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The Asian Conference on Education

Official Conference Proceedings 2010

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Ian Rank, Future University Hakodate, Japan

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Session Chair: Pey-chewn Duo

0449 (Proceedings Page 1253)

The junior Minimal English Test (jMET) for the 8th and 9th Graders

Megumi Hasebe, Gifu University, Japan

Juri Yoshimura, Gifu University, Japan

Hideki Maki, Gifu University, Japan

Hiromasa Hamatani, Fukouzu Elementary School, Japan

0355 Proceedings page 095)

An Investigation into the Cultural Awareness of English Language Teaching Students

Isil Alcin, Isparta University, Turkey

0165 (Proceedings Page 510)

A 1-day Situational Learning/Tour in MCU/a University: Perceived Effects on English Learning

Pey-chewn Duo, Ming Chuan University, University, Taiwan

Min Hsun Su, Ming Chuan University, University, Taiwan

Friday 14:15-15:45 Session 4 Room: Kiku

Professional Concerns, Training and Development Posters

0483 (Proceedings Page 493)

Predictors of Problematic Internet Usage: Shyness and Internet Usage Activities

Esra Ceyhan, Anadolu University, Turkey

0582 Proceedings page 493)

A Study on the Recycling Efficiency of Environmental Education and Awareness

Chung Te Ting, Chang Jung Christian University, Taiwan

Tzu Ling Li, Chang Jung Christian University, Taiwan

Friday 16:00-17:30

Friday 16:00-18:00 Extended Session 5 Room: Sakura A

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 3/20

Session Chair: Ming Cherk Lee

0136 (No Full Paper)

The Acquisition of Articles in a Third Language

Ahsen Hande Kur, Anadolu University, Turkey

0159 (No Full Paper)

Exploring Inter-connection between Explicit Grammatical Knowledge and General Proficiency of NSs and L2 Learners

Azizullah Mirzaei, Sharekord University, Iran

0321 (No Full Paper)

Constructing third space identities in an English language course in Taiwan

Yuhshi Lee, Wenzao Ursuline College of Languages, Taiwan

0045 (No Full Paper)

Increasing Grammar Awareness in Students

Ming Cherk Lee, National University of Singapore, Singapore

Friday 16:00-18:00 Session 5 Room: Sakura B

Cross Cultural Distance Learning Programmes in East Asia Seminar

Michiko Nakano, Waseda University

Y. Lin, Tamkang University, Taiwan

Friday 16:00-17:30 Extended Session 5 Room: Kashi

Arts, Drama, Design and Creativity 1/1 Extended Panel

Session Chair: Derry Law

0523 (No Full Paper)

An Educational Phenomenon that Combines Creative Thinking and Aesthetics: Art Education and Turkey's Profile

Emine Nas, Selcuk University, Turkey

Gülizar Çelebilik, Selcuk University, Turkey

0546 (Proceedings Page 1516)

Hybridization and Creativity: A pedagogical model for design education

Li Han, Virginia Commonwealth University, Qatar

0186 (Proceedings Page 585)

Creativity development model and its role in creative teaching in teachers

Afzal Sadat Hosseini, Tehran University, Iran

0193 (Proceedings Page 14)

The Role of Aesthetic Congruity on Visual Design Education in Hong Kong

Derry Law, The Hong Kong Polytechnic University, Hong Kong

Friday 16:00-17:30

Friday 16:00-18:00 Extended Session 5 Room: Ume

Technology in Learning 5/11**Session Chair: Alex Van Der Merwe**

0018 (Proceedings page 2)

Mini-IT Contest: Engaging Students in Active Learning Through Competitions

Macy Wong, Hong Kong Polytechnic University, Hong Kong

Calvin Wan, Hong Kong Polytechnic University, Hong Kong

Ronnie Cheung, Hong Kong Polytechnic University, Hong Kong

0047 (No Full Paper)

Use of Problem-based learning Innovation with e-Learning Design

Oon Seng Tan, Nanyang Technological University, Singapore

0626 (No Full Paper)

The use of an online role-playing game as an arena for language learning: An experimental study

Mark Peterson, Kyoto University, Japan

0072 (No Full Paper)

Gauging the performance dividend of online instruction in a blended learning environment

Alex Van Der Merwe, Durban University of Technology, South Africa

Friday 16:00-18:00 Session 5 (Extended Panel) Room: Hagi

Student Learning, Learner Experiences & Learner Diversity 1/12 (Extended)**Session Chair: Velisiwe Gasa**

0141 (No Full Paper)

Determining the Preparatory Skills of Preschools Regarding the Opinions of Teachers: A Literature Review

Serhat Odluyurt, Anadolu University, Turkey

E.Sema Batu, Anadolu University, Turkey

0181 (No Full Paper)

The Renaming of Mental Retardation (MR)

Süleyman Eripek, Anadolu University, Turkey

0557 (No Full Paper)

The Study of Education Problems, Learning Styles and Learning Needs of Children with Learning Disabilities (LD) for Primary School Students

Umaporn Jitprasat, KMUTT, Thailand

Surachai Suksakulchai, KMUTT, Thailand

0494 (No Full Paper)

Learners' Aggressive Behaviour in Secondary Schools: A Psycho-Social Perspective

Velisiwe Gasa, University of South Africa, South Africa

Enid Tlhabane, University of South Africa, South Africa

Friday 16:00-17:30

Friday 16:00-17:30 Session 5 Room: Kusu

Literacy, Language, Multiliteracies 2/2

Session Chair: Danny Robinson

0140 (Proceedings Page 432)

Fictions and Nonfictions: How do teachers use them to facilitate young children's learning and development?

Hsiang ju o, ational chia Yi University, Taiwan
 Hsiao Yu Huang, National Chia Yi University, Taiwan
 Yi Fang Tsai, National Chia Yi University, Taiwan
 Yong Bin Huang, National Chia Yi University, Taiwan
 Hsin Hsuan Liu, National Chia Yi University, Taiwan
 Chia Wei Shih, National Chia Yi University, Taiwan
 Ling Ya Liao, National Chia Yi University, Taiwan

0460 (No Full Paper)

Moving towards a critical use of information: Taking a step back in order to leap forward
Azwan Shaiza Nizam, La Trobe University, Australia

0351 (No Full Paper)

Prisons of Air or Literature: A Cause of Global Warming?
Danny Robinson, Bloomsburg University, USA

Friday 16:00-18:00 Extended Session 5 Room: Hana

Professional Concerns, Training and Development 4/5

Session Chair: A. Aykut Ceyhan

0220 (No Full Paper)

The Relationship between Automatic Thoughts, Shyness and Humor Style: An Investigation Among Turkish Preservice Teachers

Bircan Ergun Basak, Anadolu University, Turkey
 Gurhan Can, Anadolu University, Turkey

0235 (Proceedings Page 694)

Tacit Learning for Women's Career Development to the School Superintendency
Yong Lyun Kim, Hankuk University of Foreign Studies, Korea

0059 (Proceedings Page 190)

Attitude Towards Research and Research Productivity - A Study among Teachers in Higher Education in South India

Mumtaj Begum, Lady Doak College, India
 Thiagarajan Soundararajan, Sourashtra College, India, India

0482 (No Full Paper)

University Students' Viewpoint about the Computer Technology Usage in Courses

A. Aykut Ceyhan, Anadolu University, Turkey
 Yildiz Kurtayilmaz, Anadolu University, Turkey

Friday 16:00-17:30

Friday 16:00-18:00 Extended Session 5 Room: Matsu

Community, Culture, Globalization and Internationalization 5/9**Session Chair: Yi-Hsuan Lo**

0147 Proceedings (age 67)

EFL and Maternal Involvement in the Suffering of Korea

Hyekyung Kim, University of Alberta, Canada

0371 Proceedings (age 138)

The Impact of Language Internationalization on a Chinese Language School: A Case Study

Wei li u, ational aiwan ormal niversity, aiwan

0323 Proceedings (age 028)

Diversification of International Student Mobility in the Context of the Internationalisation of Higher education in Asia

Miki Sugimura, Sophia University, Japan

0486 (No Full Paper)

Local needs vs. Global Demands: A study of an ESP (English for Specific Purposes) program for vocational high school learners through school-university partnership

Yi Hsuan Lo, National Taiwan University of Science and Technology, Taiwan

Friday 16:00-18:00 Session 5 Room: Tsuki

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 5/20**Session Chair: Hsiang-I Chen**

0128 Proceedings (age 04)

A New Bilingual Instructional Model: Health studies in Thai secondary school level

Rungrawee Samawathdana, Chulalongkorn University, Thailand

Sumalee Chinokul, Chulalongkorn niversity, hailand

Aimutcha Wattanaburanon, Chulalongkorn University, Thailand

0204 (No Full Paper)

Intentional Vocabulary Learning as a Predictor of General Proficiency Achievement in the High School Second-graders: A Case for Translation

Ali hangard, harif niversity f echnology, Iran

0581 Proceedings (age 593)

Reading Strategies and Motivation to Learn English

Midori Mashiyama, Fukuoka Women's University, Japan

0242 Proceedings (age 10)

An Investigation of the Use of Language Learning Strategies at Four Senior High Schools in Taiwan

Hsiang I hen, ing huan niversity, aiwan

Saturday 9:00-12:00

Plenary Session

Aoi Room

Keynote I: Sue Jackson, London University

INTERVAL

Keynote II: Mary Stuart, Lincoln University

Saturday 13:00-14:30**Saturday 13:00-14:30****Session 1 Room: Sakura A****Languages Education and Applied Linguistics (ESL/TESL/TEFL) 1/20****Session Chair: Kazumi Yamada**

0020 (Proceedings Page 88)

An Investigation into the Textbooks of Primary Schools Studied in Iran in the Academic Year 2008 - 2009 in Terms of the Degree of Unity and Coordination in Attaching and Detaching of Word Stems to Each Other in Compound Words

Seyyed Hamid Hashemi, Islamic Azad University, Erman Branch, Iran

0111 (Proceedings Page 363)

Some Techniques and Resources in teaching English to Students of Public Schools in Kawasaki City

Maria Elvira Uezono, Kawasaki City Elementary School System, Japan

0077 (Proceedings Page 259)

The Influence of Contexts on Acquisition of "How Many" and Its Implication for English Education: the Case of Japanese Child Learners

Kazumi Yamada, Kwansei Gakuin University, Japan

Yoichi Miyamoto, Kwansei Gakuin University, Japan

Saturday**13:00-14:30****Session 1****Room: Sakura B****Languages Education and Applied Linguistics (ESL/TESL/TEFL) 17/20****Session Chair:**

0555 (No Full Paper)

An Asperger Syndrome Adolescent's Language Learning

Yu Wen Chen, Wenzao Ursuline College of Languages, Taiwan

Chia Yin Chen, Wenzao Ursuline College of Languages, Taiwan

0425 (No Full Paper)

Metaphoric Competence: A Learning Strategy for L2 Reading Comprehension and Instruction

Sheng Hsun Lee, Pennsylvania State University, USA

0349 (No Full Paper)

An integrated approach to teaching formulaic expressions in spoken business communication

Li Yuan, Shantou University, China

Saturday 13:00-14:30**Session 1 Room: Kashi****University Research and Development 1/4****Session Chair: Takahiro Koyama**

0076 (Proceedings Page 246)

Beyond Centre-Periphery: Higher Education Development in South-East Asia

Thi Kim Quy Nguyen, Institute of Education, University of London, UK

0580 (Proceedings Page 582)

Factors Influencing the Attitudes of University Faculty toward Research

Normaliza Ramirez, University of the East, Philippines

0558 (No Full Paper)

Higher Education and Development in the Middle East: Case of Iran

Takahiro Koyama, Waseda University, Japan

Saturday 13:00-14:30**Saturday 13:00-14:30****Session 1 Room: Ume****Technology in Learning 6/11****Session Chair: Tzu Hua Huang**

0197 Proceedings (page 23)

*Technology Acceptance in an Academic Context: Students' Satisfaction in Using Wireless Internet*A.Y.M. Atiquil Islam, International Islamic University Malaysia (IIUM), Malaysia
Mahbulul Haque, International Islamic University Malaysia (IIUM), Malaysia

0273 (Proceedings Page 907)

ICT in ELT in Kazakhstan: Teachers' Beliefs and Practices

Sulushash Kerimkulova, Kazakh British Technical University, Kazakhstan

0253 Proceedings (page 09)

*Interactive Whiteboard and Pedagogy*Tzu Hua Huang, National Taipei University of Education, Taiwan
Yuan Chen Liu, National Taipei University of Education, Taiwan
Pei Chun Chen, National Taipei University of Education, Taiwan**Saturday 13:00-14:30****Session 1 Room: Hagi****Student Learning, Learner Experiences & Learner Diversity 4/12****Session Chair: Craig Whitsed**

0318 (No Full Paper)

Gaps between what students have learned and what they think they have learned: From a survey on English grammar of Japanese university students

Kiyota Hashimoto, Osaka Prefecture University, Japan

0146 Proceedings (page 57)

*Course Learning Outcome Based Evaluation of Teaching and Students Assessment (CLObETSA) System*Muhammad Abaidullah Anwar, Al Ghurair University, United Arab Emirates
Naseer Ahmed, Al Ghurair University, United Arab Emirates

0094 (No Full Paper)

Negotiating academic literacies: Japanese exchange students in Australian higher education

Craig Whitsed, Murdoch University, Australia

Saturday 13:00-14:30**Session 1 Room: Kusu****Community, Culture, Globalization and Internationalization 9/9****Session Chair: Rose Stockwell**

0284 (No Full Paper)

Globalization, Blockbusters and Public Education in Museum of Art: A Case Study of the Hong Kong Museum of Art

Kin Chung Louis Ho, Hong Kong Baptist University

0713 Proceedings (page 899)

Arabs Citizens' Perspective Regarding the Impact and Motivations of the Western Countries Initiatives to Promote Democracy in the Arab World Countries

Mohammad Alzyoud, Abu Dhabi University, UAE

0205 Proceedings (page 38)

The impact of extending the school day. Attitudes of staff, students and parents at a girls' grade 10-12 high school in the Gulf

Rose Stockwell, Abu Dhabi, AE

Saturday 13:00-14:30

Saturday 13:00-14:30

Session 1 Room: Hana

Maths, Science, and Technology Learning 2/5

Session Chair: Meng-Lung Lai

0240 Proceedings (page 36)

Enhancing IT Literacy in an English Medium of Instruction Liberal Arts College in China
Haifei Huang, BNU HKBU United International College, China
Dave Towey, BNU HKBU United International College, China

0414 (No Full Paper)

Graphic Representation in the High School Literary Section
Emel Ozdemir Erdogan, Anadolu University, Turkey

0391 (No Full Paper)

Taiwanese and U.S. Preschoolers' Understanding of the Subtraction-related Principles
Meng Lung Lai, National Chiayi University, Taiwan
Yun Chung Chen, National Chiayi University, Taiwan
Yen Hua Chen, National Chiayi University, Taiwan

Saturday 13:00-14:30

Session 1 Room: Matsu

Student Learning, Learner Experiences & Learner Diversity 12/12

Session Chair: Nuttaya Iam-khong

0517 (No Full Paper)

The Design of a Database Directed Towards the Disabled and the Application Related to The Hearing-Impaired
Bulent Gaytanli, Anadolu University, Turkey

0450 Proceedings (page 265)

Current State of Internet Usage and Expectations of the Thai Vocabulary to Thai Sign Language Translational System for Primary School Students with Hearing Defects
Nuttaya Iam khong, KMUTT, Thailand
Surachai Suksakulchai, KMUTT, Thailand

Saturday 14:45-16:15**Saturday 14:45-16:15****Session 2 Room: Sakura A****Languages Education and Applied Linguistics (ESL/TESL/TEFL) 9/20: Shantou University Panel****Session Chair: Claudia Kunschak**

0233 (No Full Paper)

Internationalizing professional training: ESP development in China

Claudia Kunschak, Shantou University, China

David Hume, Shantou University, China

Mark Robinson, Shantou University, China

Robert Tindol, Shantou University, China

Li Yuan, Shantou University, China

Myra Ingmanson, Shantou University, China

Felix Giron, Shantou University, China

Saturday**14:45-16:15****Session 2****Room: Sakura B****Languages Education and Applied Linguistics (ESL/TESL/TEFL) 18/20****Session Chair: Diana Sham**

0520 (Proceedings Page 1404)

Exploring the use of English and Bahasa Malaysia in English as a Second Language classrooms

Ramiaida Darmi, La Trobe University, Australia

0619 (No Full Paper)

A Critical Study of Educational Discourse-Exchange Structure in L2 Classrooms in Iran

Maryam Ranjbar, Shahrekord University, Iran

0618 Proceedings age 657)

Globalization and Internationalization of Adult Education: The Principles and Interactive Methods of TESL

Diana Sham, BNU HKBU United International College, China

Saturday 14:45-16:15**Session 2 Room: Kashi****University Research and Development 2/4****Session Chair: Kah Heng Loh**

0487 (No Full Paper)

The Development of a Competency Evaluation System for Early Childhood Graduate Programs

Benchaporn Chanakul, Nakhon Si Thammarat Rajabhat University, Thailand

0176 (Proceedings age 28)

An Embedded Information Literacy skills Training in PBL Model for Uncertainty Reduction: A comparison of two Designs of PBL model

Kah Heng Loh, Taylor's University, Malaysia

Yushiana Mansor, International Islamic University Malaysia, Malaysia

Saturday 14:45-16:15**Saturday 14:45-16:15****Session 2 Room: Ume****Technology in Learning 7/11****Session Chair: Matsuko Woo**

0274 (No Full Paper)

Secondary School teachers' perceptions about applying web based instruction in Malaysia
Sima Sayadian, Islamic Azad University, Maybod Branch, Iran

0635 (No Full Paper)

Workshop on Language Gardening
Maricel Elorde, Language Garden Ltd., UK

0291 (Proceedings page 880)

Tracing peer feedback to revision process in a wiki supported collaborative writing
Matsuko Woo, The University of Hong Kong, Hong Kong

Saturday 14:45-16:15**Session 2 Room: Hagi****Student Learning, Learner Experiences & Learner Diversity 5/12****Session Chair: Elina Wainio**

0178 (Proceedings Page 540)

Promoting Diversity and Internationalization in Thailand's Higher Education through Transformative Learning Experiences
Patreeya Kitcharoen, Mahidol University, Thailand

0134 (Proceedings Page 424)

Influence of interactive white board (IWB) for cognitive load theory used in elementary school regular-classroom and special education
Ho Shiu Lin, Shengli Elementary School/National Tainan University, Taiwan

0540 (No Full Paper)

Cross-Cultural Multi-Competence Learning in Social Media
Elina Wainio, Laurea University of Applied Sciences, Finland

Saturday 14:45-16:15**Session 2 Room: Kusu****Adult, Vocational, Distance, and Professional Learning 1/3****Session Chair: Meilu Sun**

0116 (Proceedings page 71)

Perceptions of Stake Holders on Polytechnics' Soft Skills
Riam Chau Mai, La Trobe University, Australia
Keith Simkin, La Trobe University, Australia
Damon Cartledge, La Trobe University, Australia

0396 (No Full Paper)

LLP/Erasmus Teaching Staff and Student Exchange Activities at the Music Teacher Training Institutions of Turkey and Experience and Opinions of Teaching Staff Having Attended Teaching Staff Mobility Activities Regarding the Process
Hatice Onuray Egilmez, Uludag University Faculty Of Education, Turkey

0399 (Proceedings Page 1957)

In-service Training Effects: Reported by Chinese Primary and Secondary teachers
Meilu Sun, Institute of Vocational and Adult Education, China

Saturday 14:45-16:15

Saturday 14:45-16:45

Extended Session 2 Room: Matsu

Equity, Social Justice and Social Change 1/1

Session Chair: Bert Olivier

0148 (No Full Paper)

Navigating for success: Issues and challenges facing the curricular and pedagogical capacity of educationally at-risk students in Singapore

Pauline Ho, University of Sydney, Australia

0389 (No Full Paper)

Migration, Social Capital and Early School Drop-out in Turkey

Fatos Goksen, Zeynep Cemalcilar, Koc University, Turkey

0346 (Proceedings Page 1946)

Confronting Difference in Japan through Curriculum Reform: The Case of the Integrated Curriculum

Laurence MacDonald, Soka University, Japan

0707 (Proceedings Page 1815)

Ethical challenges regarding the globalization of higher education

Bert Olivier, Nelson Mandela Metropolitan University, South Africa

Saturday 14:45-16:15

Session 2 Room: Kiku

Maths, Science, and Technology Learning Poster

0210 (No Full Paper)

Creating appropriate mathematics learning environments for disadvantaged students through remedial instructional modules

Ru Fen ao, National Chia Yi University, Taiwan

Der Ching Yang, National Chia Yi University, Taiwan

Student Affairs Poster

0384 (Proceedings Page 1191)

The Social and Interpersonal Network Analysis of Class in The Primary School

Li Weipin, National Chengchi University, Taiwan

Saturday 16:30-18:00**Saturday 16:30-18:00****Session 3 Room: Ume****Technology in Learning 8/11****Session Chair: Heng Ji**

0435 Proceedings page 243)

Appraisal Computer Programming Language based on Visualization

Fadhil Jawad Kadhim, Al Zahra College for Women, Oman

Hala Al Lwatya, Al Zahra College for Women, Oman

0467 (Proceedings Page 1313)

Using RFID Technology to Construct a Context-Aware Ubiquitous Learning Environment

Chia Chen Chen, Tunghai University, Taiwan

Mu Yen Chen, Tunghai University, Taiwan

0426 (Proceedings Page 1233)

Automatic Cloze Generation based on Cross-document Information Extraction

Wen Pin Lin, Queens College/City University of New York, USA

Heng Ji, Queens College/City University of New York, USA

Saturday 16:30-18:30**Session 3 Room: Hagi****Student Learning, Learner Experiences & Learner Diversity 2/12****Session Chair: Nurgul Akmanoglu**

0317 No ull aper)

Research Idea Maps: An Ontological Support Method for Students in Formulating Research Ideas

Masae akazawa, Advanced Institute of Science and Technology, Japan

Mitsuru Ikeda, Japan Advanced Institute of Science and Technology, Japan

0084 (Proceedings Page 272)

The Effect of Changing Presenting Style of Dynamic Display in Chinese for Learning Disability Students

Li Chih Wang, National University of Tainan, Taiwan

Yi Chan Chang, National University of Tainan, Taiwan

0305 Proceedings page 986)

The Effectiveness of Using Simultaneous Prompting with Video Modeling in Teaching "Returning Someone's Greeting" Skills to Children with Autism

Nurgul Akmanoglu, Research Institute for the Handicapped, Turkey

Esin Pektas, Ayten Uludemir, Research Institute for the Handicapped, Turkey

Ayten Uludemir, Research Institute for the Handicapped, Turkey

Saturday 16:30-18:00

Saturday 16:30-18:30

Extended Session 3 Room: Kusu

Adult, Vocational, Distance, and Professional Learning 2/3

Session Chair: Minako Inoue

0221 (No Full Paper)

On the Road to Success: 'Border-Crossing' in Adult Education in the Era of Globalization

Natalya Tcherepashenets, State University of New York, Empire State College, USA

0326 (Proceedings Page 049)

Learning to Sustain Knowledge: Different Aspects of Motivation—An Example of Life-Long Learning

Muhammad Arshad, The Islamia University of Bahawalpu, Pakistan

Hafiz Amanullah, The Islamia University of Bahawalpu, Pakistan

Najmull Kashif, The Islamia University of Bahawalpu, Pakistan

Muhahhad Aslam Adeeb, The Islamia University of Bahawalpu, Pakistan

0413 (Proceedings Page 220)

An academic and an adventurer walk into the jungle: the challenges and benefits of accrediting learning beyond the classroom.

Brandon Charleston, Yorkbeck, University of London, UK

0283 (No Full Paper)

Opportunity for Lifelong learning: A case study of computer-assisted language learning for the community

Minako Inoue, Health Science University, Japan

Saturday 16:30-18:00

Session 3 Room: Hana

Community, Culture, Globalization and Internationalization 7/9

Session Chair: Firouz Gaini

0620 (Proceedings Page 1669)

Morals of Educational Professionals

Abdullatif alHussein, King Faisal University, Saudi Arabia

Huda AlDulajjan, King Faisal University, Saudi Arabia

0597 (No Full Paper)

Positive and negative effects on students returning from studying abroad

Ryan Richardson, Kansai University, Japan

0070 (No Full Paper)

Why not study at home? Critical anthropological reflections on the education and research policy and strategy of a university in the Northern European periphery in the age of globalization

Firouz Gaini, University of the Faroe Islands, Faroe Islands

Sunday 9:00-10:30

Sunday 9:00-10:30 Session 1 Room: Sakura A

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 10/20

Session Chair: Chan Yuen Kwan

0252 (Proceedings Page 795)

Engaging the language needs of ICT students and future employers

Shahiza Ahmad Zainuddin, La Trobe University, Australia

0294 Proceedings page 970)

Malaysian Undergraduates' Beliefs, Views and Motivation for Learning Japanese as a Third Language

Rokiah Pae, Universiti Malaysia Sarawak, Malaysia

Soubakeavathi Rethinasamy, Universiti Malaysia Sarawak, Malaysia

0298 (No Full Paper)

Learners' preference for language learning -- isolated or integrated form focused instruction?

Chan Yuen Kwan, Lancaster University, UK

Sunday 9:00-10:30 Session 1 Room: Kashi

University Research and Development 3/4

Session Chair: Chih-chun Wu

0287 (No Full Paper)

School Abilities and University Academic Achievement in Japan

Kristy King Takagi, Akita International University, Japan

0542 (Proceedings Page 1493)

Analysis of Universities Survival Factors in Taiwan

Chung Te Ting, Chang Jung Christian University, Taiwan

Shang Heng Wu, Chang Jung Christian University, Taiwan

0192 (No Full Paper)

Who goes to a graduate school?

Chih chun Wu, National Chi Nan University, Taiwan

Sunday 9:00-10:30

Sunday 9:00-10:30 Session 1 Room: Ume

Technology in Learning 9/11**Session Chair: Ko Wai Tang**

0584 (Proceedings Page 1613)

*Challenges and Issues to Implementing and Integrating Educational Technology for Teaching and Learning English at a University in the Northeast of Thailand.*Suksan Suppasetserree, Suranaree University of Technology, Thailand
Nootprapa K. Dennis, Suranaree University of Technology, Thailand

0513 (Proceedings page 379)

*Gender differences in Computer Experience and Computer Self-efficacy among High School Teachers*Hsi Chi Hsiao, National Changhua University of Education, Taiwan
Yuh Rong Lin, National Changhua University of Education, Taiwan
Ya Ling Tu, National Changhua University of Education, Taiwan

0477 (No Full Paper)

Educational Needs for Developing an Information Literacy Program: A Study of Web Evaluation Skills of Sub-Degree Students

Ko Wai Tang, The Open University of Hong Kong, Hong Kong

Sunday 9:00-11:00 Extended Session 1 Room: Hagi

Student Learning, Learner Experiences & Learner Diversity 6/12**Session Chair: Shwu-yong Liou Huang**

0223 (No Full Paper)

Effects of Student Competence Enhancement in Taiwan's Education Universities

Yu Lun Chiu, Hsin Sheng College of Medical Care and Management, Taiwan

0492 (Proceedings page 332)

The relationships of self-concept, academic achievement and future pathway of first year business studies diploma students

Siew Fun Tang, Taylor's University, Malaysia

0110 (No Full Paper)

Cultural Adaptation or Cultural Distortion? Notes on the Importance of Teaching Deeper Cultural Background in Japanese Language Pedagogy

Anatoliy Anshin, Moscow International Higher Business School/Russian State University for the Humanities, Russian Federation

0229 (No Full Paper)

An Assessment of Learning Experiences and Student Satisfaction at Higher Education Institutions in Taiwan

Shwu yong Liou Huang, National Taiwan University, Taiwan

Sunday 9:00-10:30

Sunday 9:00-10:30 Session 1 Room: Kusu

Adult, Vocational, Distance, and Professional Learning 3/3

Session Chair: Niel Kenneth Jamandre

0381 (Proceedings Page 1163)

A Consideration on the Support for Japanese Onomatopoeia Learning in Japanese for Specific Purposes

Yumi Nishimura, Kwansei Gakuin University, Japan
Kiyota Hashimoto, Kwansei Gakuin University, Japan
Kazuhiro Takeuchi, wansei akuin niversity, apan

0625 (Proceedings Page 1682)

The Importance of Information Security in E-learning Systems

Ebru Yildirim, Uludag University, Turkey

0025 (No Full Paper)

The Distance Education Program of the University of the Philippines Open University: Developments and Challenges

Niel Kenneth Jamandre, College of Arts and Letters University of the Philippines Diliman, Philippines

Sunday 9:00-10:30 Session 1 Room: Hana

Interdisciplinary Panel 1/1

Session Chair: Tayebeh Zandipour

0187 (No Full Paper)

Globalization and its Effects on Youths' Morals

Ezzat Khademi Ashkezari, Alzahra University, Iran
Maryam Shirbeigi, Alzahra University, Iran

0092 (No Full Paper)

The relationship between forgiving husbands' marital infidelity and women's mental health

Tayebeh Zandipour, Alzahra University, Iran
Azam Shafienia, Alzahra University, Iran
Fateme Hosseini, Alzahra University, Iran
Akram Zandipour Alzahra University, Iran

The logo for the International Association for Frontiers in Research (iafor) is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The logo is partially overlaid by a large, stylized circular graphic composed of two overlapping arcs, one in light blue and one in light red.

Sunday 10:45-12:15

Sunday 9:00-10:30 Session 1 Room: Matsu

Organizational Learning and Change 1/2**Session Chair: Suet Leng Khoo**

0472 (Proceedings Page 1323)

Insurance agencies' organizational learning in a turbulent time: A community of practice perspective

Wen Bing Gau, National Chung Cheng University, Taiwan

Chen Hao Wen, National Chung Cheng University, Taiwan

Yu Huang Huang, National Chung Cheng University, Taiwan

0276 Proceedings page 19)

At the crossroads of 'diversity' and 'unity' in learning: the case of Malaysian banks

Suet Leng Khoo, 'Universiti Sains Malaysia', Malaysia

Sunday 10:45-12:15

Session 2 Room: Sakura A

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 11/20**Session Chair: Brian Rubrecht**

0316 (No Full Paper)

Using TV Series in EFL Co-curriculum Activities

Huibin Zheng, Shantou University, China

Lin Fang, Shantou University, China

0600 (Proceedings Page 1622)

Bridging the gap between Teacher and Student expectations with regards to the logical structure of academic writing activities

Gavin Brooks, Ritsumeikan University, Japan

0259 Proceedings page 51)

English loanwords in Japanese television programming: Assessing high-frequency baseword vocabulary usage

Brian Rubrecht, Meiji University, Japan

Kayoko Ishikawa, Japan

Sunday 10:45-12:15

Session 2 Room: Sakura B

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 14/20**Session Chair: Anne Parmeter**

0403 (No Full Paper)

Whole English Instruction--Yes or No

Chia Yin Chen, Taiwan

0278 (Proceedings Page 934)

Course Development of English for Non-English Department Students: Procedures, Practices and Policies

Nanis Setyorini, STIESIA Surabaya, Indonesia

0386 (No Full Paper)

Teaching English Using Authentic Materials

Anne Parmeter, University of Marketing and Distribution Sciences, Japan

Sunday 10:45-12:15**Sunday 10:45-12:15****Session 2 Room: Kashi****University Research and Development 4/4****Session Chair: Supunnee Ungpansattawong**

0495 No ull aper)

Desirable Competencies: Indicators and Criteria assessment of Pharmaceutical Techniques. A Case Study of Students in Sirindhorn College of Public Health in Thailand
Parichat Utaipan, Sirindhorn College of Public Health, Thailand

0332 No ull aper)

An exploration of burnout and teacher efficacy at a Turkish state university
Ali Ulus Kimav, Anadolu University, Turkey

0490 No ull aper)

Development of an Education Management Evaluation Model for The Faculty of Science by Balanced Scorecard
Supunnee Ungpansattawong, Khon Kaen University, Thailand
Boonsri Prommapun, Sukhothai Thammathirat Open University, Thailand
Sarisack Sonthornchai, Sukhothai Thammathirat Open University, Thailand
Lawan Racksat, Office of the Basic Education Commission Ministry of Education, Thailand

Sunday 10:45-12:15**Session 2 Room: Ume****Technology in Learning 10/11****Session Chair: Lillian Lim**

0297 No ull aper)

Learning a foreign language through a Somatically-enhanced approach: an experimental study on the teaching of Thai as a foreign language
Maliwan Buranapatana, KhonKaen University, Thailand
Felicia Zhang, KhonKaen University, Thailand

0644 No ull aper)

The Internationalization of Higher Education: 'Opportunities and Threats to Nepalese Universities and Colleges'
Krishna Prasad Dotel, St. Lawrence College, Nepal

0180 Proceedings age 55)

IVLE Secure Exam Browser - the secured way to testing
Lillian Lim, National University of Singapore, Singapore
Jeffery Tay, National University of Singapore, Singapore

Sunday 10:45-12:15**Sunday 10:45-12:15****Session 2 Room: Kusu****Maths, Science, and Technology Learning 4/5****Session Chair: Ng Wee Leng**

0123 Proceedings age 88)

Chinese students' perspectives of effective mathematics learning: An exploratory study

Wee Tiong Seah, Monash University, Australia

Anastasios Barkatsas, Monash University, Australia

Peter Sullivan, Monash University, Australia

Zhongru Li, Monash University, Australia

0592 (No Full Paper)

The Status of Popular Science in Taiwan-- A Reflection on the National Year of Popular Science Reading

Hsu Wan Chen, National Taiwan Normal University, Taiwan

0368 No full paper)

Developing Students' Conceptual Understanding of Calculus Concepts with an Advanced Graphing Calculator

Ng Wee Leng, Nanyang Technological University, Singapore

Tan Wee Chuen, Nanyang Technological University, Singapore

Ng Meow Leng, Nanyang Technological University, Singapore

Sunday 10:45-12:15**Session 2 Room: Hana****Curriculum and Pedagogy 4/6****Session Chair: Pichayalak Pichayakul**

0091 Proceedings age 99)

The Integration of Project-Based Learning and Japanese for Tourism in Thailand: A Case Study of Phetchaburi Rajabhat University

Kamolthip Phonlabutra, Phetchaburi Rajabhat University, Thailand

0150 (No Full Paper)

Fitting Technology to Mathematics Pedagogy: Its Effect on Students' Academic Achievement

Leila Gano, University of the East, Philippines

0071 (Proceedings Page 227)

Challenges of Teaching International Business Etiquette: A Case Study of an Undergraduate Class in Thailand

Pichayalak Pichayakul, Chiang Mai University, Thailand

Sunday 10:45-12:15**Session 2 Room: Matsu****Organizational Learning and Change 2/2 (Thailand Panel)****Session Chair: Chayada Danuwong**

0438 (No Full Paper)

The Model of Cooperation Network for Developing Education Quality Through Individual-potentiality Instruction Based in Ubon Ratchathani Province, Thailand

Chayada Danuwong, Rajabhat Ubon Ratchathani University, Thailand

Pensri Saeteo, Rajabhat Ubon Ratchathani University, Thailand

Pinyajan Chinchai, Rajabhat Ubon Ratchathani University, Thailand

Supanee Aoki, Rajabhat Ubon Ratchathani University, Thailand

Rachen Duangsi, Rajabhat Ubon Ratchathani University, Thailand

Sunee Prasompluem, Rajabhat Ubon Ratchathani University, Thailand

Surin Luangna, Rajabhat Ubon Ratchathani University, Thailand

Chutima Chantaramani, Rajabhat Ubon Ratchathani University, Thailand

Chittawadee Thongtua, Rajabhat Ubon Ratchathani University, Thailand

Prayoonsri Buadok, Rajabhat Ubon Ratchathani University, Thailand

Sunday 10:45-12:15

Sunday 10:45-12:15

Session 2 Room: Kiku

Maths, Science, and Technology Learning Poster

0212 (Proceedings Page 665)

Students' Awareness on Plant Cultivation Learning in Technology Education
Akihito Kito, Yokohama National University, Japan

Student Learning, Learner Experiences & Learner Diversity Poster

0255 Proceedings page 19)

Research on Basic Nursing Technology in Teaching Strategies
Chang Chu Ling, Hung Kuang University, Taiwan
Liao Chin Wen, Hung Kuang University, Taiwan



Sunday 12:30-14:00

Sunday 12:30-14:00 Session 3 Room: Sakura A

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 12/20

Session Chair: Jamila Al-Siyabi

0308 (No Full Paper)

The good, the bad and the intrinsically 'best': how learners of English pass judgment on speakers of English

Andee Pollard, Australia

0503 (No Full Paper)

Teaching English verbal irony and sarcasm in an L2 classroom through concept-based instruction

Jiyun Kim, Pennsylvania State University, USA

0303 (No Full Paper)

Cultural Universalities and Peculiarities: Notions and Implications in EFL University Classrooms in Oman

Jamila Al-Siyabi, Sultan Qaboos University, Oman

Sunday 12:30-14:00 Session 3 Room: Sakura B

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 15/20

Session Chair: Tatsuya Taguchi

0302 (No Full Paper)

Language attitudes and discursive positioning among Japanese youth on a study English abroad program

Akihiro Saito, University of Southern Queensland, Australia

0570 (No Full Paper)

The Mismatch between Educational Policy and Classroom Practice: Assessment in Oral Communication Courses in Japan

Rika Tsushima, McGill University, Canada

0602 (No Full Paper)

Motivation, attitudes and selves: A Japanese perspective

Tatsuya Taguchi, University of Nottingham, UK

Sunday 12:30-14:00

Sunday 12:30-14:00

Extended Session 3 Room: Kashi

Educational Vision, Policy, Leadership, Management and Administration

Administration 5/7

Session Chair: Natcha Mahapoonyanont

0017 (Proceedings Page 55)

*Mass Communication for Environmental Education: Information Exposure, Awareness, and Lifestyle Issues for Thai Youths in Relation to Global Warming*Kanchana Chokriensukchai, The University of the Thai Chamber of Commerce, Thailand
Momoyo K Shibuya, Saitama University, Japan

0199 (No Full Paper)

*Relationship Between the Leadership and Successful Home Stay Community Based Tourism in Thailand: A Case Study of Phomlok Nakhon Si Thammarat, Thailand*Oraphan Chanin, Rajamangala University of Technology Srivijaya, Thailand
Piangpis Sriprasert, Rajamangala University of Technology Srivijaya, Thailand
Rattiya Suttara, Rajamangala University of Technology Srivijaya, Thailand

0209 Proceedings page 58)

*One Way Anova: Power of the Test after Transforming Data*Natcha Mahapoonyanont, Thaksin University, Thailand
Nussara Pengkaew, Thaksin University, Thailand
Tharadeth Mahapoonyanont, Thaksin University, Thailand
Rojarek Kamhangkit, Thaksin University, Thailand

Sunday 12:30-14:00

Session 3 Room: Ume

Biology, Biotechnology and Education 1/1

Session Chair: Christia Guevara

0202 (No Full Paper)

*Investigation on the Binding Stabilities of TMC278 inhibitor to Double Mutant HIV-1 Reverse Transcriptase (K103N/Y181C or L100I/K103N), Based on Quantum Mechanical Methods*Pensri Srivub, Rajamangala University of Technology Srivijaya, Thailand
Pongtep Nokkaew, Rajamangala University of Technology Srivijaya, Thailand
Supa Hannongbua, Rajamangala University of Technology Srivijaya, Thailand

0609 Proceedings page 640)

The Multi-Modal Representation Approach in Teaching Genetics to Non-science College Students

Christia Guevara, Laguna University, Philippines

Sunday 12:30-14:00

Sunday 12:30-14:00

Session 3 Room: Hagi

Student Learning, Learner Experiences & Learner Diversity 10/12

Session Chair: Meryl Pearce

0093 (Proceedings Page 311)

Reflections on the Enhancement of the Learning Experience Through a Variation of the Medium Used in the Teaching of Leather Working Techniques

Perihan Tunç, Selçuk University, Turkey

0121 (No Full Paper)

Undertaking midwifery studies: commencing students' views

Mary Carolan, Victoria University, Australia

Gina Kruger, Victoria University, Australia

0051 (Proceedings Page 179)

Students' yearning for practical and workplace experience

Meryl Pearce, Flinders University, Australia

Verity Kingsmill, Flinders University, Australia

Sunday 12:30-14:00

Session 3 Room: Kusu

Maths, Science, and Technology Learning 1/5

Session Chair: Abdulkadir Erdogan

0123 (No Full Paper)

Chinese students' perspectives of effective mathematics learning: An exploratory study

Wee Tiong Seah, Monash University, Australia

Anastasios Barkatsas, Monash University, Australia

Peter Sullivan, Monash University, Australia

Zhongru Li, Monash University, Australia

0638 (No Full Paper)

Mathivation - how to motivate students in mathematics?

Farid Nolen, Spired/Asian Institute of Technology, Thailand

0415 (No Full Paper)

Mathematics teachers' practices in different socio-cultural and educational environments

Abdulkadir Erdogan, Anadolu University, Turkey

Sunday 12:30-14:00

Session 3 Room: Hana

Curriculum and Pedagogy 5/6

Session Chair: Joseph Wong

0207 (No Full Paper)

English activation through art: Insights from The Kiss

Tat Heung Choi, Hong Kong Baptist University, Hong Kong

0534 (Proceedings Page 1481)

Re-Thinking Literary Pedagogy in an Age of Globalization: The Merits of an E Pluribus Unum Approach to the Teaching of Literature

Mounir Ben Zid, Sultan Qaboos University, Oman

0643 (Proceedings Page 1692)

Transforming Tacit Knowledge to Explicit Knowledge in Professional Education: A Project and Problem Based Learning (PPBL) Approach in Architectural Studies

Joseph Wong, City University of Hong Kong, Hong Kong

Sunday 12:30-14:00

Sunday 12:30-14:00

Session 3 Room: Matsu

Community, Culture, Globalization and Internationalization 8/9

Session Chair: Jyoti Prakash Bagchi

0244 (No Full Paper)

The overlooked role of culture: Asian students outperform all others at U.S. Universities
Stephen Deutsch, Seton Hall University, United States

0453 (Proceedings Page 1284)

Community-School Partnership in Non-formal Basic Education: Targets and Successes in Pakistan
Muammad Ashraf Malik, The Islamia University of Bahawalpur, Pakistan

0264 Proceedings page 70)

Christianity, Plurality and Modernity in North-East India: Retrospect and Prospect
Jyoti Prakash Bagchi, National Council of Educational Research and Training (NCERT), India

Sunday 12:30-14:30

Extended Session 3 Room: Tsuki

Educational Vision, Policy, Leadership, Management and Administration 4/7

Session Chair: Susan Miller

0243 (No Full Paper)

Exploratory Factor Analysis of Policy Leadership Behaviors Among Public School Administrators
Noryati Alias, Universiti Tun Abdul Razak, Malaysia

0279 (Proceedings Page 944)

Internationalisation of Singapore Higher Education
Anie Febriastati, Nanyang Technological University, Singapore
Hairon Salleh, Nanyang Technological University, Singapore

0143 (No Full Paper)

In Search of Quality Transnational Higher Education Partnerships : China's Experience
Lucy Siu Ping Kong, The Chinese University of Hong Kong, Hong Kong

0272 (Proceedings Page 895)

"Be not equitable to every other, and trample upon me alone": Education in Frankenstein
Susan Miller, Nippon Sport Science University, Japan/University of Glasgow, UK

Sunday 14:15-15:45

Sunday 14:15-15:45

Session 4 Room: Sakura A

Languages Education and Applied Linguistics (ESL/TESL/TEFL) 13/20

Session Chair: Chanchal Singh

0583 (No Full Paper)

The Acceptability of Collocations by Japanese Learners of English from an EIL Perspective
Hiroki Hanamoto, Kansai University, Japan

285 Proceedings age 56)

Localization and specific resources for instructors
Leah Gilner, Bunkyo Gakuin University, Tokyo

0538 (No Full Paper)

Unity in Diversity - Through the Global Language
Chanchal Singh, Shantou University, China

Sunday 14:15-15:45

Session 4 Room: Sakura B

Curriculum and Pedagogy 6/6 (Ken Kawan Soetanto Featured Panel)

Session Chair: Ken Kawan Soetanto

0537 (No Full Paper)

Encouraging Student's Self Discovery by Touching Education
Ken Kawan Soetanto, Waseda University, Japan
Mai Namiki, Waseda University, Japan

Sunday 14:15-15:45

Session 4 Room: Kashi

Educational Vision, Policy, Leadership, Management and Administration 7/7

Session Chair: Rungchachadaporn Vehachart

0387 (No Full Paper)

View from the Outside: Perspectives on the internationalization of higher education in Japan
Dwayne Cover, Kanda University of International Studies, Japan

0216 Proceedings age 74)

Study on required abilities of interpersonal communication in manufacturing industries in Taiwan
Yi Chia Cheng, National Changhua University of Education, Taiwan
Farn Shing Chen, National Changhua University of Education, Taiwan
Lun Chang Yeh, National Changhua University of Education, Taiwan
Tien Hui Yeh, National Changhua University of Education, Taiwan

0463 Proceedings age 294)

A Model of the Development for Academic Administration Decentralization of Lab Schools in the Lower Southern Area
Rungchachadaporn Vehachart, Thaksin University, Thailand

Sunday 14:15-15:45

Session 4 Room: Ume

Nursing Education 1/1

Session Chair: Jennifer Anastasi

0499 (Proceedings Page 1366)

The Development of the Evaluation Model for Internal Quality Assurance of Nursing Colleges under Praboromarajchanok Institute, Thailand.
Pannee Paisarntuksin, School of Educational Studies, Thailand

0379 (No Full Paper)

Moving South: Exploring the commonalities and variance in undergraduate nursing program outcomes across jurisdictions.

Jennifer Anastasi, Central Queensland University, Australia

Sunday 14:15-15:45

Sunday 14:15-15:45

Session 4 Room: Hagi

Student Learning, Learner Experiences & Learner Diversity 11/12

Session Chair: Hilal Peker

0195 (No Full Paper)

How to find good scientific problems: Construction of instruments for scientific problem findings

Tsai Ling Chu, National Taiwan Normal University, Taiwan

Po Lin Chen, National Chengchi University, Taiwan

Wei Wen Lin, National Taiwan University of Education, Taiwan

0473 (No Full Paper)

Preliminary Study on Teaching Model and Integration Strategy - Integration of Taiwan's Digital Archives in Art Teaching

Tsai Hua Yu, National Taiwan Normal University, Taiwan

Yu Lun Chiu, Hsin Sheng College of Medical Care and Management, Taiwan

0184 (No Full Paper)

The Use of Connectives at Beginner Levels in Turkey

Hilal Peker, Anadolu University, Turkey

Sunday 14:15-15:45

Session 4 Room: Kusu

Maths, Science, and Technology Learning 3/5

Session Chair: Taeli Yi

0214 (No Full Paper)

A Correlative Study of Taiwanese Third Graders' Performance in Fraction and their Socioeconomic Backgrounds

Yu Liang Chang, National Chiayi University, Taiwan

Su Chiao Wu, National Chiayi University, Taiwan

Zhi Yang Jiang, National Chiayi University, Taiwan

0509 (Proceedings page 365)

Producing Dynamical Graphs for Online (Hyperbolic) Geometry Course with No Experience

Taeli Yi, University of Texas at Brownsville, USA

Sunday 14:15-15:45

Session 4 Room: Hana

Technology in Learning 11/11

Session Chair: Mohd Nor Mamat

0062 (Proceedings page 305)

A Comparative Study of Human Teachers and Computer Teachers

Mehryar Nooriafshar, University of Southern Queensland, Australia

0149 (No Full Paper)

University Web Portals as Information Management Tools: The Technology Acceptance Dimension

Marita Tolentino, University of the East Manila, Philippines

0267 (Proceedings Page 885)

Development of an Electronic Environmental Attitude Test as an Assessment Tool for Environmental Education

Mohd Nor Mamat, Universiti Teknologi Mara Malaysia, Malaysia

Sunday 14:15-15:45

Sunday 14:15-15:45

Session 4 Room: Matsu

Community, Culture, Globalization and Internationalization 6/9

Session Chair: Julie Roberts

0603 No full paper)

Sixth-grade students' perceptions of being international between Shanghai and Taipei cities

Huang Yueh Chun, Graduate Institute of Educational Administration and Policy Development, Taiwan

Wu Huan Hong, Graduate Institute of Educational Administration and Policy Development, Taiwan

Chang Aldy, Graduate Institute of Educational Administration and Policy Development, Taiwan

0171 (No Full Paper)

Getting to Post-Secondary Education: A Canadian Perspective

Adela Colhon, YMCA of Greater Toronto, Canada

Dan Wise, YMCA of Greater Toronto, Canada

0053 No full paper)

"The best experience of my life so far": Internationalising through industry engagement: a case study of RMIT's Work-integrated Learning Interdisciplinary Projects in Vietnam.

Julie Roberts, RMIT, Australia

The logo for the International Association for Frontiers of Research (iafor) is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular frame around the text.

CLOSING SESSION & KEYNOTE ADDRESS

Sunday 16:00-16:45

Keynote III

Michiko Nakano, Waseda University

Virtual Presentations

Arts, Drama and Design Virtual

0107 (No Full Paper)

Return to the Wild Things' Land: A Case Study of Using Drama in a Language School in Australia

Yueh Jung Lin, Australia

Curriculum and Pedagogy Virtuals

0528 (Proceedings Page 1452)

Media education in context: A Chinese perspective

Wen Xu, University of Hong Kong, Hong Kong

0607 (Proceedings Page 1632)

Considering Divergent Approaches to Class Participation

E. Sunwoo Kang, Catholic University of Korea, Korea

Peter S. Kim, Catholic University of Korea, Korea

Economics of Education Virtual

0106 (No Full Paper)

Regional English(es): Remapping of the linguistic terrain in an era of globalization

Paule Chau, USA

Equity, Social Justice and Social Change Virtual

0325 (Proceedings Page 1040)

Learning to be alive: The education of migrant worker children on the Thai-Burma border

Nongyao Nawarat, Chiang Mai University, Thailand

Globalization and Key Issues in Education Virtual

0637 (No Full Paper)

New Character Education at Crossroad in Taiwan: Globalization or Americanization?

Feng Jihuee, National Chung Cheng University, Taiwan

Languages Education and Applied Linguistics (ESL/TESL/TEFL) Virtuals

0067 (Proceedings Page 201)

Evaluation of bilingual education in a nursery school in Taiwan

Cher Lin, University of Sheffield, UK

0215 (Proceedings Page 1824)

One Novice Teacher's Research on Teaching ESL to Chinese Adult Learners: Student-centeredness Implementation & Learner Autonomy Development

Pei Hsuan Tu, National Cheng Kung University, Taiwan

0225 (Proceedings Page 87)

Models of English Teaching Design for Future Employees in China's Petroleum Production Industry

Min Guo, Northeast Petroleum University School of Foreign Languages, China

Yuan na Xu, Northeast Petroleum University School of Foreign Languages, China

0085 (Proceedings Page 83)

Interdisciplinary and cross-cultural value principles for legal English teaching

Christiaan Prinsloo, Yonsei University, Korea

0343 (Proceedings Page 1084)

Internet Strategy, Ideological Concern and Cultural Divergence: A Comparative Case Study of International Language Education
Mei Huang, New York University, USA

0432 (No Full Paper)

Integrating Knowledge Chunks: A Mind Mapping Approach
Wenli Chang, National Chung Hsing University, Taiwan

Linguistics Virtuals

0518 (Proceedings Page 1392)

Conceptual metaphors awareness on English phrasal verbs teaching and learning for adolescents in Taiwan
Ya ying Yang, National Cheng Kung University, Taiwan
Ching yu Hsieh, Taiwan

0545 (Proceedings Page 1502)

Ideological variations in conceptual metaphors in press coverage on the US health care reform bill
ShimLew, Pennsylvania State University, USA

Literacy, Language, Multiliteracies Virtual

0498 (Proceedings Page 1347)

Adult Literacy-Related Learning, Language Use and Multiliteracies: A Case of Uganda
Sarah Hasaba, La Trobe University, Australia
Audrey Grant, La Trobe University, Australia

Maths, Science, and Technology Learning Virtual

0575 (Proceedings Page 1576)

Project-based Learning and Teaching of Professional Subjects at Selected Secondary Professional Schools in Slovakia
Katarina inakova, Ondrej Kvasnica, Slovak University of Technology, Slovakia

Professional Concerns, Training and Development Virtual

0532 (Proceedings Page 1463)

The learning needs analysis: Prolegomena to the integration of the balance of competencies in learning design
Bruno Ronsivalle, Sapienza Universita di Roma, Italy

Student Learning, Learner Experiences & Learner Diversity Virtuals

0245 (Proceedings Page 763)

How are cultural influences reflected in perceptions of Vietnamese students studying at Australian universities?
Thanh Nguyen, La Trobe University, Australia

0280 Proceedings page 979)

Learning Experiences of International Students: De-centralising the Existing Discussion
Nur Sofurah Mohd Faiz, University of South Australia, Australia
Michele Simons, University of South Australia, Australia
Gavin Sanderson, University of South Australia, Australia

0512 (Proceedings Page 1376)

Non-Cognitive Variables: A Key to College Success for Impoverished Minorities in the U.S.?
Marius Boboc, Cleveland State University, USA
R.D. Nordgren, Cleveland State University, USA

0527 (Proceedings Page 1440)

Issues Relating Activities of Planning an Organization of Collaborative Groups in Portuguese Language Teaching
Mina Isotani, Federal University of Parana, Brazil

University Research and Development Virtual

0525 Proceedings age 419)

A teaching aid for: Unified technical graphics modelling and design analysis

Paul Daniel, UK

George Loizou, Birkbeck, UK

Timothy Daniel, UK



**THE JOB PERFORMANCE CAPITAL AMONGST CIVIL SERVANTS IN
MALAYSIAN EDUCATIONAL TECHNOLOGY DIVISION: AN ANALYTICAL
STUDY.**

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Abstract

This study was conducted using interaction survey method on 400 civil servants in the Educational Technology Division (ETD) and its network across Malaysia. The instrument used in the study was particularly developed to encompass all tasks and duties based on job specifications. Specific elements explored were factors influencing intrinsic and extrinsic motivation such as competency, workload, job satisfaction, spiritual astuteness, interest, work environment, reward, supervision and coaching, job performance, commitment and training. *Workload* indicated the lowest correlation with both types of motivation. All independent variables except for *workload* showed positive correlations with the dependent variable, signifying that every unit of workload added would decrease 0.12 units of job satisfaction. Four vital elements which were intrinsic motivation, extrinsic motivation, competency and job satisfaction formed the Job Performance Capital. The path analysis model of the Job Performance Capital demonstrated that every unit added would increase 0.318 units of job performance. Findings of this research implied that the job performance of the ETD civil servant and its network depended strongly on motivational elements with their own respective roles that were inter-connected to each other and should be dealt with forethought and prudence.

Key Words: Job, Performance, Civil Servant, Educational Technology Division.

Background:

The Ministry of Education of Malaysia is responsible in improving the quality of teaching and learning in schools across the country. This is in line with the hope of Ministry of Education of Malaysia (MOE) to achieve the first-class education standard in year 2015. In this context, the ETD and its network is responsible in implementing various educational support program especially to inculcate the use and integration of educational technology within teachers and students to improve the effectiveness of the teaching and learning process.

Based on the field of work, all the ETD and network staffs comprising of 2,248 people (385 ETD staffs, 664 BTPN staffs, 98 PTPB staffs and 1,101 PKG staffs) play an important role in realizing the dream of MOE to inculcate educational technology. Thus, programs and activities of all ETD and their networks depend a lot on commitment, work culture and satisfaction, competency, attitude and motivation of all officers and staffs.

Problem Statement

Education is one of the most important issues in the country and has always obtained major attention and big budget from the rulers. This scenario happens because education is every individual's need and belief. Through the school system, children and teenagers will be able to develop themselves and would not only ensure their future but also the future of their families and society. In conjunction to the aspiration, many studies relating to students' achievements has shown that the process of using systematic teaching system with numerous usage of relevant supporting materials is able to increase the mastery of students to the excellent level. Because of that, many ideas and initiatives have been generated to improve the quality of the nation's education, thus ensuring the quality of the teaching and learning process to be competent with the latest development and findings.

Thus, the Ministry of Education has planned various strategies besides providing sufficient learning facilities and trained teachers to schools equally between urban and rural schools as shown in the Main Education Development Plan (MEDP).

From one year to another, the MOE's budget for the teaching and learning process has increased with the hope that a better schooling system can be benefited by all students. However, the performance gap between students from the urban schools and the students from the rural schools is still wide. This situation is caused by the lack of quality in the basic facilities of learning and the related services which is still not satisfactory. Hence, many teachers admit that they lack the skills in teaching support materials and also that there is limited guidance and training given. This situation encourages the MOE to give more attention and to depend on more ETD officers, BTPN and PKG to be more diligent in providing education technology related services to teachers in outside the city especially in the rural areas. Hopefully this will give direct influence and the fruit can be seen through examination results centrally.

Besides directly providing educational technology, ETD and the network staffs and officers are also responsible in ensuring the level comprehension and skills of teachers relating to educational technology is always updated in line with the latest needs. In relation to that, the responsibilities and tasks that need to be completed by every ETD and their network staffs and officers are actually very heavy. Without the internal support and the continuous motivation, whether intrinsically or extrinsically within the ETD and their networks staffs and officers, it is difficult for the goal to be realised. In addition to that, there are various issues that challenge the credibility and mental endurance of the officers such as complaints of teachers on the lack of opportunities of being exposed to the trainings of teaching support materials and the lack of demand from schools towards teaching support materials that are produced by ETD.

Strictly speaking, the success of implementing any ETD and its networks programmes in the effort to ensure the quality of education depends fully on the effort and the initiative of the officers and their staffs. Because of this reality, it is very important that the administrators of the organization to obtain a complete illustration on the motivation level of the officers and the staffs be it intrinsically or extrinsically. All the factors leading to motivation need to be explored and researched so that it can be manipulated to help improve the officers' motivation. In relation to that, this study is an initiative for the exploration of those aspects, which later contribute

meaningful data to the policy makers to plan and make a blueprint to ensure the success of the goal of ETD and its networks.

Aim

Generally, this paper is to discuss the motivation level of work within the ETD and its networks staffs and the factors that influence their motivational levels.

Objective

Specifically, this paper is to:

1. Determine the level of influence of the chosen factors towards the work motivation of ETD its networks staffs.
2. Determine whether or not there is a significant relation between work motivation of ETD and its networks staffs and their performance in the organisation.
3. Explain the analysis of the flow of the work performance of ETD and its networks staffs.

Enquiry of Study

To achieve the above objectives, a few questions related are brought up:

1. What is intrinsic and extrinsic work motivation level within ETD and networks staffs?
2. What is the magnitude of influence of the chosen factors towards the work motivation level of ETD and networks staffs?
 - a) Competency
 - b) Commitment
 - c) Work Satisfaction
 - d) Spiritual Astuteness
 - e) Interest
 - f) Work Environment
 - g) Guidance
 - h) Received Rewards
 - i) Work Burden

- j) Work value
 - k) Training and its Suitability with Role
3. Is there a significant relationship between the work motivation of ETD staffs and its network with their performance in the organization?

Importance

The writings and explanations of this paper can help the ETD and the MOE in planning and implementing programmes and activities to improve the quality of human capital and also the ETD staff and network performance to achieve the aims and objectives of the founding of ETD. In relation to that, the ETD also provides the necessary needs for the ETD and networks staffs (such as infrastructure, work environment and job specification) to enable them to give excellent service for the customers (i.e. teachers and school administrators, library and media teachers and students) who are involved in the implementation of the ETD activities.

The response in the readiness of the ETD and networks staffs on the culture of technology will enable the ETD and MOE to plan programmes that will increase the effort to instil the technology culture within them. These programmes will be able to contribute towards the government's effort to realise the Main Education Development Plan in strengthening the educational system in this country.

Scope

The discussions in this paper focus on the intrinsic and extrinsic motivation matters of ETD and its network staffs and how strong are the factors in influencing the two kinds of motivation.

A Survey on Motivation

Motivation refers to action, direction, intensity and behavioural persistence (Gordon P.H. et al, 1983). Motivation in workplace is determined by three principles that are interpersonal need (Hackman J.R. & Oldham G.R, 1976) or intrinsic motivation, extrinsic motivation and basic psychological needs. The Two-Factor Theory (Herzberg 1966) puts stress on the

importance of intrinsic and extrinsic motivation. Psychologists of organisation state that intrinsic motivation is the result of direct relationship between employees and their work which is usually self-applied. Extrinsic motivation is formed based on the external environment of the workplace usually controlled by other individuals. The relationship between extrinsic and intrinsic motivation shows that when both results of intrinsic and extrinsic are attractive, it will contribute positively to motivation. Generally, the study also shows that intrinsic and extrinsic rewards are needed to improve motivation in workplace.

In the context of career, an employee's motivation is influenced by his or her environment, work atmosphere and satisfaction (Holden 1990/91). The competency concept is introduced in early year 2000 towards determining job performance (Mohd. Sahandri, 2008). This is because employees, amongst others, are influenced by several factors, like environment and ecology, perception, memory, cognitive development, emotion, behaviour and personality (Huitt, 2001).

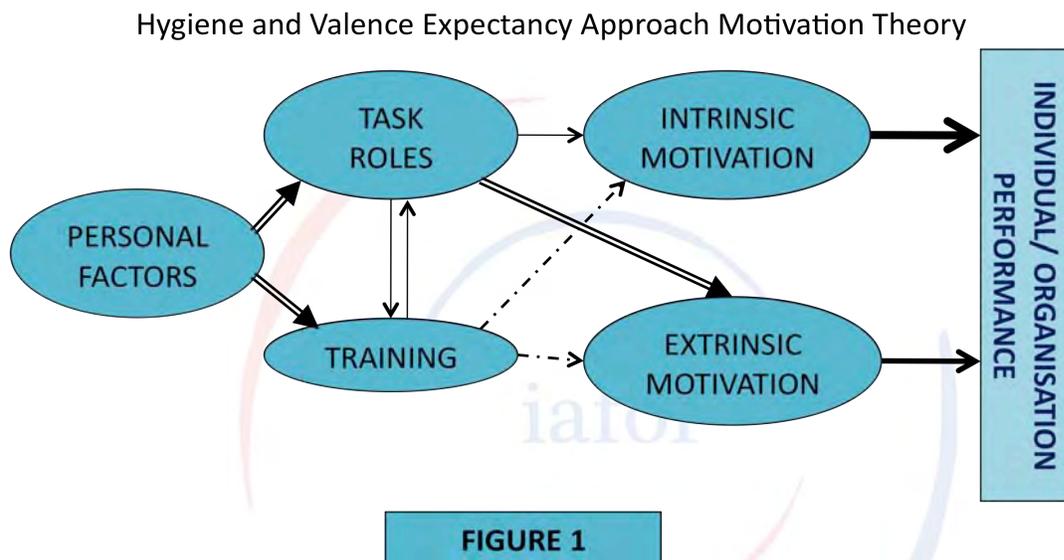
Rewards especially, can also stimulate motivation and generate the action to do an activity (Enabou & Tirole, 2003). At the same time, emotional and material support help staff to become more committed (Brandit. R , 1995) in doing an activity. Besides that, good and close relationships between staffs also influence the commitment within staffs (Abdullah Nordin, 1997). In relation to that, trainings given to PKG staffs also improve commitment and job performance within them (Mohd Sahandri, 2008). In fact, the good communication in organisation also encourages job satisfaction, job performance and job commitment and these can be considered as assets in an organisation (Mohd. Sahandri, 1998; Sharifah, Joni & Balan, 2001).

Continuous evaluation and improvements towards staff work motivation of an organisation needs to be given attention so that the performance of the organisation will always improve. With that, the report on public sector staffs shows normative commitment and a high work satisfaction level (Lem Boon, 1983) could be maintained and developed.

Conceptual Framework

This study considers the motivational parameters based on a few constructs and also theories related with the function and roles of the ETD and networks staffs as shown in Figure 1.

Conceptual Framework



Based on the conceptual framework in Figure 1, the roles and tasks done by the ETD and its network staffs and officers consists of 12 determined tasks specification. However, personal factors also influence the work culture in an organisation. Meanwhile, there are also basic needs that encourages motivation building either it is intrinsic or extrinsic. The relationship between individual and organisational needs as illustrated in some motivation theories and expectations directly influence the performance of the individual and the organisation. The whole interaction between constructs in the conceptual framework above will be elaborated by the determined variables in the instruments of this study.

Limit of Study

This study will be done in various units in the Educational Technology Division (ETD), the Ministry of Education Malaysia and networks which consists of State Educational Technology

Divisions (SETD), the Divisional Education Technology Centres (DETC) (for the state of Sabah and Sarawak) and Teachers Activity Centres (TAC) in all states. The respondents of this study are focused on two groups that are the ETD and its network staff and, library and media teachers and smart teachers. Because of that, the generalization of study is limited to all the ETD and its networks staff in Malaysia.

Design of Study

This study uses a combination design that encompasses the quantitative and qualitative approach. For the quantitative approach, the survey descriptive design is used. The descriptive research is a research that is aimed at explaining a phenomenon that happened (Murdock. K, 2002). This descriptive design will provide an illustration for a variable that is to be observed using statistical determiners to see the distribution and the pole and the data tendency. Two sets of instruments are used i.e. (i) Instruments for ETD and its network staffs and (ii) The teachers' response instruments for teachers who uses the facilities and services of TAC, DETC and SETD. The quantitative variables measured in this study are demographic backgrounds, motivation level, roles, personal factors and environmental factors which influence the respondents' motivation.

The qualitative design is used to observe the data from the open questions. This design will provide detailed information related to the studied phenomenon and is very suitable to obtain the real illustration related to the determined variables. Specifically, the qualitative design will be used to achieve the second and third objective of the study. The usage of the qualitative method will allow concept building and comprehension (Merriam, 1998 and Taylor dan Bogdan, 1998) which are very much needed to make evaluations and to give suggestions related to the motivational aspect of the ETD and its networks staffs.

Population and Sample

This population of study consists of all the ETD and its networks staff that are on duty in the nation. The determination of the accessible sample size is done by using the formula of Isaac. S & Michael W.B, (1979) where the needed sample size is $(t^2pq)/d^2$, where the value of t is 1.96, $d=0.5$, $p=0.5$ and $q=0.5$. Based on this formula, the minimum sample total needed is 384. After considering the correction factor that is, $n=n/(1+n/N)$, the number calculated is 400. The choice

of sample is by using stratified random sampling so that the external legitimacy of the study is high and the data generalisation can be done.

Instruments

The instruments of study consist of two sets that are the Motivation Instrument and the Roles of ETD and Network Staffs. The Motivation Instrument and the Roles of ETD and Network Staffs are divided into seven parts. Part A is the demographic information that encompasses age, experience, position grade and received awards. Part B and C involves personal factors and environment and is predicted to influence motivation that are competency, commitment, job satisfaction, spiritual astuteness, interest, working environment (physical, social, autonomy, rewards, coordination and guidance and job burden). Part D involves the intrinsic and extrinsic motivational items, while Part E is the items that relate to the training given and its suitability with their roles. Part F and G cover the roles of every sector in ETD and network and the overall summary of the respondents' roles. Both of these parts will form the summative score to view the performance of the sectors of ETD and network.

Parent Study

Due to the standard procedure in the preparation of a study measurement tool, a pioneer study has been implemented on 4th May 2007 in the Educational Technology Division (ETD) in Bukit Kiara, Kuala Lumpur. The study involved 30 ETD and network staffs from all sectors. Based on the response from the pioneer study, a few improvements have been done on the instruments of study.

The Legitimacy and Trustiness of the Instruments of study

The legitimacy of the front page and the instrumental content is determined through series of workshop and instrumental proofs by professionals in the fields and measured constructs. The qualitative response from the parent study can also be used to ensure the suitability of the meaning of the items in measuring the determined variables. The legitimacy of the instrument construct will be determined in the real study through the factor analysis because the calculation of the analysis can only be done when there is a bigger sample (more than 300).

Besides that, the trustiness of the study instrument from the results of the parent study and the cronbach alpha value is between 0.86 and 0.89 based on the study instrument segment.

Data Retrieval Procedure

The modus operandi of the study is in the form of survey method interaction where all the SETD and networks staff respondents will be placed in a special room in a state and will be given the duty to complete the study instrument with respect to the specific segments flexibly. The estimated timeline for this is between one and two hours where is administered by two researchers (one researcher from UPM and one from ETD). For the respondents consisting of teachers, the same procedures will be implemented.

Results of Study

12 factors have been determined and analysed with intrinsic motivation to view the relation status as shown in Table 1.

Table 1 : Factors Closely Related to Intrinsic Motivation

Intrinsic Motivation	Work Value	Commitment	Job Satisfaction	Work Performance	Spiritual Astuteness	Interest
Sig. (2-hujung) (**)	.70	.52	.50	.45	.44	.44
	Training	Competency	Reward	Guidance	Work Environment	Work-load
	.43	.42	.37	.36	.32	.07

Table 2 shows the Pearson correlation analysis findings on the significant level $p < 0.05$. It is found that there are two significant correlations in the moderate level with respect to extrinsic motivation, which are work value (.51) and work environment (.33). However, the interest factor (.32), rewards (.32), work performance (.31), competency (.31), commitment (.30), spiritual astuteness (.25), job burden (.23), guidance (.22) and job satisfaction (.20) shows low correlation with respect to extrinsic motivation.

The next analysis is to determine the relationship and contribution between the job motivation estimation variables and the work performance models with the ETD and networks staffs as concluded in Table 3.

Table 3: The Beta (β) Flow Multiplier and the Determiner Multiplier (Adjusted R^2) for the Motivation-Performance Regression Model of the ETD and Network Staffs

The Beta (β) and the determiner multiplier (adjusted R^2) in Table 3 is the result of variable regression of group 3 towards Group 1 and 2 variables. Meanwhile the results from variable regression of group 3 are on the variables of group 1, 2, 3 and 3(1). The retrieval of the regression analysis shows that there are ways which consider the variables where the beta (β) is significant statistically ($p < 0.05$) and also the non significant but meaningful variable conceptually as long as its beta (β) value is more than 0.05 (Aminuddin, 1994) or its equal correlation as explained by Hair Anderson, Tatham & Black (1995).

Independent Variable	Responsive Variable					
	Extrinsic Motivation (Column 1)	Intrinsic Motivation (Column 2)	Competency (Column 3)	Job Satisfaction (Column 4)	Indirect Work Performance (Column 5)	Direct Work Performance
Spiritual Astuteness		.090		.089		
Interest	.070*	.099	.231	.123	.209	.195
Training		.125		.076		
Job Value	.454	.475	.207	.057*	.176	
Commitment		.183	.133	.537		
Guidance		.061*	.115			
Rewards	.126				.184	.144
Job burden	.160		.076*	-.120	.063*	
Physical Environment		.054*	.071*	.137		
Job Satisfaction					.270	.139
Work Performance Capital						.318
Adjusted R^2	29.9%	57.4%	25.5%	57.1%	31.9%	38.1%

*Not Significant but Meaningful

The first column in Table 3 shows that there are four variables that will cause direct influence to the extrinsic motivation of the ETD and networks staff. All these variables contribute as much as 29.9 percent of the extrinsic motivation variance of the ETD and network

staffs. Interest ($\beta = .070^*$) is the insignificant but meaningful estimator while work value ($\beta = .454$), rewards ($\beta = .126$) and job burden ($\beta = .160$) are significant. In other words the interpretation of the value (β) means for every addition of one unit of interest will increase 0.07 unit of extrinsic motivation, an increase of one unit of reward will increase 0.126 unit of extrinsic motivation and an increase of one unit of job burden will increase 0.160 of extrinsic motivation.

The second column in Table 3 shows that there are 7 variables which will cause direct influence to the intrinsic motivation of ETD and network staffs. All these variables contributed to 57.4 per cent of the intrinsic motivation variance towards the ETD and networks staffs. The spiritual astuteness ($\beta = .090$), interest ($\beta = .099$), training ($\beta = .125$), work value ($\beta = .475$) and commitment ($\beta = .183$) are the significant estimators variables. Whereas guidance ($\beta = .061^*$) and physical environment ($\beta = .054^*$) are insignificant but meaningful estimators. In other words the interpretation of the (β) value means every addition of one unit of spiritual astuteness will increase the intrinsic motivation by 0.090 units. This is also the case for the addition of one unit of interest that will increase 0.099 units of intrinsic motivation. For every increase of one unit of training, 0.125 unit of intrinsic motivation will be increased, and addition for one unit of work value will increase 0.475 unit of intrinsic motivation, and with an addition of one unit of commitment will increase intrinsic motivation by 0.183 units. In relation to this, every increase in one unit of guidance and physical environment will increase intrinsic motivation by 0.061 and 0.054 unit respectively.

The third column in Table 3 shows that there are 6 variables which will cause direct influence to the competence of ETD and network staffs. All these variables contributed to 25.5 per cent of the competence variance towards the ETD and networks staffs. They are the interest ($\beta = .231$), work value ($\beta = .207$) commitment ($\beta = .133$) and guidance ($\beta = .115$). The workload ($\beta = .061^*$) and physical environment ($\beta = .054^*$) are insignificant but meaningful estimators. The implication from the interaction between all these variable estimators mean that every increase in one unit of interest, work value, commitment, guidance, workload and physical environment will increase competence by 0.231, 0.207, 0.133, 0.115, 0.076 and 0.071 unit respectively.

The fourth column in Table 3 shows that there are 6 variables which will cause direct influence to the job satisfaction of ETD and network staffs. All these variables contributed to 57.1 per cent of the job satisfaction variance towards the ETD and networks staffs. The spiritual astuteness ($\beta = .080$), interest ($\beta = .123$), training ($\beta = 0.76$), work value ($\beta = -.120$) and physical environment ($\beta = .137$) are the significant estimators variables. Whereas work value ($\beta = .061^*$) is the insignificant but meaningful estimators. In other words the interpretation of the (β) value means every addition of one unit of spiritual astuteness will increase the job satisfaction by 0.089 units. This is also the case for the addition of one unit of interest, training, work value, commitment and physical environment that will increase job satisfaction in 0.123, 0.076, 0.057, 0.537 and 0.137 units respectively. However, the variable estimator of job burden ($\beta = -.120$) shows inverse relationship that an addition of one unit of job burden will decrease the job satisfaction by 0.120 unit. This illustrates that the job satisfaction ETD and networks staff will drop if more workload is added to what was supposed to be there.

The conclusion of the estimator variable that affects and contributes towards the motivation and job performance of ETD and networks staffs is shown in the Performance Model of the Path Analysis Model in Figure 1.

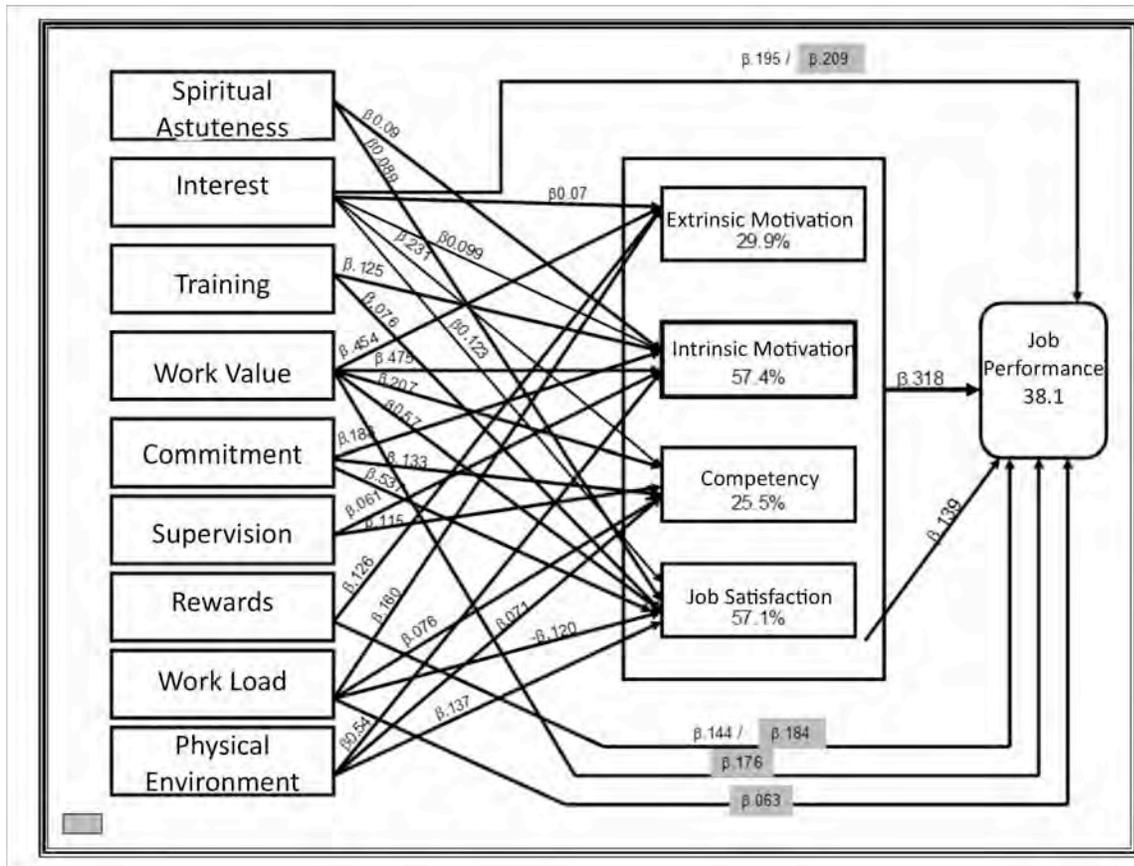


Figure 1: Performance Model of the Path Analysis Model

The fifth column in Table 3 shows that there are five variables which indirectly contributed to 31.9 per cent of the job performance variance towards the ETD and networks staffs. The sixth column in Table 3 shows that there are 4 variables which directly contributed to 38.1 per cent of the job performance variance towards the ETD and networks staffs. The spiritual interest ($\beta = .209$), work value ($\beta = 0.176$), rewards ($\beta = 0.184$), job burden ($\beta = .63^*$) and job satisfaction ($\beta = .270$) are the indirect variables interactions. In other words the interpretation of the (β) value means every addition one unit of interest and job satisfaction will increase job performance by 0.209 and 0.270 units respectively. Every addition one unit of work value, rewards and job burden will increase job performance by 0.176, 0.184 and 0.063 units respectively.

The interaction between the variables and their effects directly showed difference on the work performance model. This brings the biggest effect ($\beta = .318$), that is if one unit of work performance model is added it will increase work performance by .318 units. This is also similar

with interest ($\beta = .195$), rewards ($\beta = .144$) and job satisfaction ($\beta = .139$), thus the work performance will increase by .195, .144 and .139 respectively. Hence, the role of variable that has close relation to work motivation is important in estimating the work performance of an ETD and network staff.

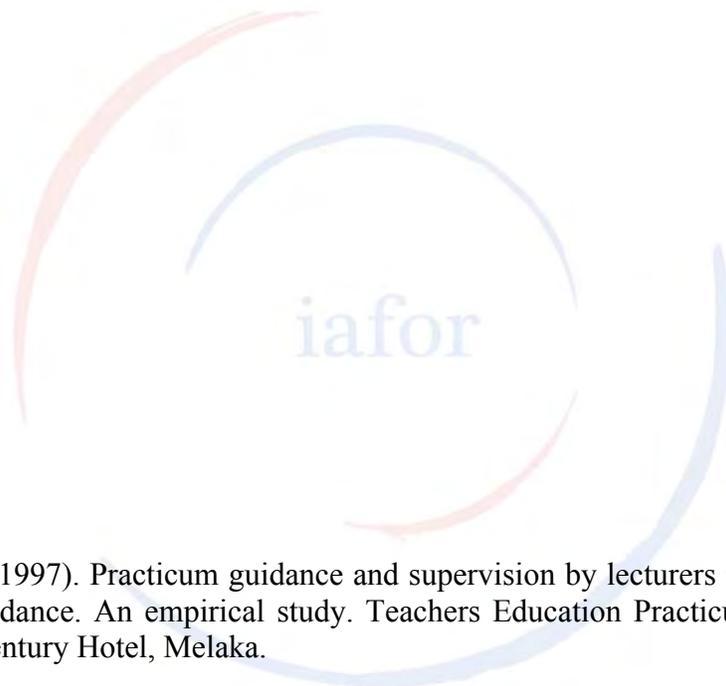
From the discussion of the retrievals above, it is clear that job burden gives less healthy impact to job satisfaction, but at the same time it could bring improvement towards the extrinsic motivation of ETD and network staffs. Overall, minters, work value and job burden affects job performance positively. All the variables detected do affect the intrinsic motivation of ETD and network staffs. Competency also directly influences the work performance, but studies shown that training would not contribute to intrinsic motivation. This means a big part of the training implemented have not meet the necessary needs of the competency of ETD and network staffs.

Discussion

Studies show that the extrinsic or outer factors do not show any relevance to extrinsic motivation. On the contrary the motivation of ETD and network officers are more intrinsic or in other words, high in work performance (mean of 4.65) and is encouraged by intrinsic motivation. This provides an assumption that ETD and networks placed officers in their respective scopes of duties based on suitable competency and expertise. Competency has contributed directly to work performance but studies have shown that training has no relevance to extrinsic motivation. This means that the trainings implemented does not meet the necessities of the officers' competency. The study has showed that increased job burden will decrease job satisfaction. This means that the administrators need to be sensitive to the job burden of officers and manage it so that the officers are not overtly burdened.

The zero order correlation analysis and double regression has helped the researchers to form another model called the "Work Performance Model" for the civil servants especially the

ETD and networks staffs and officers. In this model the contributor factor towards work performance has been classified into primary and secondary factors and is arranged into a contribution block or a model for extrinsic motivation. The primary factor contributed to the performance of intrinsic motivation, extrinsic motivation, competency and job satisfaction. The secondary contribution block is the spiritual astuteness, interest, training, work value, commitment, supervision, rewards, job burden and environment. Every contribution or capital has a contribution value towards job performance whether it is direct or indirect.



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PROBABILISTIC SPEECH RECOGNITION FOR TAGALOG LECTURE VIDEO

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Abstract

Most of the learners nowadays are imaginative and actively participate more on graphical and multimedia presentations in classroom discussion. Viewing lecture videos has become a common activity in the comprehension of a certain lecture session. However, viewing the full length of the video is time-consuming. Viewers often want immediate access to specific parts of the lecture by jumping to its exact location.

This paper discusses the development of a Speech Recognition System that would condense the hassle of viewing an entire Tagalog Lecture Videos. This system is aimed to be a teaching tool that would allow searching of Tagalog texts from Tagalog-spoken speeches.

The system uses pattern matching technique to return the most likely time occurrence of the searched word. The system encompasses a database of tagalog word recording graphs that identify different types of sounds the human voice can make. The sound is identified by matching it to its closest entry in the codebook using Euclidean distance computation.

Though the experimental results yield an average speech recognition rate of 30%, the system still offers a supplemental tool to support learning and teaching. Providing immediate access on specific parts within lectures, this tool is found out to be useful as an aid in the comprehension and retention in knowledge and of learning Tagalog texts.

PROBABILISTIC SPEECH RECOGNITION FOR TAGALOG LECTURE VIDEO
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1. Introduction

In today's technology, video recording of classroom lectures is easier, enabling more and more universities to post online videos of lectures while generating a vast range of topics. With the huge availability of topics, viewing online videos has become a common activity for students and educators in the comprehension of a certain lecture session. Students who missed an important aspect of the lecture have another chance to listen and view the online video which can be piped to their laptops or MP3 players. Although most of the contents in a certain video are useful, it is difficult and frustrating sometimes to go watch the full length video just to locate specific information within the lectures. Viewers often want immediate access to specific parts of the lecture by jumping to its exact location without going through the hassle of viewing the video from start to finish (Greene,2007).

During the past decade, the performance of automatic speech processing systems has improved dramatically, resulting in an increasingly widespread use of speech technology in real-world scenarios. The study and application of speech processing are no longer confined to research labs but are being deployed in a wide variety of applications. This research is an adaptation to answer one of the most important trends in speech-technology.

Probabilistic Speech Recognition For Tagalog Lecture Video, a spoken-word search tool, is designed to run on lecture videos that use the Tagalog dialect. It is a system that converts Tagalog speech audio into searchable text and points the user to the exact time frame of the most probable location of the searched Tagalog keyword. A handful of companies and research groups feature similar services, however their systems do not support much on Tagalog spoken speeches. Their systems have limited vocabulary size and are designed for English speakers having similar characteristics and accent. Despite several decades of research in this area, accuracy greater than 90% is only attained when the task is constrained in some way (Haven,i73). Moreover, a system that recognizes the Tagalog dialect is unavailable.

2. Review of Related Study

2.1 Local Related Study

2.1.1 Recognition of Tagalog Alphabets using Hidden Markov Model by Rolando D. Navarro Jr. of the University of the Philippines, School of Statistics, Dilliman, Quezon City

This study focused on the development of a system that would recognize an isolated Tagalog alphabet using the Hidden Markov Model (HMM). Linear Predictive Coding (LPC) was used on its feature extraction unit in the 12th order at 400 samples window length. At HMM training, each of the Tagalog alphabets to be recognized is represented by the HMM and the HMM parameters are estimated using a training observation applying to Baum-Welch re-estimation formulas. A series of codewords that represents an observation sequence is used to optimize the state sequence using the Viterbi algorithm for each of the HMM. Using either forward or backward procedure, the likelihood

of the observation sequence is computed. The HMM that gives the maximum posteriori probability yields the recognized word.

The experiments were conducted to selected adult fluent speakers of Tagalog at a controlled environment and giving an overall recognition accuracy of 85.5%.

2.1.2 Speaker Independent Continuous Speech Recognition of the Filipino Speech Corpus by Herbert Go, Regilyn Ordonez, Gift Dela Roca, of DSP Laboratory, UP Dilliman.

This project describes a method of a speaker-independent, word-level recognition for continuous Filipino speech based on the Filipino Speech Corpus, a project made by Guevarra. et al. of the DSP Laboratory in UP Dilliman. The recognizer starts with a Multilayer Perceptron that is trained to compute the phone posterior probability from the Mel-Frequency Cepstral Coefficients extracted from speech samples. A trigram language model and a lexicon containing the anticipated phonetic spellings of each word are then built and a start synchronous decoder is used to find the most probable word given the phone posterior probability, the language model and the lexicon.

Upon test and experiments, the word-level recognizer was only able to achieve an average of 32% accuracy during testing of continuous speech.

2.2 Foreign Related Study

2.2.1 Acoustic Model Adaptation based on pronunciation variability analysis for non-native speech recognition by Yoo Rhee Oh, Jae Sam, and Hong Kook Kim

In their paper, pronunciation variability between native and non-native speakers is investigated. They proposed a novel acoustic model adaptation method based on pronunciation variability analysis in order to improve the performance of speech recognition by non-native speakers. The acoustic model adaptation method is performed in two steps: analysis of pronunciation variability and acoustic model adaptation based on pronunciation variability analysis.

2.2.2 The Flattening Technique of Spectrum for Improved Pitch Extraction by EunYoung Kang, MyungJin Bae from Department of Information and telecommunication Engineering., Soongsil University, Seoul, Republic of Korea.

This research is about a new flattening technique of log power spectrum for a more exact pitch extraction in the frequency domain. It uses autocorrelation method to measure the regular harmonic spacing of the flattened log power spectrum and pitch extraction is done in the frequency domain. The experimental results of the research show better performance than the conventional autocorrelation method.

3. System Flow

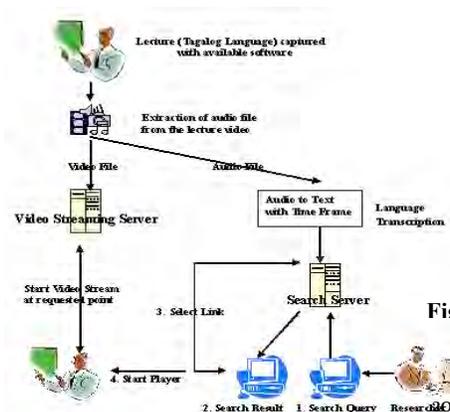


Figure 1: System Flow

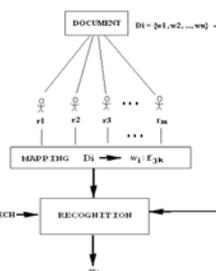


Figure 2: codebook

Figure 1 illustrates the overall idea of how the system functions. The lecture video is passed to a streaming video server which serves one's request to play and listen to a specific lecture video file. At almost the same instance, the system performs sound source separation, which is, the audio component of the video file is automatically extracted from the source and stored as WAVE format in the search server. A recording on each word of the training data is also stored in the search server that forms a collection of wav files (Figure 2). When a user submits a search term, the search page queries the codebook and return the most probable time occurrence of the search word in the lecture video file. The processes involved between the query and the result of the most probable time occurrence of the query is reflected on Figure 3. The block diagram of the speech recognition framework shows the different phases involved upon determination of word time occurrence. First into the pipeline is the pre-filtering phase of both source audio and search audio files that flatten all digital signals that are considered silence and unvoiced. The output is then a file that would apparently achieve end-point detection of words. Since spectral representation of the signal contains much of the information needed for the recognition, it can be used to represent each word and concisely capture the properties of the signal that are important for speech recognition. Spectral information from the segment of the speech signal is obtained using Fast Fourier Transform (FFT). The FFT outputs a representation value or a feature of each of the words that is used to matched in the codebook. For each of these comparisons, a distance is returned. The comparison that returns the shortest distance forms the most probable match. A time frame occurrence is then computed and displayed on screen.

4. Design Architecture

4.1 Block Diagram

The pattern-recognition approach to speech recognition is basically the process in which the speech patterns are used directly without explicit feature determination in the acoustic phonetic sense and segmentation (Rabiner, 1993). The method has two steps – namely, training of speech patterns, and recognition of patterns via pattern comparison. Figure 3 illustrates the methods used of finding the time occurrence of a spoken word in an audio extracted lecture video material using pattern recognition approach.

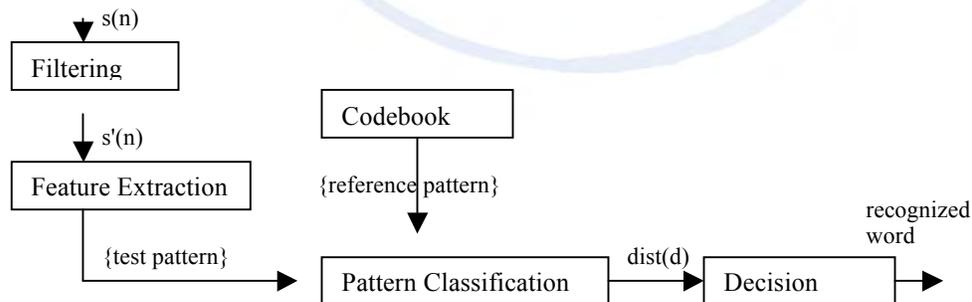


Figure 3: Text matching process diagram

The digital waveform representation of the input speech is pre-filtered to remove noise and unvoiced segments leaving the entire waveform representation as voiced and silence segments. Voice speech segments are then extracted from the digital wave form and are represented in a compact speech parameters using a windowed Fast Fourier Transform (FFT). FFT analyzes every word segment in the sampled audio file converting audio data into the frequency domain resulting

in a graph of the amplitudes of frequency components, describing the sound heard for that particular segment. These extracted speech parameters are then patterned-matched with the data in the codebook containing previously customized reference patterns. Computing the distance on each matched, the match with the shortest distance is assumed as the most likely word candidate.

4.2 Raw Data

WaveReader class reads and converts .wav files into parametric values at 256 samples to represent a single frame equivalent, overlapping at $\frac{1}{2}$ frame size on each of the frequencies in the waveform. Overlapping was necessary to paramount the representation of the frequencies. By this value, 171 frames are produced per 1000 milliseconds of recording.

4.3 Pre-Filtering

The simplest and the most straightforward classification in labeling events in speech are via the state of the speech production source – the vocal cords (Rabiner, 1993). A three-state representation can be used on labeling speech: Silence - where no speech is produced; Unvoiced - in which the vocal cords are not vibrating resulting to a periodic speech waveform or are random in nature; and Voiced - in which the vocal cords are tensed and therefore vibrate periodically when air flows from the lungs resulting to a quasi-periodic speech. Figure 4 shows the labeling classification of one of the source test data. It shows an amplitude increase on the waveform when a word is uttered and a decrease in amplitude when no word is uttered at all.

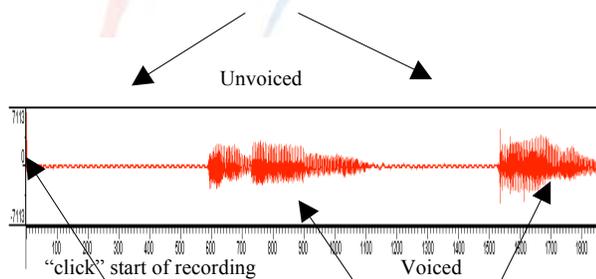


Figure 4: Spectrogram of the first 2000 milliseconds recording of the utterance "Alin ay ang iba ...".

Any vocal sample taken in a less than perfect environment will experience a certain amount of noise (Hayes, 1996). The effect of additive noise and reverberation on speech, background noise or unvoiced as it is often called, exhibits a certain frequency characteristics. If the speech signal is examined over a sufficiently short period of time (between 5 and 100 milliseconds), its characteristics are fairly stationary; however, over long periods of time (on the order of $\frac{1}{6}$ seconds or more) the signal characteristics change to reflect the different speech sounds being spoken (Deller, 1999). By this principle, a reference can be used to isolate each word in the source file.

To remove unvoiced segments without affecting voiced areas to isolate words, it is first necessary to get a sample of the room noise by itself (Deller, 1999). This sample is usually the first 200 milliseconds of the utterance (excluding the data of the first 50 milliseconds as it generates a high frequency when one starts the recording) which provides the general frequency characteristics and threshold of the unvoiced segments. A technique called end-point detection algorithm uses the threshold value to identify and separate voiced from unvoiced part of the signal. Unvoiced segment removal is performed in time domain where the amplitudes below the threshold are discarded and assumed to be flat (zero). The algorithm below describes the separation of the words.

Search from the beginning until the energy chooses Upper Energy Threshold (ITU), then back-off towards the beginning until first point at which energy falls below Low Energy Threshold (ITL) is reached. This is the provisional beginning point N1. N2 (end point) is selected in a similar way.

That is, if $S(x)$ is the sample, $U(x)$ is the background noise, all in the frequency domain, then

$$S(x)_{\text{new}} = \begin{cases} 0 & \text{if } S(x) < \text{threshold} \\ S(x) & \text{otherwise} \end{cases} \quad (4.1)$$

where threshold is the average frequency magnitude from time 50 ms to 200 ms.

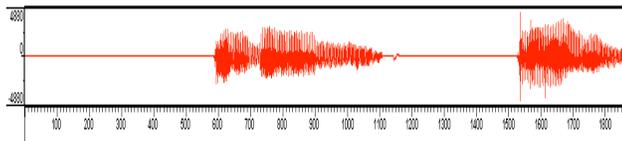


Figure 5: Spectrogram of the first 2000 ms recording of the utterance “Alin ay ang iba ...” after filtering stage.

Figure 5 is the result when the above algorithm is applied to the signal presented in Figure 4. It shows two representations of the speech signal; silence and voiced segments. A clear flat-line replaces where used to be unvoiced segments having common frequency characteristic. With this new resulting signal, words can be easily mined by a simple conditional statement and feed forward for feature extraction phase.

5. Feature Extraction

5.1 Hamming Window

The voiced segment forwarded from the previous phase for feature extraction usually contains a huge amount of data. In many digital systems processing, it is necessary to consider a small portion of the entire speech sample rather than attempting to process the entire sample at once

$$r(t) = \begin{cases} 1 & \text{for } (0 \leq t \leq N - 1) \\ 0 & \text{otherwise} \end{cases}$$

(Hayes,1996). The technique of cutting a sample into smaller pieces to be considered individually is called windowing and the simplest kind of window to use is the “rectangle”, which is simply an unmodified cut from the larger sample.

However, this type can introduce errors because near the edges of the window there will potentially be a sudden drop from a high amplitude to nothing, which can produce false “pops” and “clicks” in the analysis. The problem is recompense by slowly fading out towards the edges and multiplying the points in the window by a window function. One of the problems on this kind of solution is that

taking successive windows side by side with the edges faded out will distort the analysis because the sample has been modified by the window function. So that all points in the sample will be considered equally, windows are overlapped and to avoid distortion, the overlapped window functions should add up to a constant. It is defined as:

$$x = 0.54 - 0.46 * \cos(2\pi n / l - 1) \quad (5.2)$$

where x is the new sample amplitude, n is the index in the window, and l is the total length of the window.

5.2 Fast Fourier Transform (FFT)

The FFT is an optimized computational algorithm to implement the Discrete Fourier Transform (Deller, 1999). It takes a window of size $2k$ and returns a complex array of coefficients for the corresponding frequency curve. This algorithm has a complexity of $O(N * \log_2(N))$. It is because the data needs to be prepared by an operation called bit-reversal. During feature extraction, only the magnitudes of the complex values are used. The implementation involves two steps: shuffling the input positions by a binary reversion process, and then combining the results via a “butterfly” decimation in time to produce the final frequency coefficients. The first step corresponds to breaking down the time-domain sample of size 1 into 1 n -sized frequency-domain sample.

The frequency-domain view of a window of a time-domain sample provides the frequency characteristics of that particular window. In short, the frequency characteristics of a voice can be considered as a list of “features” for that voice. Therefore, combining all windows of a vocal sample and taking the average between them, we can get the average frequency characteristics of the sample. The frequency-domain of each word in the source can then be compared thru its frequency analysis with each cluster centered by some classification method.

6. Pattern Classification

The Euclidean Distance classifier uses a Euclidean distance equation to find the distance between two feature vectors.

If $A = (x_1, x_2)$ and $B = (y_1, y_2)$ are 2-dimensional vectors, then the distance A and B can be defined as the square root of the sum of the squares of their differences:

$$d(x, y) = \sqrt{(x_1 - y_1)^2 + (x_2 - y_2)^2} \quad (6.1)$$

This equation (6.1) can be generalized to n -dimensional vectors by simply adding terms under the square root.

$$d(x, y) = \sqrt{(x_n - y_n)^2 + (x_{n-1} - y_{n-1})^2 + \dots + (x_1 - y_1)^2} \quad (6.2)$$

7. Decision Rule

The concept with pattern matching technique in speech recognition is that enough versions of a reference pattern to be recognized are stored in the training set (Jelinek,1999). In the pattern comparison stage, direct comparisons between the unknown speech patterns to each possible pattern in the training set were exhaustively performed. These comparisons generate a value representing the distance between each word. The decision rule phase simply classifies based upon the distance of the value returned among the unknown speech recording and selects the lowest among the distance cost in the matrix. The shortest distance is returned as the most probable match to the search word.

8. Experiments

8.1 Test Setup

Recording of the training and testing sets were done in a controlled environment using ordinary PC microphone. Video recording of the text dependent lectures were done using existing video recording capable software's. Audio files are sampled at 16 KHz 16 bit mono format and windowed at 256 samples per frame. The training text is composed of a five word sentence recorded in a pan of 8 seconds and has two of the words repeatedly uttered at the start of the speech and at the end. All the experiments were done on either an Intel core 2 Duo 2.2 GHz with 2GB RAM PC or at an AMD Turion X2 Ultra Dual-Core Mobile 2.10 GHz with 3GB of RAM. This is due to the fact that recursive pattern comparison of the training set and codebook involved an enormous amount of processing power.

8.2 Experimental Results

The system test was divided into training and no-training modes. Training mode means a recording on each word has been performed by the speakers. No-training relies mainly on the available test patterns of previously made recordings. Figure 6 reflects the distance performance in searching the word "alin" in a trained environment. The graph shows significant information indicating the distance

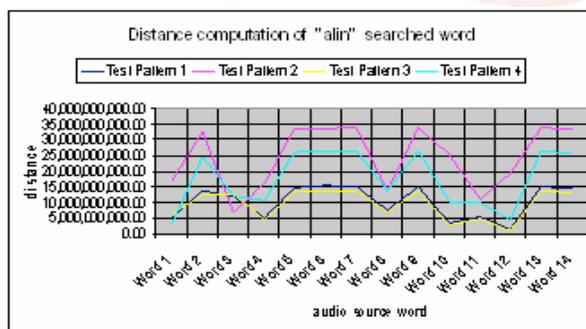


Figure 6: Distance of "alin" compared to each word in the source audio file.

corresponding to each word for every test pattern. Averaging the distances returned on each comparison indicate the most probable word frame location as

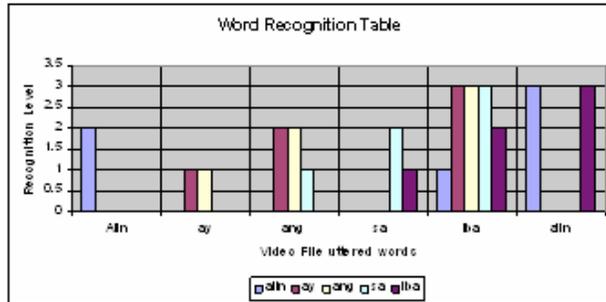


Figure 7: Word recognition level of “alin”

reflected on Figure 7. The figure shows that word 6, 1 and 5 in that order was assumed equal to the search word. Figure 8 and 9 shows the performance if no training is being made to the system. It clearly shows a change in the recognition rate giving a different probable word location.

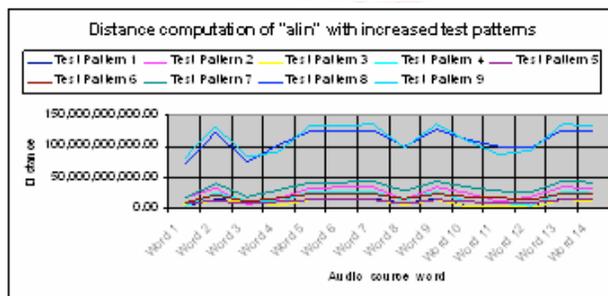


Figure 8: Distance of “alin” to each word in the source audio file at increased test patterns

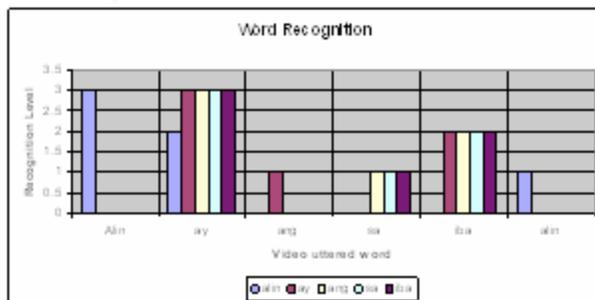


Figure 9: Word recognition level at increased test patterns

Experimental results of the system shows an average recognition rate of 30%. Moreover, an average of 30% drop off on recognition rate is returned if no training has been done. It was also notably noticed during the experiments that every time improper recognition of the word is returned, the second or the third in the rank of probable match is the correct word occurrence. The following results might be due to some facts that speakers cannot repeat precisely, on the same way, an utterance of the same word even on different trials, much more if no training has been done. Moreover, some digital representation of the most commonly unrecognized Tagalog words when examined shows a gap in between its digital representation (i.e. “iba”). The acoustic realization of stress from unstressed syllables affects spectral quality and intensity. In the case of the word “iba”, the signal representation of the word has a weak intensity and tends to have flatter spectral tilt that

probably was interpreted by the system as two separate words, consequently affecting the recognition rate.

Conclusion

Speech Recognition is naturally a field where huge amount of considerations has to be made in order to produce good recognition results. Our system generates recognition rate at an average of 30%. In a given signal, pattern matching technique is used to identify word frame location. End point detection technique is applied to break up voiced from unvoiced signal necessary for computing the distance on each test pattern to return the probable word location. On each word detection, considerations has to made on those instances wherein the frequency signal map of the word reveal a gap in between. Like for instance the word “iba”. Since the gap on the signal was assumed to reveal two words instead of one, it affects the distance computation and thus returning bad results. In studies of this kind, a good algorithm has to be implemented that would answer such instances on a signal. Although our system tries to address this type of situations, it was not able to perfectly resolve the problem.

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The logo for iafor (International Association for Frontiers of Research) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by two concentric, circular, brush-stroke-like lines. The inner line is a light blue color, and the outer line is a light red or pink color. The lines are not perfectly circular and have a soft, painterly texture.

Title: Learner autonomy in one-to-one school English laptop programmes: Balancing access and authoritative knowledge

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Topic of the submission: Technology in Learning



Learner autonomy in one-to-one school English laptop programmes: Balancing access and authoritative knowledge

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INTRODUCTION

The use of computer-based technology in English language learning has had a mixed history. The early technical pioneers and writers in Computer Assisted Language Learning (CALL), particularly, Higgins (1988) and Pennington (1996) extolled the use of desktop computers in language skills development, motivation and learner independence despite, at times, inconclusive research-based evidence demonstrating the effectiveness of CALL in general classroom contexts (Chapelle & Jamieson, 1986; Garrett, 1991). More recently, new media and literacy practitioners have shown how computers and network connectivity offer opportunities for learners in writing, reading, research, assessment, self-expression, publication, autonomy and interest-based community building (Cummins, Brown, & Sayers, 2007; Dede, 2005; Gee, 2004; Hull & Nelson, 2005; Jewitt, 2002; Warschauer, 2006). But, realising the potential of contemporary technology to bring about sustained, equitable and challenging academic language work remains, overall, an elusive and often contentious goal for educational policymakers, curriculum designers and language teachers alike. The impact of ubiquitous mobile computing on students, teachers and the curriculum is a striking case in point.

At first sight, the notion of equipping each student with a wireless laptop is empowering and exciting, and according to Dressman and Wilder (2007) the introduction of mobile technology into language learning provides opportunities for positive pedagogical change. Yet, teachers in one-to-one laptop classrooms also face a multitude of complex issues including but not restricted to: administration, challenges to existing teacher-centric practices, conflicts with curriculum and assessment, and dissatisfaction with professional development opportunities and technical training. For example, in McGrail (2006) a small group of English teachers ($n=6$) showed keen awareness of how laptops could assist in addressing their students' needs. But the teachers were not happy about being omitted from discussions about who joined the laptop programme, how quickly it was introduced across the board and what the technology was meant to achieve given top-down institutional pressure to prepare students for high-stakes, standardised tests. In other studies, Khambari, Moses and Wong (2009) reported that teachers found the professional development they were given did not address their particular needs, and Murphy, King and Brown (2007) showed professional development content to be either too difficult or too simple for some—even within the same instructional group.

In my own research conducted in a Singapore high school operating an individual laptop ownership programme (i.e. parents are required to purchase computers for their children to use in school and at home) findings show teachers challenged in the utilisation of a wider base of expertise in their classrooms beyond the conventional wisdom derived from print-based resources and teacher-led, tightly structured instruction. However, before considering

some possibilities for educators and school administrators to pursue in accommodating laptops into mainstream language learning, some contextual background to the present study is necessary.

NATIONAL AND STUDY CONTEXTS

Singapore

Since its independence in 1965, Singapore has strived to develop a just and equal nation (Lee, 1998). Crucially, education has had a key role to play in meeting these objectives and the national education system is designed with two key ends in mind: (i) develop Singaporeans in the moral, cognitive, physical, social and aesthetic spheres of life, and (ii) foster responsibility to the community and country from which senses of purpose and identity can be derived (Ministry of Education, Singapore, 2009). The Singapore government is characteristically pragmatic in its form of governance and this orientation is clearly reflected in its educational policies. In particular, successive Information Technology (IT) Masterplans announced between 1997-2008, have emphasized the importance of technical skilling, customised learning, deep intellectual engagement, self-direction and flexibility in terms of where, when and how learning occurs (Ng, 2008). Looking forward, the government has invested heavily in an ambitious and extensive research, development and innovation agenda in digital media with the aim of creating a niche digital market share, wealth generation and job creation (Media Development Authority, Singapore, 2008). Overall, policy-makers in Singapore envision a future where:

Learners in 2015 will access the latest learning resources using personalised learning devices. Content will be delivered via ultra high-speed broadband networks. Learners can choose to learn at any place, leveraging on pervasive wireless access. Learners collaborate with one another over the network, using collaborative tools. Educators guide learners, by customising learning plans and resources, and using new assessment tools to monitor their progress. The habits of independent search, integration and construction of knowledge and the skills acquired from working together with others will equip our people to continue to adapt and learn. (Info-comm Development Authority, Singapore, 2006, p. 5)

The 1:1 Laptop Programme

Fox Hill Secondary¹ (FHS) is a well-established local institution given additional government funding and flexibility to develop holistic and innovative curricula and programmes designed to stretch its pupils to the fullest. Importantly, teachers at FHS are not tied to set texts and can plan yearly and/or half-yearly schemes of work (syllabi) independently at the departmental level. FHS is also implementing—through its own design and initiative—a school-wide infrastructure and curriculum development programme to improve its students' engagement in learning and strengthen their critical and creative capabilities. This plan consists of three interrelated components: (i) key programmes, (ii) people, and (iii) places.

The first element, programmes, involves redesigning the school's instructional delivery system so that each student has on-demand access to digital tools and resources both in and beyond school. As far as pedagogy and classroom practices are concerned, emphasis is to be placed, via the crucial mediation of the laptops, on using a variety of semiotic modes (Jewitt, 2008; Jewitt & Kress, 2003; Kress & van Leeuwen, 2001), promoting research and developing oral presentation skills.

¹ All names used in this paper are pseudonyms.

Second, teachers' professional learning is to be valued and catered to through leadership and collective learning activities. For example, teachers at FHS are expected to use their "protected time" (common non-teaching periods) to further enhance their understanding of their students' learning styles and preferences through individual and group-based critical reflection. The aim is that the protected time will facilitate better alignment between the use of suitable tools and resources to meet students' learning needs and interests.

Finally, with places, FHS has invested heavily in creating multifunctional and collaborative learning spaces around wireless, interactive technologies. The school makes extensive use, for example, of dedicated servers for video streaming, data-loggers and a fully functional, high-definition, media centre for student-produced projects.

METHODOLOGY

Research Design and Participants

Following design experiment prototyping practices (Bannan-Ritland, 2003) and descriptive/exploratory case study methods (Freebody, 2003; Hitchcock & Hughes, 1995), a three-year funded research project (including a one-year pilot) is currently being conducted at FHS to investigate and evaluate its laptop programme insofar as it relates to English language teaching and learning. In terms of scope, the participants include the teachers in the English department (n=18) and students from their respective classes in levels Secondary 1 to Secondary 3 (ages 13-15). Written informed consent was obtained from senior school administrators, teachers in the English department and parents or legal guardians prior to the commencement of the study. Students were also briefed about data collection procedures that affected them and assented, accordingly, by signing off on a class-based form.

Data Collection and Analysis

The data reported in this paper are drawn from two main sources: (i) an online survey that was administered to 357 Secondary 1 students (96.7% of cohort) to determine their laptop usage profiles in school and at home, and (ii) a series of classroom observations and follow-up interviews with a small number of teachers (see Towndrow & Vaish, 2009, for further details). The teachers taught a nominal sample of four lessons each (linked topically or thematically) and their tasks were video-recorded and simultaneously coded by the research team for a variety of classroom interactions and artifact production by students. The resulting quantitative data were processed using spreadsheet software to produce frequency statistics of the total amount of class time spent in various activities. The interviews were recorded digitally and transcribed verbatim. The interview transcripts were read and coded using a grounded approach (Glaser & Strauss, 1967). Initial codes were proposed and then progressively refined to identify and categorise the teachers' pedagogies, classroom practices and professional learning concerns.

ILLUSTRATIVE FINDINGS

Due to the lack of space, the findings presented in this section represent a very small part of the overall data set. Four aspects of the English language teachers' and students' work in laptop-based learning are illustrated: (i) teachers' goals, (ii) sources of authoritative knowledge in the classroom, (iii) frequency of students' use of instructional resource in

English language learning in school, and (iv) teachers' concerns relating to vigilance and instructional control.

Teachers' Goals

The information shown in Table 1 identifies the cognitive demands placed on students during the observed lessons. The overall pattern of events indicates that students were not required to analyse (identify constituent parts and purposes), evaluate (make judgements based on criteria and standards), or create (put elements together to form a coherent or functional whole). Where and noted, students were required to remember (23.1%), understand (15.4%) and apply (7.7%) in tasks set.

Table 1. Teachers' Process Goals in English Language Tasks

	Remember (%)	Understand (%)	Apply (%)	Analyse (%)	Evaluate (%)	Create (%)
Not selected	61.5	46.2	69.2	100.0	84.6	100.0
A little	15.4	38.5	23.1	0.0	15.4	0.0
Some of the time	23.1	15.4	0.0	0.0	0.0	0.0
Almost always	0.0	0.0	7.7	0.0	0.0	0.0

Sources of Authoritative Knowledge in the Classroom

Table 2 shows that when the legitimacy of knowledge and answers were given to issues and questions raised in the classroom, teachers or texts were the most frequent sources of authoritative knowledge. It is notable—given the potential access to information—wireless computing, media, the Internet and software were never used either individually or collectively. Crucially, students were neither consulted nor recruited as sources of knowledge. Many times, no sources of authoritative knowledge were referred to explicitly.

Table 2. Sources of Authoritative Knowledge in the Classroom

	Student (%)	Previous lesson (%)	Teacher (%)	Textbook (%)	Other text (%)	Media (%)	Internet (%)	Software (%)
Not selected	100.0	92.3	46.2	100	69.2	100.0	100.0	100.0
A little	0.0	7.7	23.1	0.0	0.0	0.0	0.0	0.0
Some of the time	0.0	0.0	7.7	0.0	23.1	0.0	0.0	0.0
Almost always	0.0	0.0	23.1	0.0	7.7	0.0	0.0	0.0

Frequency of Students' Use of Instructional Resources in English Language Learning in School

Table 3 provides a profile of students' use of various instructional resources (both print-based and digital) in the classroom over a range of time periods: daily, weekly and monthly. The most frequently used digital resource was electronic slideshow software (35.6%, once a week). Importantly, a sizable minority (approximately one third) never used software (e.g. mind- or concept-mapping, Comic Book Creator) or interactive and digital media (movies, photos, animations, games, virtual reality etc.) in school. Similar figures were recorded for usage at home.

Table 3. Frequency of Students' Use of Instructional Resources in English Language Learning in School

	Textbook (%)	Textbook + Worksheet or Worksheet (%)	Worksheet only (%)	Electronic Slideshow (%)	Word-processor (%)	Internet (%)	Software (%)	Digital Media (%)	Interactive and Apparatus (%)	Props and Apparatus (%)
Never	15.4	11.2	9.5	11.2	26.9	13.7	39.5	30.3	50.4	
Once a month	24.1	17.9	12.3	16.0	16.5	13.7	22.4	27.2	20.7	
Once a week	26.1	32.5	31.7	35.6	30.0	34.5	23.5	24.4	16.2	
Once a day	20.4	24.4	32.8	26.1	17.6	22.1	9.8	10.4	6.4	
More than once a day	14.0	14.0	13.7	11.2	9.0	16.0	4.8	7.8	6.2	

Teachers' Vigilance and Instructional Control

The content of post-lesson interviews and other conversations with teachers indicated that the teachers' concerns were diverse, highly personal and linked intimately to their own experiences and knowledge of the one-to-one innovation in the school. For example, a teacher remarked in an interview following an observed lesson in which she wanted to teach the structural and grammatical features of news reports:

Initially I allowed the students to use their laptops to type notes. Then I found some of them were surfing the net [behind my back].

And she added:

When I'm in class, I want the students to listen to me alone. And ... the computers take that away.

Another colleague (with long-experience in the school) had some experience of working with IT but remained anxious about its use in class. She explained:

I see the power of the tools. It's just one apprehension: class control. I can only do it after I am assured and I have got them [the students].

In sum, the data presented portray a mixed and contradictory picture of one-to-one computing in English language learning. On the one hand, the students and teachers at FHS possess the

tools to harness the power of mobile learning in ways that are consistent with its three-part, school-wide infrastructure and curriculum development programme. Yet, there were low reported and observed use of digital tools and new media in lessons. Furthermore, students were involved in a very limited range of cognitive processes during the enactment of tasks. The majority of work done involved receiving information. Students were seldom required to manipulate, combine or critique information or knowledge for themselves. Finally, it is noteworthy that teachers were concerned about maintaining vigilance and instructional control even when the affordances of digital tools and media were known. Under these restricted circumstances, then, it is not surprising that teachers and written texts were the dominant sources of authoritative knowledge in classrooms.

DISCUSSION

The inconsistent and sometimes angst-ridden one-to-one context at FHS is as perplexing as it is potentially fruitful. As outlined above, there is strong visionary government leadership and technological infrastructure building in place in Singapore, but there is something missing, something elusive that stands in the gap between policymakers' intentions and individual classroom-level implementation. It would not be wrong to state that the pressing demands of preparing students for high-stakes examinations can quickly deplete transformative thinking in lessons (especially when there is a lot of curriculum content to cover and time is limited) but the fixed and often non-negotiable nature of formal assessment is not necessarily at odds with on-demand student access to digital tools and resources. Arguably, when teaching/learning and assessment clash, pedagogy—understood as being more than just a set of instructional methods—is potentially misaligned. Thus, if one-to-one learning is to foster autonomy, the integration and construction of knowledge, teamwork, adaptation and new literacy practices in classroom-based language learning, then I maintain educational practitioners (teachers, researchers and students) need to understand, primarily, how learner independence, crucially mediated by technology, and teacher direction relate to each other in practical terms.

Teacher Direction and Learner Independence

There can be no doubt that teacher input is necessary for instructional interactions to occur and this is particularly true when access to information, knowledge and social media are pivotal in decision-making concerning the time, location, topic, pace and pathways in learning. Yet, as shown in Figures 1a and 1b, the association between (teacher) direction and (learner) independence is potentially variable and vitally context dependent. In formal situations, high levels of teacher direction and task framing tend to constrain and limit the scope and potential for independence (Figure 1a). The converse occurs when lower levels of teacher direction widen opportunities for learner independence to flourish, especially in informal contexts (Figure 1b).²

² I am indebted to Dr. Hayo Reinders for helping me conceptualise the relationships shown in Figures 1a and 1b.

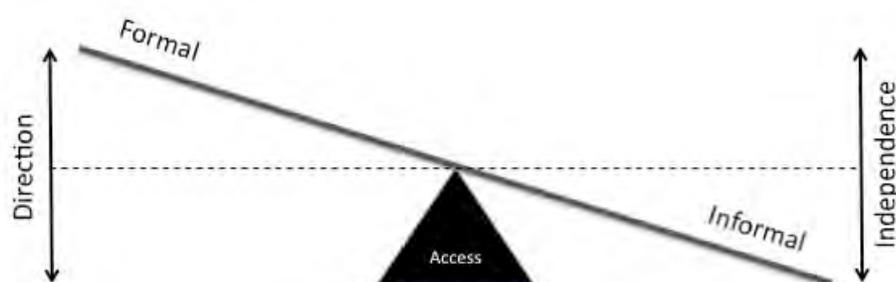


Figure 1a. High Levels of Teacher Direction in Formal Learning Constrain Learner Independence



Figure 1b. Low Levels of Teacher Direction Widen Opportunities for Learner Independence in Informal Contexts

Implications

If this conceptualisation is correct, then there are serious and pedagogically challenging implications for the ways in which school-based laptop ownership programmes in English language learning are designed, implemented and evaluated. Prototypically, two distinctive technology and new media scenarios are made possible and juxtaposed by wide access to media and information: (i) tightly framed, teacher-centred schoolwork, and (ii) more open and flexible informal usage. However, there is a double-pronged sting-in-the-tail, here. First, as learners become highly proficient independent operators, disparities between what they are exposed to with technology outside of school and what they are allowed to say and do within it widen. The unfortunate consequence is that technologically adept and knowledgeable students could become bored and possibly *enraged* by schoolwork that does not acknowledge or extend their capabilities, interests and dispositions (see Prensky, 2006, Tapscott, 2009).

Second, in an effort to maintain authoritative control over knowledge, some teachers in one-to-one learning contexts assign out-of-school tasks (e.g. homework) that only require the rudimentary and/or perfunctory use of technology. Such tasks might include word-processing, making wordy electronic slideshows or gleaning factual information from specified Websites. (Recall the data in Table 3 showed that one-to-one laptop students rarely created their own interactive media or multimodal texts, at home, for school-based purposes). Again, as functional as these assignments may be, they do not easily allow students to exercise significant pedagogical agency.

If teachers (and students) are to realise the potential of contemporary technology to bring about sustained, equitable and challenging academic work in one-to-one contexts, then they will have to face up to the inevitable reality—however disruptive it is—that ubiquitous ICT alters the axis of epistemic authority in teaching and learning towards students. Following Covey (2004) teachers might react that their concerns (e.g. lack of time and technical skilling) outweigh their influence to change working practices. However, teachers under these circumstances could become more effective if they focussed their attention on the things that they can do something about. The following section includes some recommendations about how teachers could be more proactive in one-to-one language learning.

RECOMMENDATIONS

The following recommendations relate to how teachers might increase their "circles of influence" (Covey, 2004, p. 83) in one-to-one language learning. Two broad suggestions are made that hinge crucially on teachers exercising leadership laterally in classrooms with students and in school departments with colleagues.

Partnership and Student Agency

If information technology and new media are to be used more productively as catalysts for curricula reorganisation and the growth of learner independence, then it is obvious that classroom interactions need to be designed and oriented more positively towards learners and learning. Normally, language teachers play a vital role in determining *when* access is granted to learning tools and instructional media but the matter of *how* they are recruited in meeting lesson objectives is not necessarily specified (or circumscribed) by curriculum designers in advance. If accepted, a path is opened towards a different (even non-combative) type of technology-mediated interactions with students.

One interesting possibility in this direction is Prensky's (2010) "pedagogical partnering" concept. Essentially, pedagogical partnering provides opportunities for students and teachers to focus on the aspects of learning they can do best. This involves giving students central responsibility for: finding and following their passion(s), using whatever technology is available, researching and finding information, answering questions and sharing their thoughts and opinions. For their part, teachers should: create and ask the right questions, give guidance, put material in context, explain, create rigour and ensure quality in learning. Crucially, technology supports pedagogical partnering and enables each student to personalise his or her learning processes. Technology might also be a medium for students to experience success in their learning (Brooks-Young, 2010).

But, in my estimation, there are two operating conditions that need to be fulfilled for ubiquitous technology in pedagogical partnering to be used meaningfully. First, students need to be involved in performance-based assessment tasks (cf. Hibbard, 2000) that allow them to use their content knowledge and learning-skills to demonstrate the achievement of learning outcomes where the complexity of tasks set is commensurate with the life-experiences they possess. For this to happen, students need to be able to make choices about what they present as evidence of learning having taken place and given flexibility in deciding on the strategies employed to reach curricula objectives. Experience shows that language students in one-to-one laptop programmes are ideally placed to exercise agency of this nature by using new media as channels for communication and wireless networking utilities as tools for peer-to-peer learning. However they need guidance in framing their ideas and implementing work-

plans within acceptable academic discourse and values. Additionally, teachers need to demonstrate leadership in classroom-based task design by letting their students share leadership in the domains of task implementation and assessment.

Second, the notion of what counts as authoritative knowledge in the classroom needs to accommodate more readily learning that occurs informally. What prevents (language) teachers admitting, for example, that knowledge or information taken from a computer game, blog posting, on-line status update or television programme is valid evidence in reasoned discussions, debates and judgements, in school. When this happens technology and learner independence will draw closer together and be truly mutually informing.

Collective Action

Issues relating to what can be done to expand language teachers' views of one-to-one learning are vexing but they are not intractable. One avenue would be to wait for the benefits of professional development programs in computer skilling and methodology to mature over time. But the flaw in this strategy is not that it takes time, but rather that it portrays teachers as poor, individual performers whose levels of competence can be improved through standardised and standardising professional development activities.

An alternative approach to one-to-one professional learning goes beyond the realm of an individual's action. Based on Boreham (2004) competence is not considered exclusively as an attribute of individuals. Instead it is equally a matter of collective action involving making communal sense of workplace events, developing and using a collective knowledge base and developing interdependency through cooperation and communication between sub-systems in an organisation.

If accepted, the notion of collective competence requires space for collective responsibility and mutual support for changes in workplace practices to occur (cf. Kennedy, 2005). This it is contended is only viable within an even broader framework of organisational learning. Data from the present study intimate the urgent need, therefore, for the operation of a theory of action relating to one-to-one learning that runs at the levels of the school, department or departmental sub-group. Elmore (2006) explains that a theory of action is a set of logically connected statements that link the actions of leaders to collective members of organisations to bring about improved practices. Crucially, school theories of action help colleagues understand *what* they are aiming to achieve and *why* this is important.

Working towards collective action is not a novel proposition but its application to English language one-to-one programmes is promising. Importantly, it is suggested that one-to-one learning is not solely an issue of individual competence. Seen from a wider, collective perspective, support for pedagogical change would seem to require strong, insightful and consistent leadership (not management exclusively), and knowing how to embrace complexity and foster diversity. Furthermore and most importantly, the development of teachers' one-to-one capabilities involves understanding how learning occurs in professional spheres of practice both formally and informally and allowing teachers' interactions to happen freely in these areas (see Fraser, Kennedy, Reid, & McKinney, 2007).

For example, I have witnessed a small group of teachers (not at FHS) create and operate within what Gee (2004) calls an "affinity space" that allowed them to transition from a collection of like-minded individuals towards a coalescence based around mutually benefiting

interactions. According to Gee, affinity spaces—commonly associated with on-line gaming enthusiasts—are composed of three elements and are characterised by several distinctive features: (i) content, (ii) a portal (e.g. places where interactions can occur: staffroom, corridors, canteens) and (iii) a generator that can organise, for example, content (e.g. a curriculum and the need to produce learning materials to support it).

Briefly, in terms of defining features, this group of teachers displayed many of the signature interactions of an affinity space (Gee, 2004, pp. 85-87). They:

- Had common interests, goals and practices not based on race, gender, age or social class;
- Were not segregated based on levels of expertise;
- Collaborated in the development of specialised knowledge and shared this extensively with others;
- Acknowledged and built each other's tacit knowledge; and importantly,
- Had no assigned leader.

Gee mentions that traditional school classrooms are not suited to affinity space interactions because of the status afforded to teachers and the set curriculum as sources of unquestioned authoritative knowledge. However, I maintain that teachers can successfully work in affinity-based spaces of their own devising. I am confident that teachers can bootstrap their own learning and provide leadership to their colleagues in ways that are peaceful and meaningful but not status-laden.

If I am correct about the efficacy and potential of teachers' affinity-based interactions, then school administrators and managers would do well to give as much time and space as possible to teachers to mix, match and discuss their work wherever and whenever they can. Teachers' pedagogic conversation is productive and should be seriously considered as an essential mark of inquiring, futures-oriented educators.

CONCLUSION

Within the context of a study of English language learning in a Secondary school in Singapore operating a one-to-one laptop ownership programme, illustrative findings showed how colleagues were seemingly hindered in their attempts to balance the demands of formal teacher-led direction with the autonomy that is potentially afforded by ubiquitous wireless access to the Internet and computer software. What resulted were low reported and observed use of digital tool and new media usage, and the enactment of rudimentary computer-based tasks.

Looking ahead, I have argued from an evidence base that the opportunities for positive pedagogical change in one-to-one language learning are realisable given two interrelated conditions. First, teachers need to know how learner independence that is crucially mediated by technology, and teacher-direction relate to each other in practical terms. Second (and not wishing to make light of the difficulties associated with classroom management) teachers need to recognise and respond positively to the ever-increasing reality that they no longer occupy the roles of sole source and arbiter of knowledge in the classroom that they once did when print-based and analogue resources ruled the day. Technology is no respecter of traditional epistemic authority and unquestioned procedures. So, what can be done (as FHS

wants to do) to improve students' engagement in learning and strengthen their critical and creative capabilities?

Teachers are not totally bereft of agency in one-to-one learning contexts even though the ground has shifted around them. I have recommended that they show leadership at their level in two ways by: (i) partnering (not battling against) students in task design—that is, allowing them to make decisions about how work is completed and assessed, and (ii) working collectively with colleagues drawing on commonalities and affinities that may go beyond (but certainly not circumvent) overt school-based structures. This second notion is at first sight unconventional and far-reaching because it challenges accepted (and largely unquestioned) notions of where expertise is located in schools. However, if students can create and operate in non-hierarchical affinity spaces, then teachers should be prepared to demonstrate that they can do likewise with positive results.

As mentioned at the beginning, research work at FHS is ongoing. It is planned that future published work will include detailed case studies of English language teachers' professional learning in one-to-one task design, implementation and evaluation. In the meantime, it is hoped the ideas presented here will prompt readers to reflect on their own pedagogy and practices within one-to-one or other technology-rich contexts. The following questions taken from Towndrow (2007) are offered as starting points for discussion with colleagues in schools and/or school administrators and managers.

1. Do you consider you are living in the Digital Age? If you do not think the Digital Age is currently influencing your personal and professional life, are there signs that it might do so one day soon? What can you do to prepare for this eventuality?
2. What is your stance on the challenges posed by ICT in your educational practice? Do you feel empowered or are you debilitated by what ICT has to offer?
3. How can language teachers and learners find out what ICT tools do and how they can be used to demonstrate the achievement of learning objectives?
4. Where is expertise located in your school and classroom?
5. Do you have any experience of collaborating with a colleague in the use of ICT in language teaching and learning? How did your project begin? How did your project impact on your own/your partner's teaching practice and/or professional learning?

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The Political And Economic Argument In Contemporary Classroom Teacher Effectiveness Research And Inquiry.

Introduction

This paper outlines the specific political and economic parameters that influence public education. In doing so, the paper examines theoretical aspects of the policy-making debate within Australia centred on effective classroom teaching practice and instruction. The paper implies that significant and global political and economic considerations invariably force governments to act thus exerting influence and control over educational matters including classroom teaching practice. To this extent, public education policy-making must grapple with prevailing political and economic considerations in so far as they involve and require an educational response.

There are four parts that comprise the paper. Part one expresses the main contextual arguments involved in clearly identifying, in broad terms, the political and economic forces that guide and control public education. The modern prioritisation given to change and disorder, particularly in terms of the economic, signifies the major challenge for education. In quite specific terms, this part of the paper provides the prevailing and broad-based economic argument that is the vital and important feature that propels change and transformation in terms that affects public education, the general work of schooling and classroom teaching.

The implicit facilitation of large-scale economic change occurs via the political process. The second part of the paper considers the major political imperative that has defined significant economic transformation and change in recent times. This imperative is described for the purposes of this paper as the movement towards State sanctioned dislocation and removal involving withdrawal from economic provisions and commitments that once drew upon State-based involvement. The contemporary and prevailing State sanctioned blue-print recommends and provides for market driven approaches including enhanced economic competition. The performative component of classroom teaching practice and its subsequent evaluation for systemic compliance is symptomatic of this contemporary mode of existence.

The third aspect of the paper discusses the core aspects of post-Fordist productive capacity in terms of preparation and 'job-readiness'. The new post-Fordist work order privileges demonstrative and performative capacity. To this extent, it is a skills-based new world, and education and training hold a distinctive and pre-eminent position. Classroom teaching practice is crucial for it directly links to individual student skill development.

Finally part four of the paper completes the argument by locating the apparent constant of change and dislocation within the terminologically accepted reference point of globalization. The major point emphasized here relates to control brought about by economic and political change. If one accepts the political and economic conditions portrayed at the start of the paper that have resulted, it is argued, in significant change and capital dis-organisation, the control and management, or in other words, governance of public education is paramount. In the current context, it is not surprising that education policy-making explicitly targets and emphasizes classroom teacher effectiveness and the evaluation of individual classroom instruction. Moreover and importantly, bureaucratic and policy-making arguments in support of the evaluation of individual teacher performance are sustained by positivist articulations of teaching practice. Their veracity is acutely questionable and contestable.

(1) Organised to Dis-Organised Capital: The Contemporary Milieux

The basis of organised capital production, the long established mode of productive exchange incorporates inter-related features (see Lash and Urry, 1987, p. 3). These features are characterised and suggestive of clear and structured relations of capital that now no longer dominate. Indeed, the post-

Fordist shift in productive exchange is based on disorganised modes of productive capacities that include non-uniform multi-dimensional individual abilities and talents for productive interaction and application.

Subsequently, the representative capitalist derivation of disorganisation has a conceptual but also tangible and real basis. Its affirmation in particular and individual western countries is somewhat different; nevertheless, prominent factors adhere to similar features and aspects (see Lash and Urry, 1987, pp. 5-7). Some of these include:

1. The growth of a world market combined with the increasing scale of industrial, banking and commercial enterprises...From the point of view of national markets there has been an effective de-concentration of capital.
2. The continued expansion of the number of white-collar workers and particularly of a distinctive service class (of managers, professionals, educators, scientists, etc.), which is an effect of organized capitalism, becomes an increasingly significant element which then disorganizes modern capitalism. This results from the development of an educationally based stratification system which fosters individual achievement and mobility and the growth of new 'social movements' (students', antinuclear, ecological and women's movements, etc.) which increasingly draw energy and personnel away from class politics.
3. Decline in the absolute and relative size of the core working class, that is, of manual workers in the manufacturing industry, as economies are de-industrialized. (Lash and Urry, 1987, pp. 5-7)

Disordered forms of capitalism signify economically systemic disaggregated conversion. Cultural and sociological features sustain it and propel it forward. But, its overall and foundational standpoint is built upon the productive capacities and features of capitalism itself without which it would not have importance, and moreover, would not eventuate.

Education is drawn into and cannot escape this maelstrom. On the contrary, education is not only a key part of this new world; it is one of the major facilitators of its existence and sustenance. Education through an articulated conscripted attachment to a provisionally enacted form of practical interaction produces desired outcomes. As a result, they are deemed necessary and indeed vital to the new world configuration and become de-facto policy-making inscriptions of governance. To comprehensively sense and grasp the relevance of education in this transformative transfiguration requires the elaborate discursive outline of the pervasive political and economic influence that has dominated modern contemporary times. It is also to specifically focus on schools and in particular the relevance and importance of classroom instruction and so classroom teachers.

Indeed, a major contention of this paper is to suggest that contemporary education policy-making emphasizes a re-casting of the problem and question of classroom teacher effectiveness. A specific current concern in education policy-making appears to have shifted focus and attention upon student learning, and in particular, academic underperformance. The contemporary neo-liberal emphasis on the standardization of education depicted by outcomes-based educational measures is central to policy reform strategies, particularly those that are unique to classroom instruction and student achievement. But, significantly, systemic neo-liberal audits of classroom instruction and student achievement are a prominent display of the success or failure of schools, their students and teachers. Teacher effectiveness research, particularly if it is solely defined by convoluted mathematical research designs limits its depictions of classroom practice and student achievement to the knowledge gained about teaching and learning from standardized external tests.

Consequently, the contemporary education system replete with its particular mechanisms and regimes of accountability, generally expressed as a set of education system policy-objectives and teacher personnel performance statements, obliges governments to provide an educational service. The Panoptic process of procedural surveillance that is the very formula of an imposed neo-liberal education order of governmentality over teaching practice dominates. For the school as an institution it means constant evaluations of student attendance figures (enrolments), and an attention to arbitrarily contrived numerical

comparisons of school performance-(standards) within and across geographic regions or zones and across a State. It is also characterised by attention to curriculum policy and its development. For classroom teachers it increasingly regards teaching and the work of teachers primarily for the formation of student skills. It is an agenda that has its genesis in aspects of economic performativity and relates very much to phases of a teacher's work that can be measured and verified through testing. Consequently, the role of the individual classroom teacher becomes increasingly "routinised and proletarianised" (Smyth & Shacklock, 1998, p.50) as they are "subjected to the discourses as well as the practices of managerialism" (Smyth & Shacklock, 1998, p.50). This for teachers means a performance regime that as expressed by Ball (1994) "begins with the testing of students, but raises the possibility of monitoring the performance of teachers and schools and making comparisons between them" (p.107). It also results in an "increase in the technical elements of teacher's work" (Ball, 1994, p.106) compressing, or perhaps in extreme cases, eradicating available room for expressions of professional autonomy and judgements.

(2) Commitments Withdrawn: Performance and Persistent Evaluation

The "advanced" (Rose, 1996, p.40) or neo-liberal political program is the major change in the "ideological environment of Australian schools" (Connell, 2002, p.323). Its specific focus is cast in terms of corrective intervention and redirection with a capacity to do something about a "practicable object" (O'Malley, 1996, p.193), for example, re-formulation of schooling practice away from the "limitations of the classical welfare state" (Connell, 2002, p. 323). This new conceptualisation, incorporating technologies of measurement and surveillance "of which the Panopticon and insurance are examples" (O'Malley, 1996, p.192), reflects programs of reform that have shifted key and core "coordination functions of nation-societies away from states and bureaucracies to economies and markets" (Pusey, 1991, p.3). The "trend line of change and rationalisation" (Pusey, 1991, p.3) having dismantled commitments to an equity agenda in Australian schooling, has been reconceptualised into a political program and process of strategic control that is justified in terms of efficiency and effectiveness.

A core feature of this new shift and formulation of schooling practice within Australia is the political and economic response to a sense of crisis. Its manifestation expressed in terms of "ungovernable democracies and of overloaded states" (Pusey, 1991, p.3) is preceded by core negative descriptions of developed economies the emphasis of which is centred on conditions of "directionless consensus and pluralistic stagnation" (see Pusey, 1991, p.17). A dominant free market orientation imbibed by the dynamics of reforming economic rationalisations and "systems of logic" (Pusey, 1991, p.11) provides a framework and base upon which public education policy determinations are made and enacted. The economic focus of this new market orientation advocated on grounds that exclusively presumes "system integration in which the burden of co-ordination is passed from the inferior medium of co-ordination of state bureaucracy to the supposedly better one of the economy" (Pusey, 1991, p.18) infiltrates public education policy development and enactment. In Australia it has resulted in, as Connell (2002) states:

the prioritization of 'training' over education, the partial privatization of universities, the increased subsidizing of private schools as a half-step towards vouchers, the continuing attempts to turn public schools into enterprises and principals into entrepreneurs, the invasion of public education by corporate advertising, the corporatization and fragmentation of Technical and Further Education (TAFE), the shift of research funding towards marketable products and processes, the adoption of business management practices in public education, and the 'outsourcing' of educational research and development. (p.323)

This sought after rise of a free and unfettered market agenda as a "contemporary technique of rule" (O'Malley, 1996, p.194) which "reinstates the morally-responsible individual" (O'Malley, 1996, p.194) also re-asserts individual initiative and risk-taking. It has re-cast pedagogic action and the work of schooling that for classroom teachers reflects a personal performative and individual representation of jurisdictional administration and management.

Fundamental to the current reform of public education is a system of self-management articulated in terms of a “new culture of schooling” (Ball, 1994, p.65), one that prioritizes “commodification and output indicators” (Ball, 1994, p. 65). Local school management allegedly free of the burdens of systemic constraint, are encouraged and empowered pursuing enterprising and innovative agendas for change. An indispensable and representative development of self-management based on the “illusion of autonomy and flexibility” (Ball, 1994, p.66) and brought by an adherence to free market principles of administration results in what is termed “steering at a distance” (see Ball, 1994, p. 66). As a disciplinary practice, it removes and re-locates authorial power away from those with an immediate and actual stake in education; classroom teachers, students and parents. Yet, paradoxically, it has resulted in the heightened and acute centralisation and convergence of authorial scrutiny onto those most exposed to its unequal excesses; classroom teachers and public school students.

The managerial conduit through which one can then map and record the “preferred teacher” (Smyth & Shacklock, 1998, p. 107) is a disciplinary process of exchange through forms of control that steers pedagogical action towards market imperatives and exemplars. Important characteristics include approaches that emphasize variety and responsiveness to market demands. The standardisation and normalisation of teacher’s work and classroom practice becomes a function of curriculum, the market and management approaches. The stratification experienced by the classroom teacher practitioner across these domains has invariably resulted in their objectified and commodified formation. The teacher becomes a deliverer, tester, technician, commodity-producer, performer, entrepreneur that is a resource and a cost and remains accountable (see Ball, 1994, p.49).

Indeed, the process of reform in public education has elevated management of pedagogic practice and the work of schooling so that it becomes a necessary function of exchange. Management becomes “an end in itself” (Ball, 1994, p. 71). The reformulation of public education so that it conforms to a free-market ideological outlook provides a mechanism through which delivery of key and dominant system outcomes can be attained. It “ties classroom practice, student performance, teacher appraisal, school recruitment and resource allocation into a single tight bundle of planning and surveillance” (Ball, 1994, p.71). Classroom teaching practice is re-made, and a good teacher/bad teacher dichotomy prevails. Significant differences in interest, between those that manage and those that are managed are unavoidable, notwithstanding policy document statements to the contrary.

We will engage the workforce in professional learning as part of an overall approach to service improvement. Leadership will be a major focus, as we know it is a major driver of improved performance. People must be developed and supported from the moment they choose careers in learning and development. (State Government of Victoria Education Blueprint, 2008, p.33)

This social re-adjustment for those involved in the work of schooling defines the reform process. “Self-management is the panopticon of modern educational organization” (Ball, 1994, p. 72) and power exerted through subtle means is control at a distance despite sentiments of engagement and professional collegiality.

The idealization and trumpeting of “new freedoms and possibilities of devolution and school-based management” (Ball, 1994, p.72) overplays distance and downplays control and steering. It occurs within a systemic nexus between “flexibility and constraint, autonomy and response” (Ball, 1994, p. 72). A devolved educational environment incorporating technologies of policy legitimization and regulation centralize the performativity of teacher pedagogic action. The “ideological co-optation of the moral and ethical consciousness” (Smyth, J., Dow, A., Hattam, R., Reid, A and Shacklock, G., 2000, p.86) of teachers where they are re-skilled and re-instructed to meet the demands of education consumers in a free-market re-focus classroom teaching practice. Market responsiveness as a guiding principle behind the performative classroom teacher practitioner signifies school based self-management.

Furthermore, the advanced neo-liberal “need for enhanced accountability” (Smyth, 2006, p.302) has occurred against a background of what Smyth (2006) terms “enduring myths” (p. 302), namely:

1. That we have a crisis in schools, attributable to schools, teachers, and teacher education.

2. That the way of fixing these alleged problems is by cutting schools and higher education institutions loose from a public education system and allowing them to be disciplined by 'market forces'.
3. Furthermore, that the way of improving 'quality' in education is by requiring close adherence to arbitrarily determined standards and targets, and ensuring compliance through forms of prescribed accountability.
4. That the language, rhetoric, models and modes of thought of the business sector are preferable and more appropriate to anything that can be developed by schools, students, teachers or teacher educators.
5. That the role of parents is that of judicious consumers exercising 'choice' of school that provides the best deal for them and their children, rather than active citizens interested in a system of education that is in the interests of everyone's children, not just those most adept at working the system. (Smyth, 2006, pp. 302-303)

Systemic conformity and methods of compliance bracketed and cushioned by accountability that is itself indicative of "a new industry, bureaucracy and language" (De Lissovoy and McLaren, 2003, p. 131) propels action. It "demands certain action be performed, while forcefully foreclosing on others" (Smyth, 2006, p. 304). The dilemmas that approaches of this kind provide are exacting and demanding. They marginalise and subordinate "educational and social justice values" (Ball, 2006, p. 92). Narrow and pragmatically restrained market focused actions predominate. Subsequently, suppression of any values laden debates and approaches is preferred thus elevating a "lexicon of expediency, pragmatics and financial necessity" (Ball, 2006, p. 92). Consequently, new kinds of teacher professionalism proceed and are advanced. Their specific localized frameworks intertwine career identification with school-based success and or failure. They also incorporate key features of economic characterisations largely of a prudentialist and enterprising kind, the new and transfigured post-Fordist expressions of educational engagement.

Indeed, the steady movement towards post-Fordist re-configurations of accumulation and production involve a re-intensification, or perhaps more specifically, re-investment in processes of valorisation. The implicit and key ingredient, incorporating a re-constituted attachment to a competitive skills base embedded within all sectors of the post-Fordist workforce is crucial. A vital aspect of a multi-skilled and highly flexible and productively adaptable post-Fordist worker cohort sustains the new economic transfiguration. In the maintenance of its generation is located an individual attachment to continuous pathways of education and training. It signifies a new 'spirit' epitomised through personal commitment to continuous and life-long training and learning. The aim here reflects the transient and impermanent nature of post-Fordist productive capacity and accumulation.

Classroom teaching practice and the outcomes of education have added significance in a new work order in which heightened levels of performative capacity dominate. The specific and measured evaluation of teacher effectiveness can be used to configure and determine effective instruction that meets the needs of a post-Fordist economy. This can be achieved at the system level leading to the identification of schools in terms of their academic performance relative to a system-sanctioned standard norm and or indicator. Schools that the education system deems 'under-performing' are specifically targeted and the specific evaluation of teaching practice becomes the subject of action. An important aim is the transformation of teaching practice through a concerted process of re-skilling. The major focus becomes actionable conduct performed and enacted on the classroom teacher in order to assist development of strategies of teaching practice that have been found to work in terms of enhancing individual student achievement.

(3) Transfigurations-The New Economy

The transfiguration of the old economy toward the new is characterised by a distinctive shift in Fordist production. The neo-liberal "expansion and metamorphosis of capitalism" (Bayart, 2007, p. 3) supercedes less functional modes of labour. The "replacement of Fordist types of work organization by less hierarchical modes of business management which emphasizes flexibility and the arrangement of production units in horizontal networks" (Bayart, 2007, p. 3) typifies the new shift. The old work order

typical of Fordist styles of labour and production including inescapable levels of “rigidity” (Harvey, 1990, p. 142) have declined. The new economy seeks to overcome Fordist rigidities. “Flexible accumulation” (Harvey, 1990, p. 147) best describes the present transfiguration in capital production.

It rests on flexibility with respect to labour processes, labour markets, products, and patterns of consumption. It is characterized by the emergence of entirely new sectors of production, new ways of providing financial services, new markets, and, above all, greatly intensified rates of commercial, technological, and organizational innovation. It has entrained rapid shifts in the patterning of uneven development, both between sectors and between geographical regions, giving rise, for example, to a vast surge in so-called ‘service sector’ employment as well as to entirely new industrial ensembles in hitherto underdeveloped regions. (Harvey, 1990, p. 147)

Operating in this post-Fordist world requires a new set of capacities and skills. Indeed, the competitive sustainability and competitive advantage of firms will rest on an employee’s training and ability to engage with the new economic and work order. Smaller work units will prevail incorporating a rationalisation and intensification of skill levels. Transferability of skill application embodied by functional utility is an aspect synonymous with the post-Fordist worker.

In order to achieve a seamless transition and transferability of skill levels, a change in knowledge is necessary. At its very core, a post-Fordist neo-liberal-hyper-economy utilises goods, services and knowledge. Economic activity is increasingly defined by a shift from “manufacturing and production of physical goods to information handling, knowledge accumulation, and production of knowledge goods” (Burton-Jones, 1999, p.12). The commodification of knowledge and its utilitarian and economic value re-defines capital production. The valorisation of individual productivity and efficiency rests on a capacity to integrate knowledge as an indispensable factor and ingredient of production. Computerisation incorporating information technology in all of its varied manifestations is central to this aspect of economic and industrial reform.

An important and key factor in this shift of production is education and the vital role of schools. New relationships between education and the economy in a changing society predominate and schools, including the type of pedagogical practice that they engage in, matters. A significant part of these new relationships is embodied in a rationalisation of knowledge, particularly for the post-compulsory school curriculum with now an emphasis on key and specific outcomes of knowledge. The movement towards a core curriculum for all students reflecting the “high and rising minimum threshold of knowledge and competence that is demanded by modern economies” (OECD, 1989, p.29) is important. It reflects post-Fordist shifts towards automation including the importance attached to knowledge generation as a crucial part of economic growth. There is clearly a human capital element to this aspect, one that fits a post-Fordist model of economic production. It responds to the rise of information technology as the new “basic” (OECD, 1989, p.32) in the school curriculum, notwithstanding the emphasis on making school education “more relevant to real-world labour market needs” (OECD, 1989, p.31).

The educational response to the alleged needs of a new economy and “new work order” (Smyth & Shacklock, 1998, p.78) characterised as the “new vocationalism”(see Smyth & Shacklock, 1998, p.78) highlights political and economic imperatives as major influences on education in contemporary times. Indeed, the regulatory needs of “fast capitalism” (see Smyth and Shacklock, 1998, p. 78) including the influence of an enterprise culture as “the new educational organiser” (Smyth & Shacklock, 1998, p.80), reconfigures individual productive capacity including the work of public school teachers. Moreover, the neo-liberal political and ideological regime of advanced production whose significance features prominently in re-constructed entrepreneurial productive engagement takes place within the “installation of neo-liberal forms of governance” (Davies & Bansel, 2007, p. 248), symptomatic of large scale global change.

Indeed, the advanced “neo-liberal theory of progress” (King and Kendall, 2004, p.143) has as an over-riding strategic locus, an economic characterisation that renders the State as less important than the ‘market’. Post-Fordist considerations of production that include heightened and elevated espousals of

economic competitiveness dominate. There is nothing inherently surprising in this development. A capitalist process of production must seek to re-create itself through innovation and creative endeavour (see Marx, 1990; Schumpeter, 1942). A process of economic globalization facilitates this mode of productive exchange. “Globalization intensifies competition which, in turn, stimulates innovation” (King and Kendall, 2004, p.144). This represents the post-Fordist connection between competitive intensifications, expressed through global exchanges and transactions of ‘fast capital’ and the urgent need for a renewed educational sentiment and settlement.

The economic and political configuration that the new educational settlement adopts also incorporates non-State based forms of governance. The new economic and political order that increasingly utilizes non-governmental means of representation, acts to control and confine. It is an order and form of governance that at its core has four distinctive characteristics and features. The first is an undoubted acceptance and reliance upon rationalist knowledge. The second is an emphasis on capitalist modes of production that in turn is dependent upon post-Fordist automated technology. Lastly, this means of production is largely managed through bureaucratic forms of governance (see King and Kendall, 2004, p.153).

Implicit in the contemporary post-Fordist structure of governance is transition.

Globalisation foregrounds education in specific ways that attempt to harness education systems to the rapid and competitive growth and transmission of technologies and knowledge linked to the national competitiveness of nations within the global economy. (Ozga and Lingard, 2007, p.70)

Governance becomes a question of transition, the emphasis of which is situated in methods of preparation for post-Fordist mechanisms of production. Indeed, the transformative structure of global capital including the necessary facilitation of one mode of production (Fordist) to another (post-Fordist), becomes the “object of transformation” (Balibar, 2009, p.307), and thus the accepted norm. Schools and classroom teachers form a tangible conduit and reference point for economically enacted change. Their exposure to transformative economic processes limits their functions towards the competitive needs of economic exchange. Under these conditions, teaching practice warrants particular attention for it is teachers and their specific classroom contributions that have added significance. The unique form of post-Fordist governance that globalisation can provide legitimizes active external regulatory interference steering education and what may constitute effective teaching practice in specific economic and vocational directions.

(4) Globalization

The individualization of pedagogical practice and action, and thus, the constructed and problematised account of effective teaching, is a planned scheme. Its derivation, if one accepts the formation of social inequality and exclusion through political and economic domination, is not necessarily located in relations of exploitation. Put simply, its contrived conceptualisation as a mechanised prospectus of surveillance and control is situated in post-Fordist and neo-liberal modes of corporate managerial existence as a form of governance. This in itself could be read as a form of exploitation, but is better cast generally in terms of “certain social arrangements” (Lea, 2009, p. 2) representative of the corporation now spread into all modes of employment, thus reflecting the pervasive “modern corporate structure” (Lea, 2009, p.2).

Indeed, it is this very notion of pervasiveness and immersion in a corporate dynamic of control and efficacy, generally symptomatic of unfettered and unrestrained modernity-globalization-that constitutes comparative and evaluative systems of performance and appraisal. This is not to suggest that globalization and all that this term entails reflects in itself a system, but it is to acknowledge that “we have been faced with a change of scale” (Bayart, 2007, p.6), one that is manifestly scientific (technological) and entwined within the economic and political.

Many factors have created a sense of the world’s unity both in people’s minds and as an objective configuration. Among these factors are new technologies, the development of the mass media and

transport, the extension of the market economy as a legitimate problematic (if not as a way of producing effective solutions), various ecological catastrophes, especially Chernobyl, the collapse of the Soviet Union, and the unprecedented fragility of the American territorial sanctuary. (Bayart, 2007, p.7)

Yet, to isolate and bestow singular causal factors upon such a transformative and episodic period of human history is to trivialise the event. Nevertheless, one can seek to map and outline its defining features. Marginson (1999), for example, considers the six aspects of globalization to be bounded by:

- Finance and trade;
- Communications and information technologies;
- International movements of peoples;
- The formation of global societies;
- Linguistic, cultural and ideological convergence; and
- World systems of signs and images. (p.21)

Each of these inter-related aspects as world systems “have a life of their own” (Marginson, 1999, p.20), and can and usually do “affect every part of the world, including educational institutions and programmes, and the subjectivities formed in education” (Marginson, 1999, p.20).

A primary consideration then in a new world of changing circumstances is the functionary capacity of a state in terms of its authority and control-governance. The political project of globalisation becomes a question of method. The problematics of systemic control in order to establish “governance without government” (Rosenau as cited in Dale, 1999, p.4), stems from and is linked to an expressed managerial function of rule. The genesis of comparative systems of evaluation is the result for public school teachers.

This is to be expected. The central and core mechanism of compliance that is established as an individual commitment to intensified modes of productive capacity requires devotion. It also needs and surreptitiously requests heightened expressions of individual motivation. This particular aspect may be viewed by some as new and hard-fought for expressions of rights and freedoms, previously restricted within workplaces, and especially in most schools. Indeed, neo-liberal interpretations of the new order are generally cast in terms of the removal and excision of bounded work-place regularities dismissive of employee input. An important example includes employee input into major decision-making at the level of the firm or school. Nevertheless, the post-Fordist work order implies and engenders control through the expected and functional capacities enacted by an adherence to system sanctioned norms and imperatives.

In addition, in rejecting totally positivist and ideologically empiricist conceptions of classroom teacher effectiveness, the very structure of narrow and technicist evaluations of teacher performance are also rejected. Indeed, by introducing mathematically organised schematisations of teacher evaluation, based in the main upon the learning outcomes of public school students, major and particular regions of the educational ‘space’-curriculum, context (school, classroom, peer effects, and so on) are not adequately considered. This type of epistemological reduction rather than producing vivid and accurate accounts of correlations between effective teaching practice and student learning, elevates absence and omission as part of the research and process of inquiry.

Indeed, the educational process in post-Fordist times becomes an activity whose major aim is the production of “use-values” (Althusser, 2009, p.188). The particular appropriation, generally in the form of a core and common set of curriculum options, tied to systemic assessment requirements, is therefore a vital component of pedagogic work. Pedagogical practice and the work of schooling is then the source of a nation’s economic prosperity by virtue of the preparation needed in skilling ‘on-demand’ sources of labour. School-based vocational education and training (VET) and recent proposed changes (The Bradley Review) to the higher education sector within Australia are a case in point.

A theoretical conception of classroom teacher effectiveness defined by the administrative constraints imposed by neo-liberal forms of governance warrants a total exploration of the experimental method favoured by its introduction. Globalization, one of whose characterisations is an intensified

attachment to altered pathways of economic exchange, confronts political control. Consequently, and perhaps not surprisingly, the political and administrative (bureaucratic) control through a distinctive and easy application of performative evaluation is chosen. The “absolute immanence” (Althusser, 2009, p.145) that specific positivist forms of scientificity and classroom teacher effectiveness research that prevails, releases a conceptualised view of the classroom that is ideological in character. The “Absolute Knowledge” (Althusser, 2009, p.146) that specific superstructural scientific approaches of effective teaching practice that dominate as a consequence of forms of governance that are enacted within globalised forces of economic exchange represent an obvious manifestation of power and subjectivity.

Subsequently, the performative quality of public school teachers becomes a focus for “widespread policy debate” (Connell, 2009, p.213). A vital aspect of the debate is a sought for policy articulation of what constitutes good and effective teaching. Indeed, as Connell (2009) puts it “What is meant by a ‘good teacher’ has thus become a significant practical question” (p.214). This in itself poses problematizations. The object of knowledge, which in this case is an empiricist determination and articulation of good teaching practice, through highly metricated systems of evaluation based on scientometric models of ‘effective teaching practice’ and pedagogical action, develops as a real phenomenon autonomous of contextual modalities. Representative of this “collapse into empiricist ideology” (Althusser, 2009, p.148), is the steady intrusion of a “politico-economic praxis” (Althusser, 2009, p.149) unmoved by any mediated sense of historical existence and attachment to an organic lived experience of the social. The reduction and subsequent identification through at its most extreme, the negation of difference, fulfils and mirrors the neo-liberal agenda of change.

A positivist science of classroom teacher effectiveness concerned with and sure of the “obviousness of facts” (Althusser, 2009, p.175) revokes the very objectivity it claims to espouse. A science whose primary goal is certain knowledge of effective teaching practice including determination of specific pedagogical laws that constitute that practice, incorporates the empiricist-positivist neo-liberal public education policy-making agenda. The aim sought is the evaluation of teacher effectiveness and performance. This in itself is theoretically based on a post-Fordist conception of productive capacity. It depends on a naïve characterisation of pedagogical practice that is essentially skills driven.

Conclusion

This paper has discussed the significant and defining aspects of change that characterize modern capitalist existence. These aspects reside predominantly in political and economic configurations centred specifically on the management of productive capacity for the control and maintenance of modern economies. Education, including schools and classroom teachers become important components in forcing the necessary economic adjustments required to maintain competitive advantage. Classroom teaching practice must be measured and constantly monitored so that it responds to and improves the skill level and academic achievement of individual students.

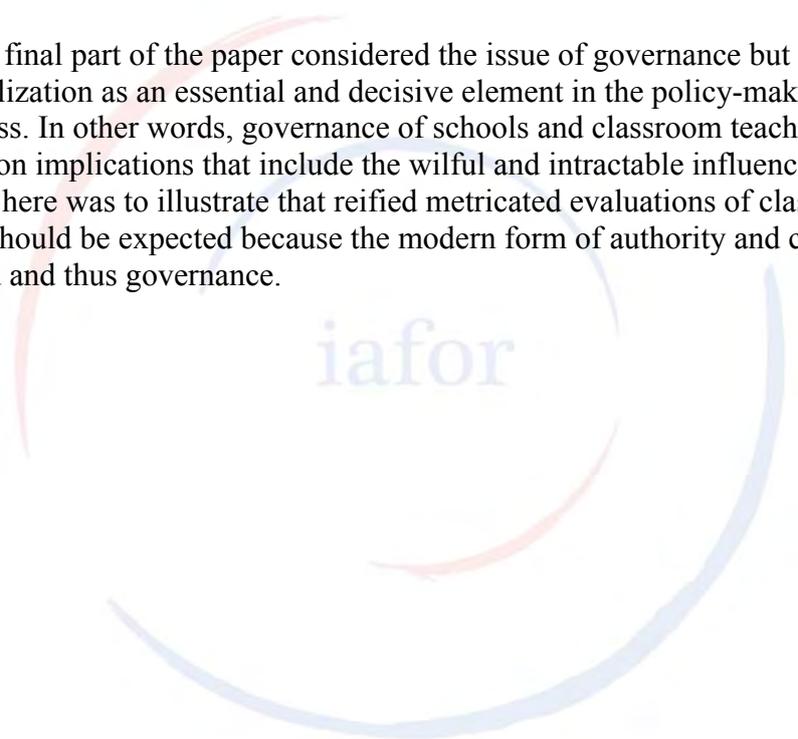
The paper has four distinctive parts. Part one discussed in broad outline, the large scale economic change evident in modern and contemporary societies. It featured, in a historical sense and perspective the role of capitalist production and accumulation in ushering in change. An important feature of this part of the paper is the necessary focus on the crucial need for continued adherence to methods of productive capacity that engender change, but also inevitably result in significant disruptions and transformations of existence; social, economic and political. It was argued in this part of the paper that education as the preferred treatment is central to the continued maintenance and accommodation of, in the main, economic change. This of-course has its consequences, and schools are also affected.

Consequently, the second part of the paper considered the political imperative as it is expressed in contemporary society. The ‘advanced’ or neo-liberal political plan and programme is dominant in schools. The major function of this political platform is the re-organisation and re-constitution of the work of schooling through a re-arrangement of pedagogical action and practice. The public school classroom teacher practitioner is the focal point upon which this altered means of action is to be instituted and enacted. In order to achieve major alterations of schooling and teaching practice, the

advanced neo-liberal political project generates new approaches that specifically relate to measurement of individual classroom teacher performance and evaluation. It does this through a broader political condition that is manifestly centred on and leads to withdrawal of pre-established and agreed to social and economic commitments and practices, that incidentally also possessed a historical connection-the Keynesian economic framework as an obvious example.

The third part of the paper dealt specifically with aspects of the new economic transfigurations that feature prominently in contemporary society. This part of the paper considered the post-Fordist shift in productive capacity and exchange. The replacement of Fordist work practices with post-Fordist approaches requires new skills and capacities that individuals need to acquire in order to function productively in a hyper-capitalist economy. Indeed, the continued economic prosperity of nations rests upon the productive capacity of its workforce and education has a vital role and part in its maintenance. For this reason, the interconnection between the economy and education produces and provokes heightened expressions of individual attachment to productivity and performance. This contributes to and culminates in summative evaluations of performance, both individual and systemic. As a result of this particular development, forms of governance and control are initiated that result in and reveal the foregrounding of education as an important and specific link to the market economy.

The final part of the paper considered the issue of governance but in terms that deal with the notion of globalization as an essential and decisive element in the policy-making debate on classroom teacher effectiveness. In other words, governance of schools and classroom teachers is symptomatic of broader globalization implications that include the wilful and intractable influence of a corporate dynamic. The aim here was to illustrate that reified metricated evaluations of classroom instruction devoid of context should be expected because the modern form of authority and control is in short a question of method and thus governance.

The logo for the International Association for Educational Research (IAFOR) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, curved lines in shades of blue and red, creating a circular, abstract design.

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Educating Youth on Environment through TV: A Case Study of Thailand

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Abstract

In order for a global society to garner the commitment of all its member countries towards the issue of reduction of CO₂ emission, social change (i.e. change in people's beliefs, behaviours, or attitudes) needs to take place in these countries. This paper examines a case study of Thailand on environmental education through the medium of TV to consider how the mass media can contribute to social change as a part of information campaigns on global warming. The data were collected to investigate the correlation between media exposure, awareness, and behaviour through a combination of a focus group study of teenagers, a questionnaire survey at selected schools (size of respondents: 2,500), and in-depth interviews with environment and communication experts, and analysed quantitatively and qualitatively. The result shows that TV is a major information source for Thai youths, though exposure to media messages on global warming is limited due to a gap between the campaign's media strategy and the youths' preference. Meanwhile, the respondents' average awareness level of the issue remains somewhat low, and their lifestyle has not shifted to be more so-called 'eco-friendly' in response to the information they had received on global warming. The analysis has found no clear correlation among those variables. From those findings identifying the problems riddling the current campaign, this study suggests three recommendations regarding mass media usage in social information campaigns on environmental issues; that is appropriate selection of channels and broadcasting time, introduction of the entertainment-education strategy, and adequate messages in accordance with the progress of the campaign.

Keywords: Information campaigns; Media effects; Thai youth; Global warming

JEL Classification: D83; Y80

1. Introduction

Environmental commitment has globally gained recognition as a pressing issue today. Our global community has been facing climate change for decades—a crucial problem resulting from global warming. The Earth Summit held in Rio de Janeiro in 1992 and the fifteen successive annual meetings held by the Conference of Parties (COP) from 1995 to 2009 under the leadership of the United Nations have provided a platform for international dialogue on the topic of environmental commitment. Moreover, researches carried out on climate change and global warming over the last decades have facilitated the accumulation or compilation of knowledge on the said issue. In the Kyoto Protocol—adopted at the COP3 held in Kyoto in 1997 to urge countries to take action towards controlling global warming by presenting a specific emission reduction target—six types of greenhouse gases were isolated as factors of global warming. The list comprising these gases included carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF₆). Carbon dioxide was named as the ‘workable’ gas—or the gas whose emission could be curtailed—among all the aforementioned gases, and it was thus decided that reducing the emission of this gas was crucial towards avoiding the further deterioration of the global warming situation (United Nations 1998; UNFCCC 2008).

Nonetheless, attempting to reduce carbon dioxide emission is a big challenge for us human beings. This is because a large number of human activities lead to the production of the gas. Fossil fuels (including coal, oil, and natural gas) are burned towards the production of energy for carrying out necessary human activities, resulting in an increase in atmospheric carbon dioxide concentration. From this fact, it follows that a society seeking economic and social development would cause the emission of an even greater amount of carbon dioxide, thus worsening the environmental problem. Going by the number of carbon dioxide producing activities carried out in them, developed countries appear to be more responsible for carbon dioxide emission than developing countries. However, this does not mean that smaller economies need not work towards the reduction of CO₂ emission. In fact, they are saddled with a much harder task: they are expected to construct a new methodology satisfying the requisites of both socio-economic development as well as environmental commitment.

In order for a global society to garner the commitment of all its member countries towards the issue of reduction of carbon dioxide emission, social change (i.e. change in people’s beliefs, behaviours, or attitudes), along with the development of a new policy and new technologies, needs to take place in these countries. One of the strategic techniques towards facilitating social change is the undertaking of information campaigns. As communication researchers, the authors focus on the aspect of information campaigns and gain an understanding of the status quo global warming campaign implementations particularly in smaller economies as the fundamental knowledge—a starting point for better campaign planning. This paper examines a case study of Thailand on environmental

education through the medium of TV to consider how information campaigns on global warming can be practiced effectively through the mass media.

2. Information Campaigns

Information campaigns are a designed communication strategy disseminating pro-social information towards changing individuals' beliefs, attitudes, or behaviours, and eventually fostering a social change. Since the inception of marketing studies (e.g. Kotler and Zaltman 1971), the basic campaign design has become more refined. Applying the 4Ps of marketing, a pro-social information campaign carefully decides the message that is to be delivered (product), the means and location of providing the necessary services (place), the cost (including mental cost of changing beliefs, attitudes, and behaviour) (price), and the media which should be used to effectively deliver the message (promotion).

Without such consideration and planning, it is observed that a pro-social message does not normally permeate society even though the thing it advocates is 'good', 'easy to access', or 'affordable'. Rice and Atkin (2002) assert that the message should be designed on the basis of the needs, norms, and culture of the target population. As Rogers (1995) identified from his diffusion research, new ideas and products ('innovations' in Rogers' terminology) which are well-diffused have five characteristics. These include relative advantage, compatibility, less complexity, tryability, and observability. In particular, the compatibility of new ideas with people's existing values, beliefs, norms and culture, or needs is of great importance because human beings have selective attention and memory: their existing values, beliefs, norms or culture, or interests stemming from needs work as a filter and opposing or irrelevant new ideas are often ignored or forgotten.

At the promotion stage of pro-social messages, such as the one advocating the reduction of carbon dioxide emission, the use of two types of communication—mass media and interpersonal communication—should be considered. Both have advantages and disadvantages, but when used in conjunction or to supplement each other, the effectiveness of each is enhanced. The mass media deliver messages to a wider population at once and generate and direct public opinion (e.g. McCombs and Shaw's (1972) agenda-setting theory; Noell-Neuman's (1984) spiral of silence). On the other hand, interpersonal communication—particularly with opinion leaders—proves more effective vis-à-vis the decision-making process. In other words, the mass media can play a big part in making people aware of social issues while a personal communication network can work to persuade them towards changing their behaviour. Although beliefs, behaviours, and attitudes can be changed through either media messages or personal persuasion, this is more likely to happen when the mass media can generate a new environment which is more compatible with the message sought to be spread and personal communication prevails on people to adopt it.

3. A Case Study of Thailand

Thailand has been displaying steady economic development over the last few decades, achieving the world's 34th highest GDP in 2008 (World Bank 2009). In the Human Development Report (UNDP 2009), the country is grouped with those displaying a medium degree of development although its HDR index has shown an improvement since 1980s. Such social conditions have led to a change in the lifestyle of the Thai people, resulting in a higher percentage of carbon dioxide being produced in the country. For instance, the Thai people's consumption of electricity has been increasing by 6–8 percent every year, and in 2008, it reached a high of 22,000 megawatts—the equivalent of 322 million tons of carbon dioxide gas being emitted. By the year 2012, Thailand's annual gas emission is estimated to go up to 418 million tons (Electricity Generating Authority of Thailand 2009).

The above figures gain significance in the light of the fact that the Thai economy is agriculture-based, thus making it vulnerable to climate change. Water is considered to be one the key resources for Thailand's development; however, the country faces problems like water shortage and drought due to the climate changes caused by global warming. The rise in temperature causes changes in the country's rainfall pattern by negatively impacting the amount of rainfall it normally receives. The decrease in rainfall adversely affects farm produce such as corn, sugarcane, and rice and thus results in either a decrease in the annual harvest, the poor growth of farm produce, or disease outbreaks. The above naturally indicates that if the cycle of temperature rise and drought were to continue unabated, it would jeopardise the economy of Thailand. These severe effects of global warming on the country's economy automatically put Thailand in the high-risk group of countries affected by the phenomenon. All of the above facts point to the necessity of changing the Thai people's view on global warming, as also of changing their life-styles towards inculcating more eco-friendly habits for effecting a positive difference in the global warming scenario.

Some social campaigns on environmental issues have been already conducted in Thailand, and research has established that there is a certain correlation between people's exposure to media messages and their awareness regarding the issues. Penpinan (2001) studied the relation between media exposure, knowledge, awareness, attitude, and participation in environmental preservation in Thailand's Samut Prakarn area to confirm that there is a positive correlation between media exposure and knowledge as well as awareness on the given issue. Vorawansetha's (2003) study on the sea turtle preservation campaign in Chonburi area also revealed the existence of a strong correlation between the levels of media exposure and awareness. Similar results were found with regard to other social issues, such as HIV/AIDS prevention (Boonnamma 1998) and anti-corruption (Kochakorn 2001). Other researches have confirmed the relation between media exposure, attitude, and behavioural change, such as Nghanakao's (2000) study on pedestrians' compliance with traffic rules and Wangchaigchai's (2003) study on energy saving campaign.

However, there are some studies which are unable to prove the hypothesis that the knowledge of issues leads to behavioural change. For instance, the aforementioned Penpinan's study found that knowledge of an issue is in no way related to participation in its campaign-promoted activity.

Still, as studies of past campaigns in Thailand largely point to a tendency of linking media exposure, attitudes, and behaviour, the hypothetical scenario for this study is that there is a correlation between people's exposure to media messages dealing with global warming and their awareness of the problem as well as between people's awareness of the issue and their actual lifestyle.

4. Research on Thai Youth and Environment Education through TV

4.1 Data

In order to obtain data towards fulfilling the aim of this research, this study combined the research techniques of a focus group study, a questionnaire survey, and in-depth interviews. The focus group study was conducted to gather information towards framing a questionnaire. Eight Thai youths aged between 13 to 15 years were randomly selected. The questions to be posed to the focus group were formulated on the basis of a literature review on youth lifestyle and the effect of global warming on the world; however, the review was conducted in an unstructured manner.

The questionnaire survey was conducted at the middle schools located in all the five regions of Thailand. Using multistage cluster sampling, 2,500 students aged between 13 to 15 years were selected. Of these respondents, 32.2% were boys and 67.8% were girls. Those aged 13 comprised 29.1%, those aged 14 comprised 36.0%, and those aged 15 comprised 35.8% of the respondents. The questionnaire, framed on the basis of the results obtained from the focus group, consisted of 7 parts and 122 questions.

In-depth interviews were conducted to obtain supplementary data which would help to determine solutions for the problems identified through the questionnaire survey. The interviews were conducted with eight experts—two lecturers of mass communication, two scientists, one NGO staff member, one environmental news TV reporter, and two TV documentary producers. Although the interviews were unstructured, they were within the scope of the agenda setting theory pertaining to the mass media.

The data obtained through the questionnaire survey was quantitatively analysed while that obtained from the focus group study and in-depth interviews was analysed qualitatively. The quantitative data was divided into two groups—urban (Bangkok) and rural (other areas)—for a comparative analysis.

4.2 Findings

4.2.1 *Exposure to the Media Message*

The respondents were quizzed on their sources of information on the phenomenon of global warming so as to determine the Thai youths' pattern of media exposure. The result of this survey is summarised in Table 1. The most popular source of information on global warming was found to be TV (81.2%), followed by a great margin by teachers (5.1%), the Internet (3.2%), and the radio (3.1%). In contrast, the government agency—the original source of the majority of the information regarding global warming—was not recognised as a source of the same by those surveyed. This suggests that TV is the major source of information on global warming for Thai youths.

If we compare the results of the surveys conducted on urban and rural respondents, we will find slight differences with regard to the print media, personal media, and participatory media as sources of information on the issue of global warming. 4.9% of urban youths were exposed to the message of global warming through newspapers and magazines while 2.2% of rural youths were exposed to the said message through these sources. A similar trend is seen in the case of personal communication with others such as friends and parents. In total, 3.9% of urban youths and 2.4% of rural youths had selected this media category as an information source. On the other hand, rural youths depended more on the radio and Internet than did the respondents living in Bangkok (6.7% and 2.9%, respectively). The results of this comparison clarify that youths in Bangkok have access to various sources of information on global warming while those in rural areas strongly depend on broadcast and electric media for the same.

Table 1: Source of Global Warming Information for Thai Youths

	Bangkok		Rural Areas		Total	
	counts	%	counts	%	counts	%
TV	166	80.6	1,767	81.2	1,933	81.2
Radio	4	1.9	70	3.2	74	3.1
Movie	3	1.5	17	0.8	20	0.8
Internet	2	1.0	75	3.5	77	3.2
Newspaper and Magazines	10	4.9	48	2.2	58	2.4
Billboards	2	1.0	14	0.6	16	0.7
Teacher	10	4.9	112	5.2	122	5.1
Parents	6	2.9	35	1.6	41	1.7
Movie stars	1	0.5	18	0.8	19	0.8
Government office	-	-	3	0.1	3	0.1
Friend	2	1.0	17	0.8	19	0.8
Total	206		2,176		2,382	

However, when one looks into the details of the survey, it becomes evident that the level of the respondents' exposure to TV messages regarding global warming is rather poor. In Thailand, most of the TV programmes dealing with global warming are made in the documentary format, and thus hold no interest for teenagers. On happening to chance upon a channel broadcasting such a documentary, they would in all probability switch to another entertainment-oriented channel, such as Channel 7. As a result, they have no information on the type of programmes containing messages relevant to the global warming issue nor do they have enough information on the issue.

Teenagers appear to avoid watching documentaries because they feel that owing to the format's serious nature, they are too 'hard' to watch. However, the respondents of the survey mentioned that they might watch documentaries on global warming if they featured their favourite celebrities. The celebrities which they listed included pop singers, actors, and sports players. Another reason the respondents cited for their not watching the documentaries was the time at which they were usually broadcast—a time when teenagers usually do not watch TV—which was in sharp contrast to the time when entertainment programmes were broadcast.

4.2.2 Awareness on Global Warming

Statements describing various aspects of global warming were presented to the respondents and they were asked to respond with either ‘true’, ‘false’, or ‘I don’t know’ to the statements. This was done in order to gauge the respondents’ awareness of the issue. The statements that elicited maximum correct answers by the respondents, as represented in Table 2, are given below:

- Deforestation can cause a global flood in the future (92.6%);
- The unprecedented warm weather is a result of litter burning (90.4%); and
- Deforestation exacerbates flood during the rainy season (80.1%).

Table 2 Awareness of Thai Youths on Global Warming Issue

(%; within bracket =n)

Knowledge	Correctly Answered	Mis-understood	Don’t-know
Deforestation can cause a global flood in the future	92.6 (2,315)	2.8 (70)	4.6 (115)
The unprecedented warm weather is a result of litter burning	90.4 (2,260)	5.1 (127)	4.5 (113)
Deforestation exacerbates flood during the rainy season	80.1 (2,002)	6.2 (155)	13.7 (343)
Animal farming contributes to a warmer climate each year	25.4 (634)	28.9 (722)	45.8 (1,144)
Wasting fuel is a factor which contributes to shorter winters in Thailand	29.4 (735)	20.1 (503)	50.5 (1,262)

On the other hand, the descriptions which a larger number of respondents misunderstood or answered with ‘I don’t know’ were:

-Animal farming contributes to a warmer climate each year (misunderstood: 28.9%; ‘I don’t know’: 45.8%); and

- Wasting fuel is a factor which contributes to shorter winters in Thailand (misunderstood: 20.1%; ‘I don’t know’: 50.5%).

This result shows that teenagers understand simple, or rather, direct cause-effect associable relations such as deforestation and flood or heat and burning while they cannot associate animal farming or fuel wastage with global warming due to the indirectness of the associations. When comparing urban and rural youths, no significant difference is found between the two groups (see Table 3); instead they display a similar distribution pattern. On the whole, therefore, the teenagers’ average awareness level remains somewhat low—at the 60-plus-percent range—regardless of area of living.

4.2.3 Lifestyle Potentially Relevant to Global Warming

In the survey, teenagers were asked about their lifestyle potentially relevant to global warming in order to determine the manner in which they internalise the issue on a daily basis. As no significant difference was found between the urban and rural groups, the result is presented at large. Only one per cent of respondents were found to have changed their lifestyle in response to the information they had received on global warming so as to be more so-called ‘eco-friendly’ while the others were continuing to follow their old lifestyle.

One reason which the some respondents cited for not changing their lifestyle was their perceived lack of obligation with respect to saving water or electricity at school because they (i.e. their parents) paid tuition fees. These students felt that by paying the tuition fees, they had paid for the expenses incurred from their water and electricity usage as well. Other students blamed the social system—which they felt they could do nothing to change—as one of the reasons for upholding their lifestyle. They understood that burning garbage or throwing it into rivers causes environmental damage, but felt that teenagers could do little to stop these practices without administrative support. A voice from the focus group expressed the

Table 3 Comparison of Awareness by Area of Living

Area	n		S.D	t
Urban (Bangkok)	218	7.64	3.50	-1.53
Rural	2,272	7.99	3.21	

following sentiment: ‘we know that the disposing of litter by burning it is not a good idea, but we have no choice but to do so’.

4.2.4 Correlation between Exposure, Awareness, and Lifestyle

The correlation between exposure to media messages on global warming and awareness of the issue was analysed in order to examine our hypothesis. The coefficient of correlation was found to be 0.07 at the significant level of 1%, which means that there was no clear correlation between the two variables. Thus, the first part of the hypothesis could not be supported. This result hold good for both urban and rural cases.

Meanwhile, the coefficient of correlation between awareness and lifestyle was found to be 0.165 at the significant level of 1%. Again, this result showed no clear correlation between the two given variables, resulting in the second part of the hypothesis not being supported fully. The survey result, therefore, failed to confirm the relationship between exposure, awareness, and lifestyle.

5. Discussion

5.1 Problems in Media Messages

From the survey results represented in the previous section, we have been able to identify certain problems as regards media exposure, awareness, and lifestyle in connection with the issue of global warming. At the media exposure stage, the most crucial problem that came to the fore in our survey was that in Thailand, there is a gap between the campaign's media strategy and the youths' preference. At present, messages on global warming reach the public through TV documentaries: a format which youths are not familiar with; which are broadcast on a channel they do not often select to watch; and which are relayed at a time they do not usually watch TV. Clearly, the media's selection and message style do not match the youths' preferences.

Although Thai teenagers depend mainly on TV to obtain information on global warming, their frequent avoidance of documentary programmes dilutes the effect of their exposure to the message conveyed through them. They are selectively exposed to media messages and as a result, their understanding of the global warming issue is likely to remain at an unsatisfactory level. As exposure to the message sought to be conveyed is the starting point of all social information campaigns, the survey result suggests that global warming control campaigns in Thailand face the abovementioned challenge.

In order to overcome this challenge, employing the entertainment-education (E-E) strategy would perhaps prove effective. The E-E strategy is a communication strategy which works to foster social change by disseminating designed messages through entertainment products, such as TV/radio dramas, songs, and theatre plays (Singhal and Rogers 2001). That is, the E-E strategy is employed to provide people with information on certain issues while entertaining them at the same time. This strategy has been used all over the world with the aim of facilitating the success of information campaigns. The suggestion of some of the survey respondents of using celebrities in documentaries points to the need for E-E programmes.

Broadcasting hours and channels are also important factors in determining the extent of media exposure. Selecting the right (i.e. popular) channels as well as right broadcast timing increases the target group's level of exposure. In the case of Thai youths, TV channel 7 should be included as a message provider. It is also important to allocate programmes around prime time, although as environmental TV news reporter J. Bansang points out, environmental content faces difficulty in securing good broadcasting hours. He puts across his thoughts on the subject in the following words:

[E]nvironmental content is not profitable. It simply does not sell. So, environmental programmes are akin to trophies for TV stations, not money. As news coverage translates into money, naturally the 'trophy' programmes get less time... Also, experts believe that only news related to the economy,

politics, crimes, or something sensational makes for interesting news. Not environmental issues. Environmental news generally develops slowly, while other kind of news—for instance, political news—develops on daily basis. Whoever talks, it becomes news. So does crime. But as environment changes take place slowly, environment-related news develops slowly as well (in-depth interview, October 13, 2008).

The above viewpoint coincides with Maslow's hierarchy of needs (1954). Human beings are inclined to be interested in their basic or immediate needs rather than their future needs. Although environmental issues are by and large considered important, many people—even TV experts—feel that that the negative impact of these issues will affect them in the distant future and they thus do not accord the issues immediate attention. The thing which needs to be done in order to bring about a shift in their attitude is to impress upon them the need to address environmental issues on an immediate basis.

5.2 Problems Related to the Level of Awareness

As regards the problems related to awareness about global warming, the result of the survey makes it clear that not many teenagers are aware of some indirect factors resulting in global warming, although 'global warming' as an issue is widely known. This result suggests that the mass media's function of agenda-setting is working adequately: today, the young generation of Thais have realised that global warming is an important issue which they need to consider. However, the fact that teenagers' awareness remains at a relatively shallow level indicates a failure of the message design to stimulate their interest (or their desire for further information) and a lack of message strategy corresponding to the stage of change.

The failure to stimulate teenagers' interest is considered to stem from their selective media exposure. Thai youths stop receiving information on global warming at the initial level itself because it appears as 'hard', 'serious', or 'heavy'. If their initial exposure to the media message results in such an impression, it is bound to discourage them from gaining further knowledge on the issue.

Even though their initial exposure to the message results in kindling people's interest in the issue, people's awareness regarding the same will not progress unless another problem, which is detailed below, is solved. In general, the information which people need changes in accordance with the progress of the information campaigns. The level of understanding also varies from individual to individual. The campaigns are expected to provide appropriate information accordingly (Kotler and Lee 2008). In Thailand, however, the mass media have not been successful in delivering advanced messages with regard to global warming because they have not explored the various different avenues of spreading awareness on the issue and have exclusively relied on documentary programmes for the same. Therefore, many students have no knowledge of the causes of global warming or its consequences. As A.

Wongjareon—an NGO staff member—has pointed out in his interview, the campaign message which is widely shared is too simple, merely stating that ‘litter burning causes global warming’ or similar, with no information being offered to the public about why a certain action leads to global warming (in-depth interview, April 13, 2009).

5.3 Problems in Changing Lifestyle

During the course of this study, nowhere did we observe that people had undertaken a lifestyle shift to adopt a more environmentally conscious one. The problem here is not the fact that the shift has not occurred; rather, the causative factor seems to be the lack of internalisation of the global warming issue as well as the absence of a supportive social system.

The cases of respondents who had not changed their ways so as to curtail their use of water and electricity at school suggest that their grasp of global warming shares no link with their individual lifestyle. If they approach the issue of global warming as a matter of personal responsibility and internalise the implications resulting from it, they might extend the scope of their understanding of the issue to consider that their saving water and electricity would not only help their school but simultaneously help in reducing global warming. It may take time to diffuse new values and behaviour through a society, as Rogers (1995) acknowledges; however, it can never be effected without establishing a linkage between a social message and individual life (and its consequences in a global society). To teenagers, environmental problems might appear massive and beyond the scope of an individual’s responsibility, leading them to ignore them and never be motivated to take any action towards solving them. A comment from a respondent reflects this attitude:

A majority of my friends believe that climate change is a severe problem. However, they think that they will not live long enough to see its effects. They don’t think they can afford to help either (focus group of aged 13-15 years, 2008).

The latter point also prevents people from taking action to prevent global warming. The lifestyle of Thai youths as well as the majority of the Thai people is one which relies on traditional habitude owing to the fact that there is neither a systematic and well-planned approach towards environment preservation nor a context which encourages it. The respondents point out the need of a garbage disposal facility. One of the interviewees describes the situation as follows:

It is a difficult task to change certain aspects of people’s lifestyle, like the burning of litter. In some provinces, litter burning is prohibited in the city area and near the motorways, but the motivating factor behind this prohibition is the prevention of accidents, not global warming. ...local residents still continue to burn litter. Although the city area has a council bin service, we don’t see any local councils or government agencies encouraging a waste

separation process. The situation is even worse for residents living in remote areas. Waste is not collected by the council service, which means local residents will burn it whatever it the refuse may comprise: tire or plastic bag (Wongjareon, in-depth interview, April 13, 2009).

Establishing facilities and systematic support systems does not come under the ambit of the media's roles, although the media can address the institutions which have been established for combating the issue at hand, or at the very least, motivate the public towards addressing the institutions. In the case of Thailand, the mass media does not seem to have generated a certain climate of opinion as yet.

5.4 Conclusive Comment

The problems discussed above should by themselves serve as reasons why our hypothesis has not been supported through the results of our survey. We can summarise the reasons as such: the selective exposure of the public to the media messages leads to a shallow level of awareness, which in turn causes a lack of internalisation of the issue (see Figure 1). If and when these problems are resolved, the campaign on global warming control in Thailand would show a different level of development.

This paper has focused on the impact of media exposure, awareness, and the lifestyle of teenagers on Thailand's information campaign concerning the global warming issue. Although the result could identify the problems riddling the current campaign, further research will be required in order to get a full picture of the campaign as there are other variables which should be included in the analysis.

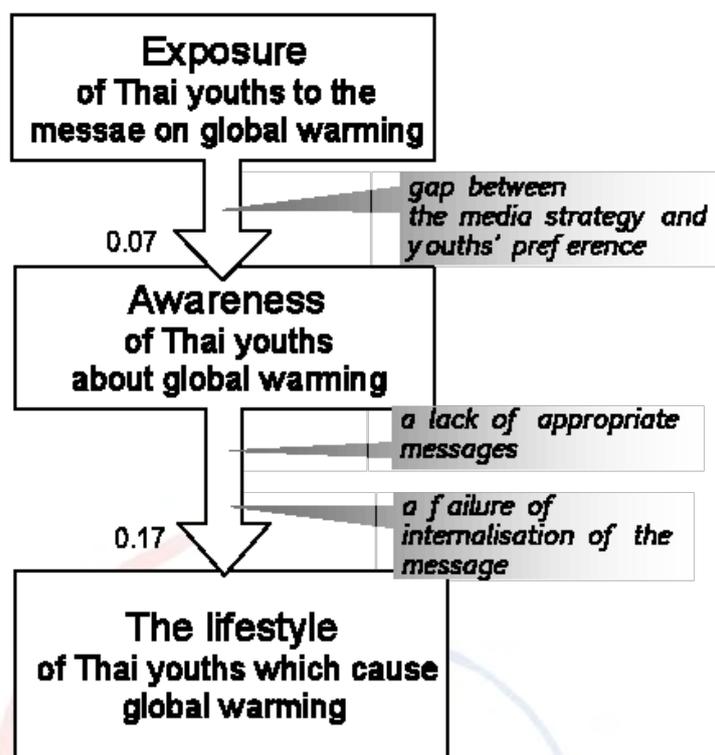


Figure 1: The examination result of hypothesis of this study.

6. Recommendations

As the campaign is still ongoing, this study would like to suggest—on the basis of its findings—some recommendations regarding mass media usage as a part of social information campaigns on environmental issues:

- (1) Appropriate TV channels and broadcasting hours should be selected. Since it is of great importance that the mass media deliver messages on environmental issues to a wider population, including the younger generation, it is recommended that for doing so, they make wider use of the TV channels which the survey result identified as teenagers' preferred choices. They should also consider allocating the prime time slot to informative programmes, or at least try to incorporate messages on global warming into other popular TV programmes and media, including the Internet, so that teenagers' exposure to the message would increase.
- (2) The entertainment-education (E-E) strategy should be introduced to improve the media exposure rate of the message. This research has identified the readiness of teenagers to watch E-E programmes. In fact, not only can such messages be relayed through TV or radio programmes, they can also be incorporated into music and

related promotion videos. While it is admittedly not an easy task to develop the content of E-E programmes so as to satisfy teenagers, it is not impossible either and can be achieved by conducting a detailed research on teenagers. Some cases may run the risk of the Archie Bunker effect (i.e. negative role models being regarded as 'cool'), but on the positive side, awareness on the issue would go up by implementing the E-E strategy.

- (3) Messages should be designed in accordance with the progress stage of the campaign. It is preferable that the media provide the information through a simple, short, and clear message. However, people do not maintain the same level of understanding and awareness as the campaign progresses. The message should be modified to provide new information in accordance with people's interest. Considering the use of websites or magazines to enhance the audience's understanding of the message and providing the needed information would be worthwhile.

Of course, for any campaign to succeed, other parts—such as the social system and education—need to be improved as well. Still, the mass media can prove to be a powerful tool in a social campaign when used properly and combined with other factors.

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**MINI-IT CONTEST: ENGAGING STUDENTS IN ACTIVE LEARNING THROUGH
COMPETITIONS**

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Abstract

Active learning has received considerable attention over the past several years. It has attracted strong advocates among teachers and students looking for alternatives to traditional teaching methods. This paper describes the design of a mini-IT contest, emphasizing on computer literacy education for year one university students. A software package for generating and maintaining question banks for a “Millionaire” type competition is developed. This “millionaire type” quiz game aims to arouse the natural interest of computing students by participating team-based competitions involving multiple rounds. This mini-IT contest cultivates an active learning environment and appropriate experiences for students to discover and verify their answers in a climate of mutual respect and open communications. Ultimately, the students are encouraged to become active learners by exchanging roles throughout the mini-IT contest. The competition was formally evaluated by students for enhancement of knowledge and learning through team efforts. Positive feedbacks were obtained from the students.

Keywords – *Active learning, Competition, Collaboration*

Introduction

Research over the past few decades suggests that students must do more than just ‘sit and listen’ – they must discover and understand knowledge through active discussion and engagement (Johnson, Johnson & Smith, 1998; Kao, et al., 2008; Moreno & Mayer, 2000). Active learning is often contrasted to the traditional lecture where students passively receive information from the instructor. It is presented or perceived as a radical change from traditional model of education in terms of teaching and learning (Prince, 2004). The empirical support for active learning is extensive. Bonwell and Eison (1991) conclude that active learning leads to better student attitudes and improvements in students’ thinking and writing. It surpasses traditional lectures for retention of material, motivates students for further study and develops their thinking skills (Wan, et al., 2010). Indeed, active learning is one of Chickering and Gamson’s (1987) “Seven Principles for Good

Practice”.

This paper describes the design of a mini-IT contest, emphasizing on computer literacy education for year one university students. The mini-IT contest injects a sense of competition to encourage active learning. It also provides a web-based environment for idea exchange and open communications. This project addresses each of these issues. First, it considers mini-IT contest as a tool to support computer literacy education. Second, it cultivates an active learning environment where students participate in team-based competitions. Students are motivated to think deeply about the important computer terms and concepts and engage actively in the learning process in order to become active learners. Finally, it promotes a collaborative competitive learning strategy that accommodates both collaboration and competition in a manner that better achieves the learning outcomes.

Literature Review

In recent years, educators have explored a variety of innovative teaching techniques that emphasize students' active learning. There are several reasons for this pedagogical transition from lecture-based teaching to system-based pedagogy. Some studies mentioned that certain students are motivated to learn when they are active participants in the educational process, especially when there are course activities that must be done in class (Friedman, Rodriguez & McComb, 2001; Rosato, 1995). Most importantly, through learner-centered activities, students can practice the necessary skills, such as, resource management, interpersonal communication, information management, systems management, and the use of technology (Kendall, 1999). Thus, it should come as no surprise that the common forms of active learning received considerable attention in the educational field.

A. Active Learning

Active learning is generally defined as any instructional method that engages students in the learning process (Prince, 2004). It requires students to do meaningful learning activities and think about what they are doing (Bonwell and Eison, 1991). The core elements of active learning are student activity and engagement in the learning process (Prince, 2004). The student activity has been chosen for this project, the mini-IT contest, and students are engaged to work in teams to win the competition.

B. Collaborative Learning

Collaborative learning refers to any instructional method in which students work together in small groups toward a common goal (Prince, 2004; Smith and Gregor, 1992). It means that

collaborative learning encompasses all group-based instructional methods, including cooperative learning (Cusea, 1992; Millis and Cottell, 1998). The essence of collaborative learning is student interactions rather than on learning as a solitary activity (Prince, 2004).

The elements of active learning and collaborative learning reflect well on the development of the mini-IT contest. The competition is a well-designed student activity that is introduced in the computer classroom. Active student engagement and interactions are promoted as the competition arouses the natural interest of the computing students by participating team-based competitions involving multiple rounds.

C. Introducing Student Activity – Competition

Just as with education, some forms of competition became formalized long ago in human history. That is, competition is bound by rules and becomes organized by specialists (Verhoeff, 1997). Indeed, education and competition are intimately related. On one hand, it is natural for students to compete. They seem to have an innate desire to compare themselves with others in every way. On the other hand, competition may be found vital in adult life that a society especially educates their young to compete (Cheung, et al., 2010; Verhoeff, 1997). Thus, it is necessary to incorporate competition into education to help students get used to it in later life. Many educators have supported the use of competitions but there is no general agreement as to what constitutes the best way of putting competitions to good use in education (Verhoeff, 1997). The simplest consideration of using competitions is that the beneficial effect derives precisely from the fact that it is a change from the regular curriculum. The actual mini-IT Contest details will be described in a later section.

D. Achieving Learning to Learn (L2L)

With the development of the active learning tools, such as the Mini-IT Contest, students have engaged themselves in the method itself – ‘the what’ of the learning is ‘the how’ (Hofmann, 2008)! Fredriksson and Hoskins (2007) explain how learning to learn (L2L) contains both affective and cognitive dimensions, with the affective dimension referring to social skills such as learning relationships, motivation, confidence, learning strategies, and the ability to overcome obstacles. The cognitive dimensions are concerned with the capacity to gain, to process and assimilate new knowledge and students organizing their own learning. Competitions can arouse students’ interests and motivate them to actively participate in the learning process. Moreover, the critical learning to learn need is achieved through students voluntarily participate in the competitions and enhance their higher order cognitive abilities, such that students can achieve genuine understanding and be able to apply and transfer the knowledge acquired. Indeed, L2L allows students to become

more effective, flexible and self-organized learners in a variety of contexts (Hofmann, 2008).

E. Promoting Student Engagement

An ideal classroom in the 21st century – “Active Classroom” should encourage students to think and not merely recite; task-focused and not simply sit and listen; and work in teams and not learn in isolation; and transcend across time and space, and not bounded by the four walls of the classrooms (Activate, 2010). The type of activity, like the Mini-IT contest, influences how much classroom material is retained (Prince, 2004). Wiggins and McTighe (1998) mentioned that good activities develop deep understanding of the important ideas to be learned. Thus, the activities must be designed around important learning outcomes and promote thoughtful engagement on the part of the student. Student engagement is the core element in active learning and there is considerable evidence to support the effectiveness of student engagement on a broad range of learning outcomes (Johnson, et al., 1998a; Johnson, et al., 1998b; Prince, 2004; Springer, et al., 1999). Hake (1998) examined pre- and post-test data for over 6,000 students in introductory physics courses and found great improvements for students in classes with substantial use of interactive-engagement methods. In addition, Redish et al. (1997) state that the nature of active engagement improved learning gains and not to the extra time spent on a given topic. Active engagement methods surpass traditional instruction for improving conceptual understanding of basic physics concepts (Laws et al., 1999). Thus, the mini-IT contest as an active engagement method will likely to support the students’ understanding of basic computing concepts and applications.

F. Promoting Student Interactions – Collaborative Learning

The core element of collaborative learning is students working together in small groups with extensive interactions to achieve a common goal (Prince, 2004). The results of meta-studies carried out by Johnson, Johnson and Smith (1998a, 1998b) found that collaboration improved learning outcomes relative to individual work across the board. For instance, with respect to retention, the results suggested that collaboration reduces attrition in technical programs by 22 percent, a significant finding when technical programs are struggling to attract and retain students (Prince, 2004).

It is evident that there is a strong relationship to support collaboration promotes a broad range of student learning outcomes. In particular, collaboration enhances academic achievement, student attitudes, and student retention (Prince, 2004). The above studies from Johnson, et al. (1998a, 1998b) also found that collaboration promotes interpersonal relationships, improves social support and fosters self-esteem. Collaborative learning provides a natural environment in which to promote effective teamwork and interpersonal skills (Prince, 2004).

Mini-IT Contest for Active Learning

The student activity designed here is the mini-IT contest to promote active and collaborative learning. It is a software package for generating and maintaining question banks for a “Millionaire” type competition. The Mini-IT contest is a small scale version of the Hong Kong Polytechnic University’s IT Contest. The project title “Mini-IT Contest” refers to a local contest held for year one university students at the Department of Computing in The Hong Kong Polytechnic University. This contest model has been used by various universities in Hong Kong (such as, Hong Kong University of Science & Technology; The Chinese University of Hong Kong; City University of Hong Kong and Hong Kong Baptist University) for developing students’ interest in computing subjects. Verhoeff (1997) stated a list of attributes and dimensions that are useful to classify and analyze the mini-IT contest (see Table 1).

Table 1 - Attributes of Mini-IT Contest

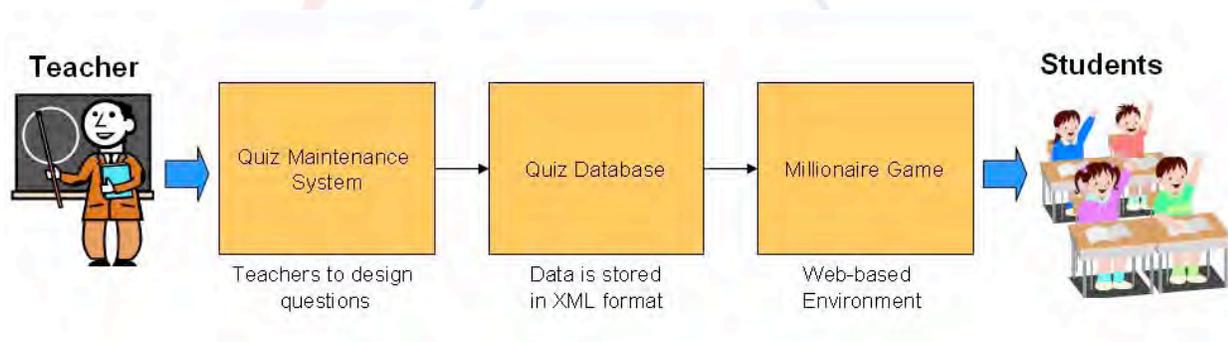
<i>Attributes and Dimensions</i>	<i>Mini-IT Contest</i>
Intended Objectives	<ul style="list-style-type: none"> • To support the Hong Kong Polytechnic University’s initiatives in promoting the 4 Ts in Active Learning – “<i>Thinking, Task-focused; Teamwork; Transcendence</i>” (The Hong Kong Polytechnic University’s website, 2010); • To develop a competition environment for supporting the transfer of computer knowledge to Year One university students; • To provide a web-based environment for exchange of ideas and open communications in promoting active and collaborative learning; and • To develop students’ teamwork skills in competition environments and to develop student trainers for the subject.
Fun-oriented Vs Serious	Fun-oriented – a “Millionaire” type competition
Spectator Event Vs Participatory Event	Participatory event – students are grouped into teams to compete for the final rounds of championship.
Individuals or Teams	Teams
Skill-oriented Vs Knowledge-oriented Vs Luck-oriented	Knowledge-oriented and luck-oriented
Fixed Format Vs Free Format	Fixed format – there are more than 300 questions in the question banks. The teacher is responsible to select 15 questions at various difficulty levels

	for each set of competition.
Follow-up to Participants	A formal evaluative process will be followed after the Mini-IT contest (e.g. overall results, student participation rate, student evaluation forms)

System Architecture and Implementation

The system flow of the “Millionaire” type quiz game is shown in Figure 1. The system is designed so that its implementation and administration will not suffer from the negative aspects of many active learning activities, such as the sacrifice of substantive learning time, administrative headaches, and unrealistic teacher preparation requirements (Ostapski, Cunningham and Williams, 2009). There are three main components in the system including the quiz maintenance system, the quiz database and the millionaire game.

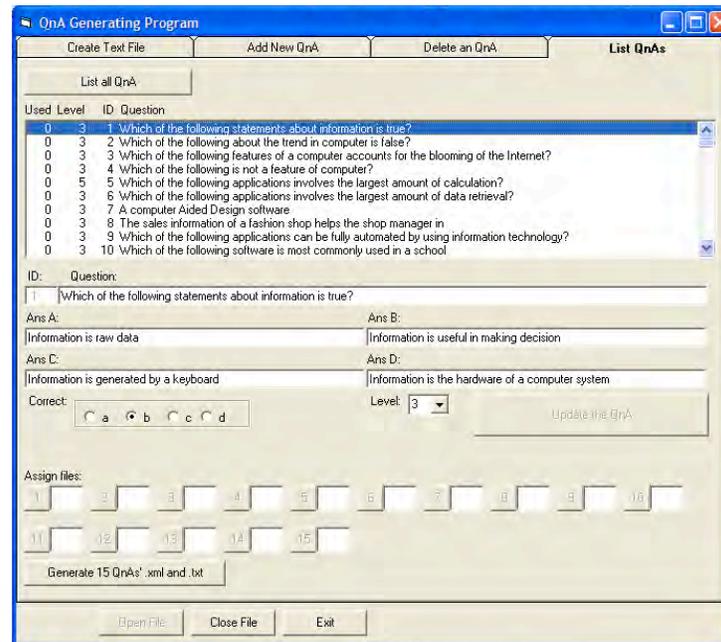
Figure 1 – The System Flow



A. Quiz Maintenance System

The Quiz Maintenance system is designed to provide a user interface which facilitates teachers to input and select the appropriate quiz questions, provide answers and determine the level of difficulty for each of the questions (Figure 2). In addition, the teacher may add, delete or update any questions in the database of the quiz system. Teacher can extract all the questions from the database in text format.

Figure 2 – Quiz Maintenance System



B. Quiz Database

The quiz questions will be stored in XML (Extensible Markup Language) format. The key advantage of XML is that it is designed as a human- and machine-readable format and its self-documenting format facilitates description of structure and field names as well as specific values. In addition, XML supports Unicode which allows most of the information to be communicated and to meet the challenges of large-scale electronic publishing (W3C, 2010). Each quiz database contains a number of questions and three databases are created. It is divided into different computer categories, computer concepts, computer applications and database applications. Each database has stored 300 records with details of quiz questions, choices of answer and level of difficulty from 1-15. Below is an example of a quiz question.

```
<props>
<question>A composite key contains
</question>
<ansa>complicated attributes
</ansa>
<ansb>only one attribute
</ansb>
```

```

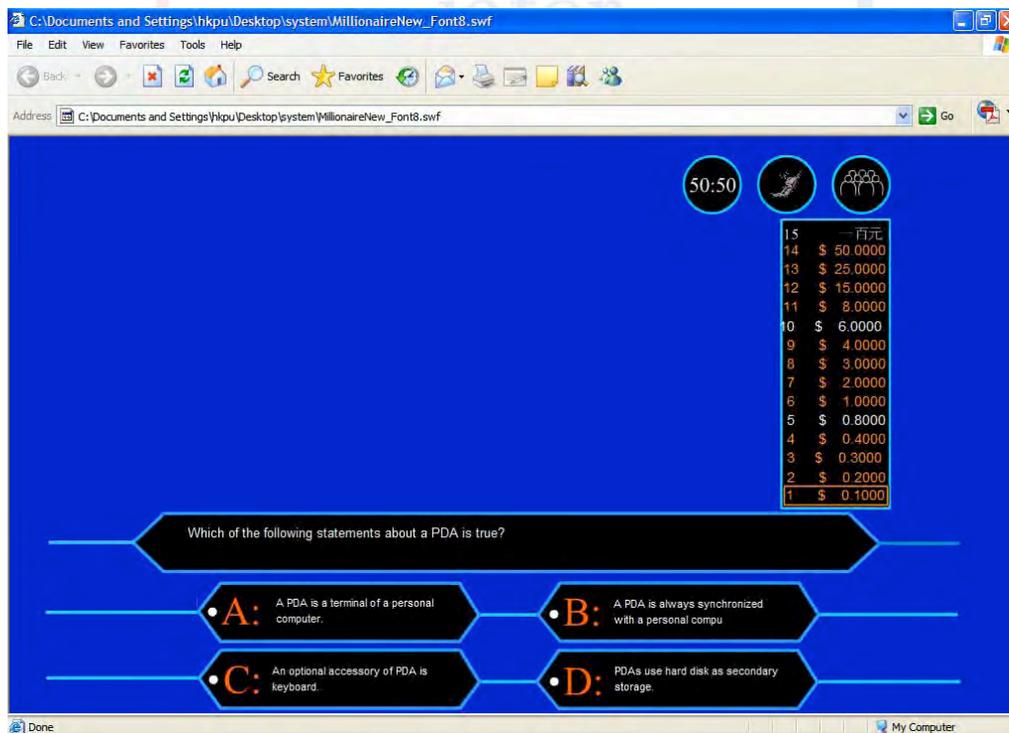
<ansc>derived attribute
</ansc>
<ansd>multiple attribtes
</ansd>
<correctanswer_txt>a</correctanswer_txt>
</props>

```

C. Millionaire Game

A millionaire program is developed in flash format and it can be run in the web-based environment (Figure 3). Thus the game can be published to the Internet and accessed by students or users with Internet browser installed with flash player. This does not only enhance students' accessibility to the game but also enhance the in-class usability for the teachers. It is because the teachers can simply conduct the game in a classroom computer without complicated installations and preparation.

Figure 3 – Millionaire Game



D. Implementation Tools

The millionaire game is developed in flash programming language which runs in the client side. At the beginning of the game, the computer programme retrieves 15 questions from the database for each of the level of difficulty. The programme would then judge the correctness of the user's choice of answer. If the answer chosen is correct, the answer of the next difficulty level will be displayed. The core of the web-based environment is implemented by flash programming since it provides a simplified, fast way to create dynamic web content. Flash technology enables rapid development of web-based applications that are server and platform independent. With this program, the game can be published to the Internet and accessed by clients with Internet browser.

System Application

A. Quiz Nature

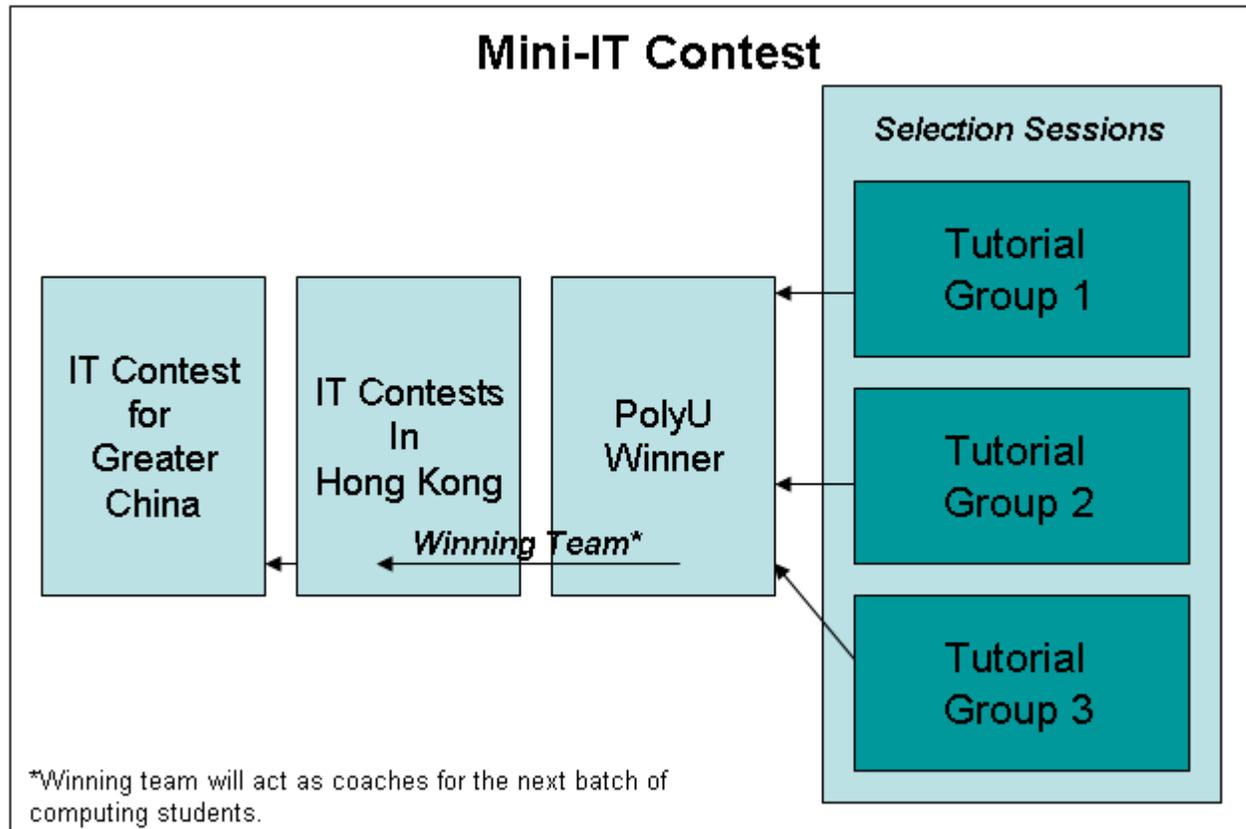
The competitions were embedded in the computer lab session to arouse students' interest and without disrupting class activities. Student participation was voluntary and not part of the course assessment. Each week, a team will undertake the quiz game and the results will be recorded.

B. Quiz Arrangement

This quiz competition was introduced to 70 students in an introductory course (Computer Concepts and Applications) in computing at the Hong Kong Polytechnic University. The course was running in 14 weeks with 2 hours lecture and 1 hour computer lab/tutorial class per week. These students were divided into 3 tutorial classes. For each tutorial class, we divided students into 6 to 7 teams, each with 4 students. The students competed with each other in teams through a "millionaire type" quiz game. Each competition was conducted in front of the whole class and each team was required to discuss the answers guided by a coach, contributing to the success of the game. When the quiz game finished, the difficulty level reached and the amount gained would be announced to the participating team as evaluation control. The winning team will be awarded various prizes for the competition awards.

The project cultivated an active and collaborative learning environment and appropriate experiences for students to discover and verify their answers for each team in a climate of mutual respect and open communications. The most successful teams in each of the 3 tutorial classes competed for the final rounds of championship.

Figure 4 – Mini-IT Contest and Its Relationships with External Competitions



Each team was supervised by a coach who acted as a trainer for the events. Ideally, each coach is a senior student who acts as leader in each of the tutorial group. He/she will select among the tutorial group teams to participate in the Mini-IT contest through selection sessions (also in the form of competitions). Those winning teams will be awarded a contract to work as a coach when the Mini-IT contest is scheduled for the next batch of computing students. Apart from mastering the computer concepts and applications, the winning teams will represent the University to compete other IT contests in Hong Kong and in Greater China. Figure 4 shows how the deliverables are being used by the Mini-IT contest, and their relationship with external competitions. The design and use of competitions can certainly motivate students' interests and participate actively in the learning process. Indeed, the concept of learning to learn is reinforced well as students will engage themselves in participating with various IT contests.

System Evaluation

A. Student Evaluation

A survey on "Millionaire" Quiz Game was conducted to determine if the Mini-IT Contest

successfully promoted active and collaborative learning, and learning to learn. There were 55 participants in the survey with positive results.

Table 2 – Summary of Evaluation Results

Overall rate (5=strongly agree, 1=strongly disagree)	
1. Have you studied computing during Secondary School studies?	3.73
2. Do you think the Millionaire Competition is relevant to the subject COMP 250?	3.73
3. Have you actively participated in the Millionaire Competition?	3.65
4. Do you think that there should be discussions within a group to help understanding the multiple choice questions in the Millionaire Competition?	4
5. Can the Millionaire quiz game enhance interest in learning (for IT concepts)?	3.45
6. Did you learn new computer concepts in the Millionaire quiz game (other than those taught in the lecture)?	3.34
7. Do you think that such kind of Game/Competition activities should be introduced in a subject?	3.73

In comparing the evaluation results with the subject marks, it noted that the student who got maximum mark 83.9 (A+ in the course) have rated the game 4.5; and the student who got minimum mark 37.9 (D) has not rated the game. Overall, students seemed to have a greater appreciation of class time and the quiz has enhanced their interests in the course. Students were motivated to excel in ways that traditional lecture cannot achieve.

B. Achievement of Learning Outcomes

The design and the development of the Mini-IT Contest are to promote active and collaborative learning. It involves reading, writing, discussion and engagement in solving problems, analysis, synthesis, and evaluation. It also emphasizes on teamwork that team members work cooperatively to solve problems (Lorenzen, 2001). This contest directly support the Hong Kong Polytechnic University's initiatives in promoting the 4 'T's in active learning (The Hong Kong Polytechnic University's website, 2010) :

“Thinking; Task-focused; Teamwork; Transcendence”

The contest is the beginning to develop a culture among students to promote active learning. A question bank is developed for the competitions, and promoted fore-runners in active learning. All the questions will address the developments in the subject area, with practical implications. By

participating in competitions, contributing their ideas, or acting as trainers for the events, learning is task-focused. By participating in teams and discussions among the tutorial groups, learning is not confined to the walls of the classroom. It can be taken anytime, anywhere beyond the class contact hours. This contest will also develop the concept of 'train the trainer'. When the winning teams become the trainer for the next batch of computing students, it is possible to have active learners to become trainers of their peer groups.

Conclusion

By having competitions injected into the learning environment, it provides a way to increase student interest in the subject area, promote active and collaborative learning, and reinforce learning to learn. This transitional pedagogy frames teachers as information managers, cultivating the conditions and environment under which learners are to learn the importance of knowledge, skills, teamwork, ideas exchange and open communications. It is believed that learning activities should be constructed to create a balance between cooperation and competition in order to enhance motivation and learning performance (Tauer and Harackiewicz, 2004). It is worth noting that the Mini-IT Contest is just the beginning, educators are encouraged to create learning activities to better reinforce active and collaborative learning.

Acknowledgements

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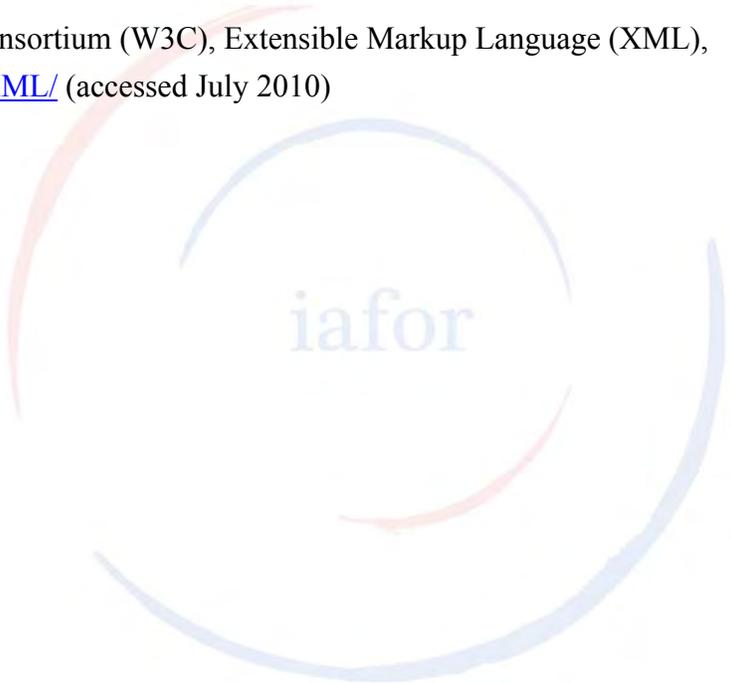
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The logo for the International Association for Frontiers in Education Research (iafor) is centered on the page. It features the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The upper arc is a light red color, and the lower arc is a light blue color, matching the text. The arcs are positioned such that they appear to frame the text, with the red arc on top and the blue arc on the bottom.

Title of the article and presentation: An investigation into the text books of primary schools studied in Iran in the academic year 2008 – 09 in terms of the degree of unity and coordination in attaching and detaching word stems to each other in compound words.

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Submission reference number: 0020

Topic of submission: An investigation into the text books of primary schools studied in Iran in the academic year 2008 – 09 in terms of the degree of unity and coordination in attaching and detaching word stems to each other in compound words.

IMPORTANT NOTE

Persian words and examples in Persian alphabets have been used in this article using the Times New Roman font. In order to see them properly, files for complex script and right-to-left languages must be installed. I think that mentioning the procedure may help some people. If you know the procedure, please excuse me for the redundant information.

To install them (in Windows XP), please go to Control Panel, Regional and Language. Then in the “Languages” tab refer to “Supplemental language support” and checkmark the box next to “install files for complex script and right-to-left languages”. You may be asked to insert the CD of your Windows into your CD drive.

After installing the files, please go back to “Languages tab” and in the part “Text services and input languages” click “Details”. Next, in the “Setting” tab and in “Installed services” by clicking on “add”, add the language “**Farsi**” and its keyboard.

**An Investigation into the Textbooks of Primary Schools Studied in Iran in the Academic
Year 2008 - 09 in Terms of the Degree of Unity and Coordination in Attaching
and Detaching Word Stems to Each Other
in Compound Words**

Abstract

In this research all of the text books of primary school studied in the academic year 2008 – 09 (1387 – 88) are studied word by word. Compound words which have different written forms and the degree of coordination in attaching and detaching of different words from each other in them are especially cared for. Moreover, the degree of unity of spelling and coordination in different text books of the same grade and also different grades of primary school is compared. Data collection is done through studying all the words of all the text books. Regarding the type of the research, data collection and analysis, the research is descriptive. All the books of different grades of primary school studied in the academic year 2008 - 09 make the research population and because all the words in these books are considered, there is no randomization and all of them form the selected subjects. Data analysis is done through specifying the frequency and percentage of probable uncoordinations in written forms and also in attaching and detaching of different morphemes to each other. The results show that in some of the text books individually and also among all of them compared with each other there are some uncoordinations in terms of detaching and attaching word stems to each other in compound words.

Key words: Text books, Compound words, Morpheme, detached writing, attached writing

Title: An investigation into the text books of primary schools studied in Iran in the academic year 2008 – 09 in terms of the degree of unity and coordination in attaching and detaching word stems to each other in compound words.

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1. Introduction

Knowing the correct spelling of each language is necessary for native speakers of that language and using incorrect spelling of words especially for educated people causes the negative view of other people. Based on the Persian alphabets, correct spelling of words includes not only using right letters but also the correct way of attaching different words and morphemes to each other. Unfortunately, in Persian the method of attaching morphemes to each other has become person specific and many uncoordinations can be found in different books and also in one book about similar morphemes.

Regarding this point that the foundation of learning how to write forms in primary schools, a lot of attention must be paid to the manner of writing, spelling and unity in detaching and attaching different morphemes to each other. Otherwise, a student who is at the beginning of learning how to write gets confused. This, in turn, results in more mistakes in spelling and more incorrect detaching and attaching morphemes to each other.

In this article all the text books studied in primary schools in Iran in the academic year 2008-09 (1387-88) have been considered word by word in terms of the degree of coordination and unity in detaching or attaching of the second word to the first one in compound words.

2. Review of literature

The researcher could not find any similar or related article or point in the site of Ministry of Education of Iran, Office of Programming and Writing Books and other related links searched in Google to use them for the betterment of this article and to mention them as the review of literature. To do this research, the field worker referred to many Persian books about the different kinds of compound words in Persian. Among these sources, I can mention “Persian Grammar” by Abdol Azim Gharib et al, “Persian Grammar” by Parviz Natel Khanlari, “Persian grammar” by Hasan Anvari and Hasan Ahmadi Givi, “Persian Grammar” by Mohammad Javad Shari’at, “Persian Grammar: the Lexical Categories and Merge” by Mahdi Meshkato-Dini, “Derivational Suffixes in Contemporary Persian” by Khosrow Keshani and “Instructions on Persian Writing” by the Academy of Persian Language and Literature.

These sources were used for a definition of Persian compound words, their different types and the different word classes which can make compound words in Persian. The definitions mentioned in these books are quoted in section 5.

3. Methodology

3.1. Research method

Regarding the nature of the article, data collection procedure and data analysis, research method is descriptive. In this article all the collected compound words have been studied based on the way of attaching the second word to the first one. Depending on the part of speech of the second word stem, they have been divided into verbal group (having a verb stem) and non-verbal group (having other parts of speech). Data has been collected through studying all the books word by word.

3.3. Data collection procedure

Because all the books studied in all grades of primary schools formed the research population of the article, all the compound words in all of them were considered one by one and those which had the possibility of being written in a different way of attaching or detaching words were noted down. So, no randomization was used to collect data.

3.4. Methods used to specify the source of each word

In any part of the article for the words collected from the books some numbers have been used which are sometimes accompanied with the letters “i” “a” or “c”. These numbers and letters which represent the book and the page from which the word has been collected are explained as follows:

1. A two-digit number has been specified to each of the text books studied in primary schools. The first digit, from 1 to 5, represents the first up to the fifth grade of the primary schools and the second digit is the fixed, specified number for each book based on its name. Table 1 shows the names of the books studied in primary schools and also the numbers specified to each of them. As it can be understood from the table, the first grade has five books, the second grade has seven books and the third up to the fifth grade each has eight books. As example, the book of mathematics of the first grade is specified with the number 14, that of the second grade with 24, that of the third grade with 34, that of the fourth grade with 44 and that of the fifth grade with 54.

item	names of the books of primary schools	book numbers of first grade	book numbers of second grade	book numbers of third grade	book numbers of fourth grade	book numbers of fifth grade
1	Persian (Reading)	11	21	31	41	51
2	Persian (Writing)	12	22	32	42	52
3	Sciences	13	23	33	43	53
4	Mathematics	14	24	34	44	54

5	Teaching the Koran	15	25	35	45	55
6	Heaven Gifts	-	26	36	46	56
7	Heaven Gifts (Workbook)	-	27	37	47	57
8	Social Sciences	-	-	38	48	58

Table 1

- In many cases in the article, a one to three digit number has also been added to the two-digit number of books which represents the number of the page from which the case has been extracted. For example, in table 2, in front of the verb stem “آلود” in the compound word “خواب آلود” number “31117” has been written. The figure “3” represents the third grade, the figure “1” represents the book “Persian (Reading)” and the three-digit number “117” represents the number of the page from which this compound word has been extracted. It means that this word has been collected from the page 117 of the book “Persian (Reading)” of the third grade.
- In some cases, the letters “i”, “a” or “c” accompany the number described in 2 above. These letters represent the words “introduction”, “appendix” and “cover” respectively and mean that the words have been collected from these parts of the books. For such cases sometimes the number of the page is also added to the fixed number of the book and sometimes it is not.

4. Research hypotheses

There are 2 hypotheses that the researcher tried to find out whether they are proved or rejected.

- There are probably some uncoordinations in terms of detaching and attaching words to each other in compound words in each of the text books of primary schools.
- There are probably some uncoordinations in terms of detaching and attaching words to each other in compound words among the text books of primary schools contrasted with each other.

5. Persian compound words

Meshkato-Dini (2007, 29) (in his definition of Persian compound words writes, “Compound Words can be analyzed into two or more word stems. Prefixes, suffixes, prepositions and some other grammatical morphemes can be used in their structures”. He mentions fifteen different types of compound words (30). Keshani (1992, 55-66) calls the present and past stems of the verbs [in Persian each verb has the two stems] used in the structure of compound words “verbal suffixes”, and the nouns used in the structure of such words “nominal suffixes”. Gharib et al (1988, 32) believe, “A compound noun consists of two or more words.” He explains nine different types of compound nouns in his book (32-33). According to Natel Khanlary (1991, 161), whenever a noun or an adjective has two or more components and each of them is meaningful in isolation, it is called a compound word. Anvari and Ahmadi Givi (1992, 96-97, 99-100, 151-156) have defined compound nouns and adjectives as words consisting of some components and mentioned sixteen different types of compound nouns and many more different types of compound adjectives. In the Instructions of Persian Writing by the Academy of Persian Language and Literature (2006, 5) one can read:

In recent decades, the most important different views regarding how to write Persian words have been about attached or detached writing of compound words.

The academy ... has chosen a middle way and has tried to write rules and regulations only for cases whose attached or detached writing is compulsory and leave the manner of writing the other compound words to writers' tastes.

In the continuation of this idea of "attached writing" and "detached writing" of compound words the Academy (2005, 39) brings up three solutions as follows:

1. Writing some rules for detached writing of all compound words and determining the exceptions.
2. Writing some rules for attached writing of all compound words and determining the exceptions.
3. Writing some rules for compulsory detached writing of some compound words and attached writing of some others and giving the choice for the rest of them to writers.

When approving "The Instruction on Persian Writing" the Academy chose the third solution and only determined the cases of compulsory detached or attached writing (The Academy, 2005, 39).

Regarding the detached and attached cases of compound words in the above-mentioned sources, especially "The Instructions on Persian writing", it becomes clear that rules cannot be easily codified for detached and attached writing of compound word in Persian and also they cannot be easily justified. However, we can expect the writers and editors of text books especially text books for primary schools to pay much more attention to unity and coordination of such words.

6. Data analysis

In this article all the compound words in the text books of primary schools are studied in terms of the attaching and detaching of the second words to the first ones in compound words. The researcher tries to point out all coordinations and uncoordinations used in the books and compare and contrast them with each other by using tables containing uncoordinations and mentioning frequencies and percentages of different cases.

2562 cases were collected consisting of 358 compound words. Many of these words are repeated a few times. From the 2562 cases, 1313 cases consisting of 231 compound words making 51.25% are those whose second word stem is a verb. These 231 compound words make 64.5% of the total number 358. The rest of the collected cases, 1249 ones, consisting of 127 compound words making 48.75% are those whose second word stem is not a verb. These 127 compound words make 35.5% of the total number 358.

Regarding that from among 358 collected compound words, those whose second word is the present or past stem of verbs make 64.5% and those whose second word is not a verb make only 35.5%, first verbal stems (consisting of a verb) and then non-verbal words (having a stem other than a verb) will be studied in terms of unity and coordination in attaching or detaching from the first part of the compound words.

6.1. Present and past stems of verbs in collected compound words in terms of manner of attaching to the previous word

6.1.1. An investigation into their manner of attaching to the previous word

Many uncoordinations can be seen in the way the present and past stems of verbs in compound words are attached to the previous words. Regarding their way of attaching, they can be divided into different group as follows:

6.1.1.1. Only detached in all collected cases

The verb stems used only detached from the previous words are shown in table 2. For each verb stem, one compound word in which it is used is mentioned as an example. The page number of the compound word is also given.

verb stem	example	gloss	page number of the example
ألود	خواب ألود	sleepy	31117
آموز	دانش آموز	student	1450
آمیز	رنگ آمیزی	color blending	2729
آور	جمع آوری	collecting	1383
انگیز	غم انگیز	sad	4666
بخش	جان بخشش	refreshing	5110
بُر	گچ بری	plaster molding	3841
بَردار	عکس برداری	photography	33105
بست	دل بسته	attached	51156
بین	پیش بینی	foretelling	4186
پُرس	احوال پرسی	greeting	2112
پرست	بت پرست	idolater	4519
پَز	شیرینی پزی	cooking sweets	4482
پوش	روپوش دار	insulated	4360
پیچ	هاسیم پیچ	coils	4371
پیما	راه پیمایی	demonstration	11102
تاب	شب تاب	shining at night	3154
تراش	سنگ تراشی	carving	48102
جو	جنگ جو	warrior	58105
چسب	دل چسب	pleasing	41166
خراش	دل خراش	heart-rending	5654
خوار	آتش خوار	fire-eater	51178
خوان	درس خوان	diligent student	2664
خیز	حاصل خیز	fertile	41127
داشت	یادداشت برداری	note taking	31141
دان	ریاضی دان	mathematician	5181
دی	چهارم دیده	experienced	51178
ربا	آهن ربا	magnet	1364
رسان	پیام رسان	messenger	5110

ریز	خون ریز	blood shedder	58105
زا	آسیب زا	harmful	3516i
زن	نفس نفس زنان	panting	32138
سرا	غزل سرا	poet	51156
شکن	قانون شکنی	law breaking	4162
شناس	زمین شناسان	geologists	5351
فرسا	طاقت فرسا	intolerable	4668
فروش	هارنگ فروش	paint sellers	4334
فشان	آتش فشان	volcano	5368
کار	برنج کار	rice sower	24155
کش	زحمت کش	hard-working	3811
کش	می کروب کش	microbicide	3388
کوش	سخت کوش	diligent	31125
گشا	دل گشا	pleasant	3141
گفت	پیش گفتار	preface	259i
نشان	آتش نشانی	fire fighting	311a
نگار	پیام نگار	message taker	4515i
نواخت	یک نواخت	monotonous	4347
نورد	کوه نورد	mountain climber	32120

Table 2

6.1.1.2. Only attached in all collected cases

Table 3 contains those verb stems used only attached to the previous words in all the collected compound words. For each of them one example with the page number is mentioned.

verb stem	example	gloss	page number of the example
آ	خوش آیند	pleasant	4197
باز	جان بازی	self sacrificing	3162
بود	کمبود	shortage	48116
تاز	پیش تاز	pioneer	4220
چین	گل چین	careful selecting	415i
خند	لبخند	smile	5610
داد	روی داد	happening	4352
ده	سازمان دهی	organizing	488i
رس	دسترسی	being accessible	5858
رفت	آبرفت	alluvium	4829
کاو	کنج کاو	curious	3273
کرد	روی کرد	aspect	11i
گزین	جایگزین	substitute	42105
نمود	ره نمود	leading	517i
نهاد	پیشنهاد	suggestion	2723

Table 3

6.1.1.3. Both attached and detached in collected cases

The verb stems studied in this part, all represent uncoordinations in the text books. They can be divided into some different groups.

1. Some of the verb stems in collected cases have been used detached in some compound words and attached in some others. A list of them with one example and page number of the example is mentioned in table 4.

verb stem	example for detached case in compound word	gloss	page number of the example	example for attached case in compound word	gloss	page number of the example
بَر	رنج بر	hard working	41108	پی امبر	Prophet	5880
خور	آب خوری	drinking cup	4819	دل خور	offended	41178
خورد	کرم خورده	worm-eaten	5126	سال خورده	old	4664
دوز	پیراهن دوزی	shirt-making	24135	کفش دوز	shoemaker	326i
زاد	امام زاده	offspring of an Imam	22150	علی زاده	a family name	517i
زد	بهت زده	astonished	4656	زبان زد	frequently mentioned	5626
سپار	خاک سپاری	burying	4178	ره سپار	setting out	5728
گذر	خوش گذران	one who lives in pleasure	48104	ره گذران	passers-by	4157
نما	قطب نما	compass	31137	راهنما	guide	2182
نواز	چشم نواز	beautiful	51187	دل نوازی	affability	5676

Table 4

2. Some of the verb stems are used detached in some of the collected compound words, but in the same others they are used both detached and attached. Table 5 shows one example for each of these verb stems in compound words in which they are detached. Table 6 shows the same verb stems in compound words in which they are used both attached and detached. The page number of one collected case and the frequency of the collected cases are also shown.

verb stem	example	gloss	page number of the example
باف	دست باف	hand-woven	389
بُرد	نام برده	mentioned	4427
بند	پیش بند	apron	4182
پاش	گل آب پاش	rose-water sprinkler	5345
پذیر	امکان پذیر	possible	361i
ران	کشتی رانی	sailing	3398

ساز	آهنگ ساز	composer	2167
سوز	آتش سوزی	fire	3160
شو	لباس شویی	washing machine	5824
کُن	آب گرم کن	geyser	3377
گذار	بنیان گذار	founder	5699
ماند	عقب مانده	dull	4123
نشین	کوچ نشینی	immigrating in different seasons	4841
نویس	اسم نویسی	enrolling	3487
یاب	راه یابی	entering	41137

Table 5

verb stem	compound word with detached verb stem	Page number of a case	frequency of the compound word	compound word with attached verb stem	Page number of a case	frequency of the compound word	gloss
باف	خیال باف	41178	2	خیال باف	113a	1	imaginer
بُرد	فرمان بردار	41153	1	فرمان بردار	51194	1	obedient
بند	دل بند	3212	1	دل بند	1567	1	darling
پاش	سم پاشی	4330	3	سم پاشی	4330	1	poisoning
پذیر	بخش پذیر	54111	17	بخش پذیر	44139	14	dividable
ر	دل پذیر	314a	4	دل پذیر	3135	18	pleasant
ران	سخن رانی	48118	3	سخن رانی	58129	1	lecturing
	قایق ران	1154	1	قایق ران	5835	1	sailor
ساز	نیم ساز	54127	5	نیم ساز	44163	4	bisector
سوز	دل سوز	11121	12	دل سوز	1567	4	sympathetic
شو	دست شویی	4163	1	دست شویی	4355	1	toilet
کُن	بازی کن	4247	1	بازی کن	34148	1	player
گذار	نام گذاری	4367	10	نام گذاری	4411	9	nominating
ماند	باقی مانده	34178	20	باقی مانده	5417	14	the remainder
	باقی مانده است	54153	1	باقی مانده است	4488	2	has remained
نشینی	دل نشینی	4517	5	دل نشینی	4563	3	pleasing
نویس	خوش نویسی	416i	8	خوش نویسی	4512i	1	calligrapher
یاب	ارزش یابی	557	35	ارزش یابی	1571	51	evaluating
	دست یابی	587i	3	دست یابی	1569	1	accessibility

Table 6

3. Some of the verb stems are used attached in some of the collected compound words, but in the same others they are used both detached and attached. Table 7 shows one example for each of

these verb stems in compound words in which they are detached. Table 8 shows the same verb stems in compound words in which they are used both attached and detached. The page number of one collected case and the frequency of the collected cases are also shown.

verb stem	example	gloss	page number of the example
آورد	دستاورد	achievement	318i
آمد	پیش آمد	happening	51187

Table 7

verb stem	compound word with detached verb stem	Page number of a case	frequency of the compound word	compound word with attached verb stem	Page number of a case	frequency of the compound word	gloss
آورد	ره آورد	11i	3	ره آورد	12i	3	present brought
آمد	خوش آمد	3825	2	خوش آمد	5676	2	welcome

Table 8

4. Some of the verb stems are used detached in some compound words, attached in some others and both detached and attached in the same other ones. Table 9 shows those related to the first two cases with one example and page number. Table 10 represents those related to the third case with all the collected examples. The frequency of each example is also added.

verb stem	example for detached case in compound word	gloss	page number of the example	example for attached case in compound word	gloss	page number of the example
دار	تب دار	having fever	1147	پیرچمدار	pioneer	3736
گرد	آفتاب گردان	sun flower	33114	بالگرد	helicopter	5179
گو	دروغ گوئی	lying	51180	حقگو	one who says the rights	11i
گیر	برف گیر	holding snow	4291	غافلگیر	attacked unawares	3596

Table 9

verb stem	compound word with detached verb stem	Page number of a case	frequency of the compound word	compound word with attached verb stem	Page number of a case	frequency of the compound word	gloss
دار	باغ دار	3815	3	باغدار	44132	1	owner of a garden
	بال دار	3194	3	بالدار	444a	1	having wings
	پاس دار	41164	3	پاسدار	58148	1	guard
	پستان دار	3332	3	پستاندار	3324	2	mammal

	چان دار	5352	26	چان دار	22153	2	animate
	خدا ننگه دار	2222	30	خدا ننگه دار	4210	43	God protecting
	نگه داری د	33103	9	نگه داری د	4178	1	hold, keep
	دام داری	3816	4	دام داری	3813	5	animal husbandry
	دین دار	3856	1	دین دار	5895	1	religious
	کتاب دار	3122	5	کتاب دار	3856	1	librarian
	گل دار	3343	2	گل دار	32101	1	having flowers
	مرغ داری	2287	2	مرغ داری	44155	9	raising hens
گرد	جهان گرد	4128	1	جهان گرد	51187	2	tourist
گو	پیش گوئی	41177	1	پیش گوئی	4186	2	foretelling
	گویی	3668	10	ی	362i	4	truthful
	راست گو و گفت و گو	41116	95	راست گو گفت گو	446	2	conversation
گیر	آب گیر	4191	2	آب گیر	12124	2	river-basin
	دست گیر	41108	2	دست گیر	4884	2	arrested
	دل گیر	51134	3	دل گیر	5646	1	annoyed
	کمان گیر	41118	7	کمان گیر	31123	2	arch man
	ماه گیر	41108	13	ماه گیر	4412	2	fisherman

Table 10

5. Some of the verb stems have been used both detached and attached in each of the collected compound words. Table 11 shows these stems and the compound words. The page number of one case and the frequency of the compound word are also mentioned.

verb stem	compound word with detached verb stem	Page number of a case	frequency of the compound word	compound word with attached verb stem	Page number of a case	frequency of the compound word	gloss
بار	خون بار	5145	1	خون بار	51188	1	blood shedding
پرور	پروری دام	3812	7	دام پروری	5810	10	raising cattle
خواه	دل خواه	51189	14	دل خواه	5178	14	favorite
رفت	پیش رفت رفت	4118	3	پیش رفت	4123	16	progress
رو	پیش روی راه رو	4634	1	پیش روی راه رو	578	2	proceeding
		2182	1		2246	3	corridor
شد	گم شده	4186	1	گم شده	3611	1	lost
فرما	حکم فرما	5632	3	حکم فرما	5674	1	dominant
گزار	خدمت گزار	48115	3	خدمت گزار	4561	5	servant
	سپاس گزار	4180	20	سپاس گزار	417i	2	thankful

Table 11

6.1.2. More considerable points in tables 2 to 11

All of the cases mentioned in tables 2 to 11 represent uncoordinations in the manner of attaching verb stems in compound words. These uncoordinations can be found in one book, among the books of one grade and also among the books of different grades. Even if the cases mentioned in tables 2 and 3 which are related to being detached or attached of some verb stems are contrasted with each other, uncoordinations in similar situations can be found. In all cases mentioned in tables 4 and 9, one verb stem has been used detached in some words and attached in some others. In all cases mentioned in table 6, 8, 10 and 11, one verb stem has been used both detached and attached in different occurrences of a single compound word. Some of the most prominent cases are as follows:

The verb stems “آ” (come), “آموز” (learn) and “آمد” (came) (as mentioned above in Persian both present and past verb stems are used) which all begin with the letter “ا”, are not coordinated based on the manner of attaching to the previous letter. They are respectively only attached, only detached and both attached and detached.

The verb stems “بَر” (take) and “بُر” (cut) and also “رَفَت” (went) and “فَتُر” (swept) which are spelled the same, are not coordinatedly attached to the previous words.

The verb stem “نَشِیْن” in the compound word “دَلنَشِیْن” (pleasing) is used in both detached and attached forms in the book number 45.

The verb stem “دار” in the compound word “پَسِتَانِدار” (mammal) is used in both detached and attached forms in the book number 33.

The verb stem “دار” in the compound word “دامداری” (animal husbandry) is used in both detached and attached forms in the book number 38.

The verb stem “گو” in the compound word “پیشگوی” (foretelling) is used in both detached and attached forms in the book number 41.

The verb stem “گو” in the compound word “راسِتگو” (truthful) is used in both detached and attached forms in the book number 36.

The verb stem “بار” in the compound word “خونبار” (blood shedding) is used in both detached and attached forms in the book number 51.

The verb stem “خواه” in the compound word “دلخواه” (desire) is used in both detached and attached forms in the book number 51.

The verb stem “رفت” in the compound word “پیشرفت” (progress) is used in both detached and attached forms in the book number 41.

The verb stem “فرم” in the compound word “حکفرم” (dominant) is used in both detached and attached forms in the book number 56.

The verb stem “گزار” in the compound word “سپاسگزار” (thankful) is used in both detached and attached forms in the book number 41.

6.2. Non-verbal words in collected compound words in terms of manner of attaching to the previous word

6.2.1. An investigation into their manner of attaching to the previous word

Many uncoordinations can be seen in the way the non-verbal words used in compound words are attached to the previous words. Regarding their way of attaching, they can be divided into different group as follows:

6.2.1.1. Only detached in all collected cases

The non-verbal words used only detached from the previous words are shown in table 12. For each of them, one compound word in which it is used is mentioned as an example. The page number of the compound word is also given.

word	example	gloss	page number of the example
آواز	خوش آواز	sweet singing	1172
آهنگ	خوش آهنگ	melodious	4126
باز	لج باز	obstinate	51190
بازی	تاب بازی	swinging	21125
بال	سبک بال	tranquil	4634
بیان	خوش بیان	able to speak frankly	2118
پرت	حواس پرت	absent-minded	51165
پشت	لاک پشت	tortoise	1198
پور	قاسم پور	a family name	24a
پیگر	غول پیگر	giant	3181
تن	پیل تن	giant	51185
جا	یک جا	all together	4526
جمعیت	کم جمعیت	having little population	48109
حرف	کم حرف	not talkative	3755
خط	خوش خط	having good handwriting	1287
دایره	نیم دایره	semi-circle	4469
دخت	سیمین دخت	a name	14a
دست	تنگ دست	poor	5148
دسته	گل دسته	minaret	2196
دفعه	یک دفعه	at once	2123
دوش	خانه به دوش	vagabond	12117
ذوق	خوش ذوق	having good taste	42125
رخ	گل رخ	beautiful	4115
رفتار	خوش رفتار	behaving well	2182
رنگ	خوش رنگ	of a pretty color	51138
روز	نیم روز	mid-day	41123
سال	بزرگ سال	adult	43103
ستون	چهل ستون	having forty columns	31125
سرد	خون سردی	cold blood	5172
شاد	دل شاد	happy	31125
صبر	کم صبر	not very patient	111a
صورت	خوش صورت	beautiful	51153
طرف	یک طرفه	unilateral	3828
عاقبت	خوش عاقبت	having good fortune	51189
فلک	چرخ فلک	merry-go-round	4385
قامت	خوش قامت	tall and handsome	4665

قسمت	خارج قسمت	quotient	4485
قلب	خوش قلب	kind	41144
قلی	نچف قلی	a name	41144
قیمت	گران قیمت	expensive	3840
کام	شیرین کام	having a sweet mouth	32152
کدام	هیچ کدام	none	5375
کس	هیچ کس	nobody	4123
گراد	سانتی گراد	centigrade	4834
گوشت	آب گوشت	a kind of food	4115
لیمو	آب لیمو	lemon juice	389
موقع	چه موقع	when	1179
نام	اندصاحب نام	they are famous	4662
نگران	دل نگرانی	anxiety	1571
وقت	هیچ وقت	never	2619
مزار	هفت مزار	seven thousand	44161
ممت	تربزرگ ممت	more ambitious	31154
هوش	کم هوش	dull	31128
یک	کدام یک	which one	5755

Table 12

6.2.1.2. Only attached in all collected cases

Table 13 contains those non-verbal words used only attached to the previous words in all the collected compound words. For each of them one example with the page number is mentioned.

Word	example	gloss	page number of the example
پاچه	دست پاچه	hasty	41178
پایه	کوه پایه	foot of a mountain	4825
چال	یخچال	refrigerator	3345
درست	تندرست	healthy	329
راه	گمراه	misled	5638
رضا	علی رضا	a name	447a
رگ	سیاهرگ	vein	43100
شاه	خوارزمشاه	a name	58105
شش	آبشش	gill	3325
عباس	غلام عباس	a name	152i
علی	غلام علی	a name	564i
گونه	چگونه	how	41105
مرغ	سیمرغ	a mythical bird	51129
مزد	دستمزد	wage	44131
ناز	گل ناز	a name	41113

یار	آبیاری	irrigation	4138
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Table 13

6.2.1.3. Both attached and detached in collected cases

The non-verbal words studied in this part, all represent uncoordinations in the text books. They can be divided into some different groups.

1. Some of the non-verbal words in collected cases have been used detached in some compound words and attached in some others. A list of them with one example and page number of the example is mentioned in table 14.

word	example for detached case in compound word	gloss	page number of the example	example for attached case in compound word	gloss	page number of the example
پا	هشت پا	octopus	4341	دم پای	slippers	34156
دوست	مهمان دوست	being hospitable	319a	رحمان دوست	a family name	2668
نامه	دانش نامه	thesis	5114	شاهنامه	name of a famous book of verse	11117

Table 14

2. Some of the non-verbal words are used detached in some of the collected compound words, but in the same others they are used both detached and attached. Table 15 shows one example for each of these non-verbal words in compound words in which they are detached. Table 16 shows the same non-verbal words in compound words in which they are used both attached and detached. The page number of one collected case and the frequency of the collected cases are also shown.

word	example	gloss	page number of the example
برگ	دم برگ	part of a leaf	4324
چه	چنان چه	if	3513i
خانه	بت خانه	idol-temple	2578
دل	خوش دل	happy	41178
رو	کمر رو	shy	4139
که	همین که	as soon as	2122
متر	میلی متر	millimeter	34163

Table 15

word	detached in the	page number	frequency of the	attached in the	page number	frequency of the	gloss
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	compound word	of one case	compound word	compound word	of one case	compound word	
برگ	گل برگ	1342	3	گلبرگ	21i	1	petal
چه	آن چه	4374	9	آن چه	452	11	whatever
خانه	چاپ خانه	2197	1	چاپخانه	512i	21	printing house
	کتابخانه	3412	45	کتابخانه	34136	16	library
دل	سنگ دل	4157	1	سنگدل	51174	1	stone-hearted
رو	رو به رو	2130	19	روبرو	2470	2	opposite
که	آن که	2111	2	آن که	44169	1	that which
	این که	2110	3	این که	44112	2	the fact that
متر	سانتی متر	54106	17	سانتی متر	54152	7	centimeter

Table 16

3. Some of the non-verbal words are used attached in some of the collected compound words, but in the same others they are used both detached and attached. Table 17 shows one example for each of these non-verbal words in compound words in which they are detached. Table 18 shows the same non-verbal words in compound words in which they are used both attached and detached. The page number of one collected case and the frequency of the collected cases are also shown.

word	example	gloss	page number of the example
بخت	جوان بخت	fortunate	481a
پزشک	دامپزشک	veterinary surgeon	443a
شنبه	یکشنبه	Sunday	48113

Table 17

word	detached in the compound word	page number of one case	frequency of the compound word	attached in the compound word	page number of one case	frequency of the compound word	gloss
بخت	خوش بخت	41130	15	خوش بخت	4665	2	lucky
پزشک	دندان پزشک	5126	1	دندان پزشک	5126	1	dentist
شنبه	پنجشنبه	48113	1	پنجشنبه	4472	3	Thursday

Table 18

4. Some of the non-verbal words are used detached in some compound words, attached in some others and both detached and attached in the same other ones. Table 19 shows those related to

the first two cases with one example and page number. Table 20 represents those related to the third case with all the collected examples. The frequency of each example is also added.

Word	example for detached case in compound word	gloss	page number of the example	example for attached case in compound word	gloss	page number of the example
صد	هفت صد	seven hundred	345	سی صد	three hundred	541
کار	راه کار	solution	24a	شاه کار	masterpiece	58111

Table 19

word	detached in the compound word	page number of one case	frequency of the compound word	attached in the compound word	page number of one case	frequency of the compound word	gloss
صد	هشت صد	412c	1	هشت صد	446	2	eight hundred
کار	چه کار	1191	7	چکار	44149	2	what

Table 20

5. Some of the non-verbal words have been used both detached and attached in each of the collected compound words. Table 21 shows these non-verbal words and the compounds. The page number of one case and the frequency of the compound word are also mentioned.

word	detached in the compound word	page number of one case	frequency of the compound word	attached in the compound word	page number of one case	frequency of the compound word	gloss
بارہ	یک بارہ	4178	7	یک بارہ	2619	1	suddenly
بو	خوش بو	3229	17	خوش بو	31156	3	sweet-smelling
بہا	گران بہا	51132	7	گران بہا	51190	1	expensive
تنگ	دل تنگ	41107	3	دل تنگ	41108	1	gloomy
حال	خوش حال	4194	108	خوش حال	4564	27	happy
دم	صبح دم	5610	2	صبح دم	468i	1	dawn
دیگر	یک دیگر	35109	93	یک دیگر	35110	25	each other
روا	فرمان روا	4879	4	فرمان روا	4530	5	emperor
ریز	سنگ ریزہ	2180	5	سنگ ریزہ	2562	1	gravel
طور	چہ طور	5488	17	چہ طور	5453	2	how
قدر	آن قدر	5676	32	آن قدر	44109	1	that much
	چہ قدر	5656	54	چہ قدر	5674	17	how much

گرم	دل گرم	5619	1	دل گرم	41109	2	confident
گوش	بازی گوش	31143	3	بازی گوش	34159	3	playful
مرد	جوان مرد	3196	11	جوان مرد	32136	1	brave youth
مزه	خوش مزه	373	16	خوش مزه	368	2	delicious

Table 21

6.2.2. More considerable points in tables 12 to 21

All of the cases mentioned in tables 12 to 21 represent uncoordinations in the manner of attaching non-verbal words in compound words. These uncoordinations can be found in one book, among the books of one grade and also among the books of different grades. Even if the cases mentioned in tables 12 and 13 which are related to being detached or attached of some non-verbal words are contrasted with each other, uncoordinations in similar situations can be found. In all cases mentioned in tables 14 and 19, one non-verbal word has been used detached in some words and attached in some others. In all cases mentioned in table 16, 18, 20 and 21, one non-verbal word has been used both detached and attached in different occurrences of a single compound word. Some of the most prominent cases are as follows:

The non-verbal word “خانه” in the compound word “کتابخانه” (library) is used in both detached and attached forms in the book number 34.

The non-verbal word “متر” in the compound word “سانتی متر” (centimeter) is used in both detached and attached forms in the book number 54.

The non-verbal word “پزشک” in the compound word “دندان پزشک” (dentist) is used in both detached and attached forms in the book number 51.

The non-verbal word “به” in the compound word “گران به” (expensive) is used in both detached and attached forms in the book number 51.

The non-verbal word “تنگ” in the compound word “دل تنگ” (gloomy) is used in both detached and attached forms in the book number 41.

The non-verbal word “دیگر” in the compound word “یکدیگر” (each other) is used in both detached and attached forms in the book number 35.

The non-verbal word “طور” in the compound word “چطور” (how) is used in both detached and attached forms in the book number 54.

The non-verbal word “قدر” in the compound word “چقدر” (how much) is used in both detached and attached forms in the book number 34.

7. Results

While analysing the collected compound words, many uncoordinations were observed. Nearly all tables represent them. Even some tables and sections, which represent coordination and unity in some parts, when contrasted with other similar parts show uncoordinations in the text books. These uncoordinations cause a lot of problems for primary students in learning how to write compound words.

Based on data analysis and what was mentioned about the tables, the two hypotheses can now be discussed.

7.1. Hypothesis 1: There are probably some uncoordinations in terms of detaching and attaching words to each other in compound words in each of the text books of primary schools.

By using the collected data, their analysis in the previous section (6), the different tables and what was mentioned about them, it can be understood that this hypothesis is not proved for some of the books and is proved for some others, meaning that some of the books are coordinated in terms of detaching and attaching different words to each other in compound words and in some others uncoordinations have been found. The two cases are discussed now.

7.1.1. Books in which uncoordinations have not been found.

In none of the books numbered 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 31, 37, 42, 43, 44, 46, 47, 48, 52, 53, 55, 57 and 58, each compared and contrasted with itself, uncoordinations were not found.

7.1.2. Books in which uncoordinations have been found.

7.1.2.1. Book number 11 (Persian (Reading) of the first grade)

1. There are uncoordinations in the manner of attaching. The verb stems in the compound words “راه پی‌م‌ای” and “روی‌کرد” (refer to tables (rtt) 2 and 3), “دل‌سوز” and “خی‌ال‌باف” (refer to table (rtt) 6).
2. There are uncoordinations in the manner of attaching the non-verbal stems in the compound words “لاک پش‌ت” (rtt 12) and “شاه‌نامه” (rtt 14).

7.1.2.2. Book number 32 (Persian (Writing) of the third grade)

The two words in the compound word “خوش‌بو” are detached on page 29 and attached on page 133 (rtt 21).

7.1.2.3. Book number 33 (Sciences of the third grade)

The verb stem “دار” in the compound word “پست‌ان‌دار” is used in both attached and detached forms (rtt 10).

7.1.2.4. Book number 34 (Mathematics of the third grade)

The word “خان‌ه” in the compound word “کت‌اب‌خان‌ه” is written in both attached and detached forms (rtt 16).

7.1.2.5. Book number 35 (Teaching the Koran of the third grade)

The word “دی‌گر” in the compound word “دی‌کدی‌گر” is written in both attached and detached forms (refer to section (rts) 6.2.1.3 and rtt 21)

7.1.2.6. Book number 36 (Heaven Gifts of the third grade)

The verb stem “گو” in the compound word “راست‌گو” has been written in both attached and detached forms (rts 6.1.1.3 and rtt 10).

7.1.2.7. Book number 38 (Social Sciences of the third grade)

The verb stem “دار” in the compound word “دام‌داری” has been written in both attached and detached forms (rts 6.1.1.3 and rtt 10).

7.1.2.8. Book number 41 (Persian (Reading) of the fourth grade)

1. The verb stem “گو”, “رفت” and “گزار” respectively in the compound words “پیشگوی”, “پیشرفت” and “سپاسگزار” have been written in both attached and detached forms (rts 6.1.1.3 and rtt10 and 11).
2. The word “تنگ” in the compound word “دلتنگ” has been written in both attached and detached forms (rts 6.2.1.3 and rtt 21).

7.1.2.9. Book number 45 (Teaching the Koran of the fourth grade)

The verb stem “نشین” in the compound word “دلنشین” is written in both attached and detached forms (rts 6.1.1.3 and rtt 6).

7.1.2.10. Book number 51 (Persian (Reading) of the fifth grade)

1. The verb stems “بار” and “خواه” respectively in the compound words “خونبار” and “دلخواه” are written in both attached and detached forms (rts 6.1.1.3 and rtt 11).
2. The words “پزشک” and “به” respectively in the compound words “دندانپزشک” and “گرانبه” have been written in both attached and detached forms (rts 6.2.1.3 and rtt 18 and 19).

7.1.2.11. Book number 54 (Mathematics of the fifth grade)

The words “متر” and “طور” respectively in the compound words “سانتیمتر” and “چطور” have been written in both attached and detached forms (rts 6.2.1.3 and rtt 16 and 21).

7.1.2.12. Book number 56 (Heaven Gifts of the fifth grade)

1. The verb stem “فرم” in the compound word “حکمفرم” has been written in both attached and detached forms (rts 6.1.1.3 and rtt 11).
2. The word “قدر” in the compound word “چقدر” has been written in both attached and detached forms (rts 7.2.1.3 and rtt 21).

7.2. Hypothesis 2: There are probably some uncoordinations in terms of detaching and attaching words to each other in compound words among the text books of primary schools contrasted with each other.

Using what was mentioned in data analysis, the table and other finding about the tables, it becomes clear that this hypothesis is proved about the text books when contrasted with each other. There are lots of uncoordinations in term of the manner of attaching and detaching of the second word to the first one in compound words.

8. Conclusion

Based on how the Persian letters of alphabet can attach to each other in written language and also based on using this important characteristic, it is necessary to pay attention to those morphemes and words which must attach to each other and those which must not. Of course, because of different types of morphemes and different possibilities of detaching and attaching them to each other, there can be many rules and details for them. However, organizing these rules and making

people obey them when writing are so difficult that even the Academy of Persian Language and Literature decides to choose a middle way as mentioned in section 5.

In writing Persian, unfortunately, different writers use different ways of detaching and attaching different words and morphemes to each other. However, it is very important for writers, compilers and editors of text books of schools, especially primary ones, to pay much more attention to being consistent and coordinated in this regard, especially in compound words.

As the article shows, the text books studied in primary schools in the academic year 2008 – 09 (1387 – 88), regarding the coordination in each book, are partly coordinated and partly are not. Meaning that some of these books (each compared and contrasted with itself) are coordinated in terms of detaching and attaching different words to each other in compound words and some of them are not. Considering all the books compared and contrasted with each other in this regard, they are not coordinated.

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So you think you're ready for university? Barriers, needs and supports for mature age individuals accessing higher education.

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Abstract

Education research conducted in Australia has clearly identified that mature age individuals' experience a range of barriers in accessing, progressing and succeeding in university courses. The research also demonstrates that in rural and regional communities, mature age students from diverse backgrounds face additional barriers exacerbated by gender, ethnicity, age and the financial and time costs associated with geographic distance between communities and university campuses. However, the need to provide significant support to the groups who are under represented in higher education is a predominant theme within the literature and a lack of a cohesive approach to ensuring access to higher education and support for these cohorts to progress and reach success is a consistent theme. The Review of Australian Higher Education (The Bradley Report) identifies the need to increase higher education participation rates amongst groups which experience constraints and barriers to university education, including those in rural and regional communities.

Introduction

OECD comparative research of adult learning policies and practices in nine countries in Europe and Scandinavia contends that, despite reform agendas reshaping adult learning policies and practices, there are persistent inequities in terms of the provision of, access to, and outcomes of adult education and training (OECD: 2003). Research internationally has assessed adult education and training reforms against social programs and policies aimed at specific groups of individuals within society, including the unemployed, discouraged workers, early (forced) retirees, women returning to work, youth, Indigenous communities and people with disabilities (Noonan, Burke & White: 2004, Evans: 2003, Stevenson: 2003, James: 2001).

This research and other from the Asia Pacific region reveals persistently inequitable participation in education based on social class, gender (dis)ability and age, with correspondingly inequitable outcomes (Townsend: 2009, Jackson: 2009, Toppo: 2009, Satyanarayana: 2009, Nakano: 2009, Raghavan: 2009, Evans: 2003). Social inclusion as education practice is a multifarious concept in the culturally and linguistically diverse societies we now acknowledge. The challenge for governments and education agencies is to be able to 'see' the changing diversities of local regions and communities and to devise the flexibility to 'mingle' and network with these sub-groups. To be able to 'know' what they need and then negotiate a way to provide education services and resources that meet their needs and also contribute to the building of community capacity and cohesion by means of the development of social and human capital.

Education participation by adults is not readily translating into the building of human and social capital in localised community contexts. Race and culture, as experiences of community and as indicators of community cohesion and social inclusion, have been absent from debates around social and human capital development. Government-based education and training can be experienced as a form of social control and social reproduction, but it does have the potential to act as an agent of social relationship building, social cohesion and social justice.

Research on adult education from Australia, Japan, India, Malaysia and other Asia Pacific nations (Townsend, 2009, Jackson: 2009, Toppo: 2009, Satyanarayana: 2009, Nakano: 2009, Raghavan: 2009) uncovers these complexities with issues of population movement, migration, community participation, liberation through literacy, inter-cultural competence and social connection being motivations to access education and training. This paper explores access to and participation in university based higher education in diverse regional and rural contexts in Australia. This analysis will reveal that social, cultural and economic contexts and access to lifelong learning are inexplicably linked and will influence education policy and program development at local levels throughout the 21st century.

Review of Australian Higher Education

The Review of Australian Higher Education (The Bradley Report) has identified the need to increase higher education participation rates amongst disadvantaged groups including those in rural and regional communities in Australia. The report highlights significant workforce shortages and in particular, notes the need for urgent attention to increase higher education participation rates in rural and regional areas (DEEWR: 2008).

The Bradley Report (DEEWR: 2008) recommended that 40% of the Australian population be university graduates by 2030 via new equity policies, performance funding, research training schemes and research block grants. In anticipation of the current Labor government's new student demand driven system, some universities have enrolled well above government funded enrolment caps. However, an estimate of an increase in 450,000 higher education places by 2030 would expand the sector by an equivalent of 24 medium sized universities. Meeting this demand could cause budget blow-outs and the outcome of recent elections leading to a minority government could cause policy paralysis and an end to this bi-partisan agenda.

The Bradley Report (DEEWR: 2008) also deemed that the provision of higher education in regional areas throughout Australia needs serious policy and funding attention by all governments, including the additional allocation of \$80 million per year so that innovative, collaborative and local programs and solutions to higher education participation can be addressed.

Mature Age Barriers to Higher Education

Previous research conducted in Australia has clearly identified that mature age individual's experience a range of barriers in accessing, progressing and succeeding in university courses (Townsend & Delves: 2009; Kenny, McLennan, Nankervis, Kidd, Connell & Buykx: 2007) which is consistent with findings internationally. This research also demonstrates that in the rural and regional context, mature age students face additional barriers exacerbated by financial and time costs associated with geographic distance between communities and university campuses. Consistent with the Review of Australian Higher Education and key government policy directions, La Trobe University has identified the need to increase regional participation rates. A strong focus of these plans is enhanced relationships with the broader education sector including vocational training and community education providers.

A key component of the operation of the new La Trobe Rural Health School in regional Australia is facilitating students from non-traditional and disadvantaged groups to access and participate in higher education. Research (Kenny, McLennan, Nankervis, Kidd, Connell & Buykx: 2007) demonstrates that mature age students are an important group in health workforce planning, however, the need to provide significant support to this group is a predominant theme within the literature (Townsend & Delves: 2009, Bexley: 2008, Hammill & Awhina: 2007, Cullity: 2006).

Internationally, the lack of a cohesive approach to ensuring access to higher education and support for this cohort to progress and reach success is a consistent theme.

Direct recruitment of individual mature age adults, specifically those from rural communities and individuals from diverse backgrounds and abilities is an issue that has been discussed within Faculties without much direct action to address the barriers. Recent data from Australian Centre for Education Research (ACER: 2009) has revealed that although La Trobe University and other universities in Australia do attract students from a full range of equity categories, much more can be done to attract and 'coach' mature age individuals through the complex and often daunting process of applying for entry into a university course.

Allowing mature age individuals to have direct access to key academic staff who have the knowledge and skills to encourage mature age individuals to participate in the process of course selection, rather than just course administrators, can make a difference. Mature age individuals often want answers to complex questions with regard to part-time study options, timetables, key support services, flexibility and academic skills services. The information they require about these issues is often more detailed than currently provided and appointing key academic staff to act as contact points via email and telephone for mature age individuals during the initial application timeframe can make a significant difference to whether an individual applies for entry into a course.

The literature (Townsend & Delves: 2009) undoubtedly states that life and education transitions are significant issues for mature age individuals and especially so for those living in rural and regional communities. Most higher education institutions do not provide comprehensive transition support for mature age individuals accessing university. Programs such as summer school academic skills workshops and pre-entry counselling services could make all the difference to the self-confidence and skill base of mature age individuals wanting to access university courses, at both regional and urban campuses. These types of programs are common place in the community college sector of the USA and there is a need for Australian universities to embark on a range of pilot programs situated in vocational training and community colleges during the university application process in August to September each year, to provide information, counselling and academic skills to prospective mature age students.

Supporting the transition period for mature age individuals is a key gap in the services provided by higher education institutions in Australia however, such services are provided to the secondary school sector in supporting individuals from Year 10 onward to consider accessing university courses. Mentoring could also be provided as a key resource for prospective mature age individuals with current students being able to not just act as guides during Open Day and Orientation Week but in the intervening period when life and education transitions become key issues for mature age individuals.

Peer mentoring, peer tutoring and peer learning activities at many Australian universities are occurring in an extremely ad hoc manner and do not reflect an organisational commitment to, or philosophy of peer activities in a higher education setting. There is a difference between peer mentoring and peer tutoring/learning and these two programs need to be distinguished in any integrated model. Integrated and coordinated peer mentoring and peer learning activities would complement current curriculum and student services reforms by providing a value added learning resource to all students. There is significant research that reveals that peer mentoring and peer learning increases the access, progress and success of students from groups that have low participation rates in higher education.

Peer mentoring activities that support student transitions can occur as an integrated student engagement model, that incorporates; mentoring that engages students as they apply for access to university courses; mentoring that engages students in the vital first two years of their degree which supports social and academic skills development. Mentoring in the final year of a student's degree can encourage career planning, development and transition.

The model of regional development and education reinforcing each other can create a 'virtuous cycle of prosperity' however, consideration needs to be given to issues relevant to key equity groups such as the supply of affordable accommodation and the availability of part-time work for future students of all ages, familial circumstances and needs. Australia's university system is going to become more decentralised in the next 50 years as populations shift into regional hubs and cities (Hugo: 2010). Traditionally young people from low socio-economic backgrounds moved to cities in search for jobs, housing and possible future education and training. With the growth of regional cities in Australia, a new demographic trend of these cities becoming affordable and attractive choice for young people from low socio-economic backgrounds may see the demand for higher education places at regional campuses of universities massively out way the spaces and resources currently available.

University Access and Success

The beginning of the so called Australian 'regional education revolution' involving collaboration between universities and other training and education providers in specific regional areas has begun with state based research and reports on education performance and the context of higher education 2012-2025. Education statistics from the State of Victoria, in Australia has revealed that in 2007, 14.7% of students enrolled in Victorian universities and higher education providers were from low socio-economic backgrounds compared with a population distribution of nearly 25%. On the other hand, nearly 42% of students enrolled were from high socio-economic backgrounds compared with a population distribution of nearly 25%, on over representation compared to low socio-economic groups (ACER: 2009).

In relation to the targets set by the Bradley Report (DEEWR: 2008) of 40% of the Australian population accessing and completing a bachelor degree, the actual completion numbers in Victoria between 2005 and 2007 of around 29% reveal a need for notable growth in university participation and outcomes. Two key areas of analysis are required to assist in the achievement of the policy response outlined in the Bradley report. The first is identifying the actual components of this growth in terms of age groups such as 25-34 year olds and the 35 plus age group. With Australian population growth being relatively low via birth rates, the 18-24 age group is proving to be a small cohort for universities and so the older age groups are an obvious area of growth for this sector. The second issue requiring analysis is the role that migration will play in terms of domestic and international participation in university programs.

Australia has recently experienced a federal election campaign where population growth, migration and refugees were major political and policy issues. There appeared to be bi-partisan support for 'population sustainability', by lowering migration and humanitarian refugee intakes, however, this populist political stance actually endangers the new higher education policy framework by limiting the diversity of groups in the Australian community that could access and progress through undergraduate programs.

The Tertiary Education Plan for Victoria (DIIRD: 2010) has been developed as a guide to widening access to higher education to previously under-represented groups. The plan states that Victoria is well positioned to achieve 'something close to universal participation by 2025' (DIIRD: 2010: 12). However, the facts are that participation in higher education by people from

low socio-economic backgrounds, from outer urban fringes, Indigenous Australians and people from rural and regional areas has remained relatively unchanged for 20 years. The report states that: *Boosting participation by members of currently under-represented groups requires a multi-pronged strategy that takes into consideration the funding of higher education as well as aspirational, cultural and social factors, which will be particularly challenging to address (DIIRD: 2010: 16).*

A Regional Case-study

The Tertiary Education Plan for Victoria recommends that: *by 2025 each non-metropolitan administrative region should achieve at least a 10 percentage point increase in the proportion of people in the 25 to 34 age group who attain a bachelor degree qualification, and that by 2020 each non-metropolitan region should achieve at least a five percentage point increase in the proportion of higher education undergraduate enrolments of people from a low SES background (DIIRD: 2010: 20).*

The La Trobe Rural Health School was formed and commenced operation at the Bendigo campus of La Trobe University in the northern region of Victoria in January 2010. This new Faculty based school aims to provide a university departmental structure to support the implementation of the policy frameworks discussed to date. The Bendigo education plan is an innovative regional education plan facilitated by local government, regional education providers and interested parties to ensure that the northern region of Victoria becomes a 'learning region'.

This notion of a learning region has led to the development of a vision for 2025 of 'learning as a personal and collective value' where individuals are encouraged to believe that they can 'achieve anything' with residents given access to a diverse range of education choices locally with 40% of the local population having a bachelor degree and 98% of 20 year olds having completed year 12 or above. It is also aimed that the region develops an international reputation for training health and human services professionals. This vision means an increase of university places in the region up from 3,780 to nearly 6,000 individuals participating in undergraduate programs locally (City of Bendigo: 2010).

La Trobe University's Faculty of Health Sciences is one of Australia's leading health science faculties. The Faculty has developed a vigorous and extensive approach to strengthening health sciences education in rural and regional Northern Victoria through the development of the La Trobe Rural Health School (LRHS). The ability of the Faculty to deliver significant student growth and high quality learning and teaching outcomes has been recognised and supported by the Commonwealth of Australia with 63 million dollars of funding allocated through the 2008 Diversity and Structural Adjustment Fund and the 2009 Education Investment Fund. This major funding is being used for key staffing positions and a major regional infrastructure program.

In 2010, the LRHS achieved an astounding 30% increase in student numbers in a range of health and human services programs including nursing, para-medicine, social work, occupational therapy, dentistry, podiatry, speech pathology and public health. How was this achieved? The answer appears to be diversity! The LRHS now offers a diverse range of health and human services undergraduate programs for a diverse workforce within a diversifying community. The LRHS has utilised a multipart marketing campaign that supports the regional education plan where academic and administrative marketing strategies have involved participation in expos and events at schools, vocational training and community colleges, community organisation, Indigenous groups as well as marketing direct to the variety of health and human services providers throughout the region. Reaching out to a range of community events and workplaces means that the LRHS is talking to potential students in all age groups and from all socio-

economic and cultural backgrounds. This paradigm of universities reaching out rather than relying on 'open days' where individuals come to campus to seek information is an important change, it sends the message that the university wants diverse groups participating in their programs.

The second major issue is that of curriculum change and the 'care factor' for students that is built into curriculum and program delivery at universities. The LRHS has since 2009 been delivering new four year undergraduate Masters programs within a curriculum framework where the first two years of each program is based on the development of academic and professional knowledge and skills utilising an enquiry based learning (EBL) model of learning that is group and activity based. This new curriculum framework provides an academic and professional program that attempts to ensure that undergraduate degrees for health and human services are both knowledge and vocationally based. The EBL model and process encourages the diversity of the student population to work with each other so that in each subject, students form learning groups that cross disciplines, cultures, age groups and experiences which presents challenges but also highlights issues of group work, diversity, cultural competence and other issues that academic staff and students now have to confront on a daily basis on-campus.

Built within the first year experience of students in this new suite of 4 year programs are two specific mentoring programs that aim to improve the success of students. A peer mentoring program has been facilitated for the past two years that connects students in their first year of university with students in their second or third year to assist in the transition to academic and professional education. The program has been structured so that students can connect with others from similar backgrounds who understand their lives and needs and as such mature age students can be mentored by a mature student, younger students from rural backgrounds with the same and students from non-English speaking backgrounds with other NESB students, encouraging the development of social and cultural capital as part of the campus experience. This program is soon to be evaluated via an online tool and some preliminary data may be available soon. The main purposes of mentoring for first year mature age students has been to develop a more effective way of developing social networks for those students who often do not spend much time on campus outside of attending lectures and tutorials.

The second program is a discipline mentoring program where students meet as discipline groups such as nursing, social work, public health and so on and are linked to their main discipline academic that coordinates discipline activities throughout the first year of study that introduces the profession to the student. Discipline mentors organise fortnightly sessions where guest speakers from the professions, students in their final year and academic skills and student support staff provide relevant information to first year students to provide relevance to their early studies at university. This can consolidate any individual decision to study a specific course but it can also facilitate change via internal lateral transfers between courses.

These programs have been my passion as I am both the peer mentoring coordinator and senior discipline mentor, playing an integrated role encouraging current academic staff and students to engage with first year students to ensure that their university experience is one that connects them to university study, provides pastoral care, relevant advice and the development of social capital (Townsend, Delves, Kidd & Figg: 2010) within the university community.

Conclusions

With the outcome of the recent Australian election now certain, the Gillard Labor alliance government has reinforced the need to reform and expand the Australian higher education system. It is now widely accepted that this expansion means increasing diversity within this

education sector, but the how, why and how much, do not have universal agreement. Australian still has a three tier system of post-secondary education involving adult, community education (ACE), vocational education and training (VET) and higher education (HE) which has resulted in university education being characterised by less diversity, high unit costs, limited funding sources and where unconventional programs, subjects, students and institutions are viewed with suspicion.

Facing similar reforms and pressures, the USA has expanded differently and from a vastly more diverse base. The US higher education system is diverse in many ways, diversity in purpose, status, financing and costs are the variations that contribute to the scope and exclusivity of the US system. A major differentiation in the US that is being considered in Australia, albeit very quietly, is that, multi-purpose education institutions come in many forms. Urban and regional universities aim to meet the varied needs of cities and regions by becoming an education system within itself, often including community colleges that focus on the range of students found in locale, offering bridging and qualifying programs, four year university programs and graduate schools.

The key feature of the US system is that everything is considered higher education; everyone can go to college; tertiary, post-secondary, post-school, further education, vocational education, advanced education, adult education is the vocabulary of Australian, exclusive, fractured systems. Status hierarchies exist in American higher education as more subtle and complex structures but in one sense philosophically and practically there are gradations, not barriers to access and success.

Regional higher education policy in Australia needs to acknowledge something that urban universities do not; regional policy is about people, place, space and community (Swerissen: 2010). Regional communities develop social, cultural and economic identities around their place in society, their place geographically and historically as well as their place in the future as previously outlined in the Bendigo education plan. Regional communities and cities expect universities to support local people, spaces and places, they want high quality educational opportunities and increased participation and they expect local universities to contribute economically, socially and culturally via partnerships with local organisations and industries.

In terms of creating opportunities for access and success for mature age individuals, as well as people from low SES backgrounds and different cultural groups, community educational partnerships with schools, training colleges, community colleges to create early engagement and local pathways are crucial. Alternate marketing and selection processes and entry pathways into university programs recruit motivated individuals no matter their background coupled with student support programs with accommodation, part time employment, financial assistance and social support; these strategies can provide diverse growth with the Australian higher education sector. When we ask individuals, *'do you think you're ready for university?'* we also need to ask ourselves as higher education institutions, *'are we ready for the diverse students that want to participate in our university?'*

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Article Title

The Content-based Reading Approaches (COBRA) Model's Application to ELL and LD students

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Abstract

The content-based reading approaches (COBRA) framework was constructed by Heerman (2002). The researcher reviews literature to support the idea that the COBRA model helps English language learners (ELLs) and students with learning disabilities (LD) gain achievement in content area reading. The researcher provides several reading strategies for teaching the COBRA skills for both ELL students and LD students. By drawing parallels between ELL and LD students, the researcher hopes to instigate discussion between the two differing methodologies.

Keywords: reading methods; content-based reading; English language learners (ELLs); learning disability (LD); middle school

The Content-based Reading Approaches (COBRA) Model's Application to ELL and LD students

Introduction

The framework of content-based reading approaches (COBRA) was developed by Heerman (2002). COBRA contains seven reading-learning objectives for subject matter classrooms. Lee's (2007) study investigated ELL teachers and LD teachers' perceptions of the importance of several specific reading strategies for helping their respective type of student learn to read, in which she consolidated seven of the COBRA goals into five: background knowledge; experiential learning; vocabulary; comprehension; and study and appreciation. Lee (2007) mentions that the structure of the COBRA model was designed to accommodate three interchangeable approaches: the communicative approach, the skills approach, and the strategic approach. Much literature shows evidence that the five goals of the content-based reading approaches (COBRA) framework provide ELL students and LD students with a great deal of help on content-area subjects. Drawing from her doctoral research, and following the five core COBRA goals, the researcher provides several strategies for teaching content-based reading to ELL and LD students.

Background knowledge

Literature for ELL students

Short and Echevarria (2005) state that "content-area teachers can provide rich, meaningful lessons that strengthen background information and promote the literacy of students learning English" (p. 1). They argue that like native English speakers, English language learners (ELLs) have differing levels of cognitive ability. "When ELLs struggle with schoolwork, however, teachers should be aware that the problem may be related to background knowledge rather than to intellectual ability" (Short and Echevarria, 2005, p. 10).

Duff (2001) argues that ESL students in mainstream social studies classes are often disadvantaged in several ways such as the lack the linguistic, cultural, and geographical knowledge to interpret oral/written texts. Therefore, activating ELL students' background knowledge is the foundation of learning the content-area subjects.

Peregoy and Boyle (2000) state that good readers will set a purpose for reading and bring several knowledge resources to bear upon the comprehension process, among them: decoding ability, language knowledge, background knowledge, written genre knowledge, familiarity with text structures, and comprehension-monitoring abilities. They also claim that "comprehension was better when reading the passage reflecting their own cultural tradition. In similar studies involving culturally familiar and culturally unfamiliar passages of similar linguistic difficulty, comprehension was higher for the culturally familiar text" (p. 5). In other words, familiarity with text content "alleviated limitations" associated with second language proficiency in text comprehension. It is clear that background knowledge is a powerful variable for both native and non-native English readers. However, it becomes doubly important in ELL reading because "it

interacts with language proficiency during reading, alleviating the comprehension difficulties stemming from language proficiency limitations. Therefore, building background knowledge on a text topic through first-hand experiences such as science experiments, museum visits, and manipulatives can facilitate success in reading” (Peregoy and Boyle, 2000, p. 5).

Heffernan (2003) suggests that teachers “conduct brainstorming activities before reading a text to supply students with the appropriate words and knowledge. Discussing appropriate vocabulary and phrases with students, surveying student opinions, or hypothesizing about a text are also useful techniques for teachers to employ” (p. 64). He believes that these techniques not only provide students the useful skills to activate background knowledge, but also give them the problem-solving skills to develop overall fluency.

Literature for LD students

It is helpful to activate LD students’ background knowledge prior to teaching them a text. Haager and Klingner (2005) state that “pre-teaching vocabulary helps students by providing them with background knowledge that can help them understand the topic they will be studying” (p. 349). They mention that pre-teaching will indicate what information is important and require their attention while reading. They suggest using a variety of pre-reading strategies to help LD students gain or retrieve their prior knowledge before they read such as graphic organizers, semantic maps or webs, and concept maps. In addition, they suggest that field trips, videos, live demonstrations, direct experiences through hands-on learning, multimedia presentations, websites, and guest speakers can provide further background knowledge to ELL students and LD students.

Guided imagery is one of the visualization strategies that “capitalizes on students’ active imaginations. Activities such as role playing, pretending, and daydreaming are natural elements of children’s play” (Buehl, 2001, p. 59). Haager and Klingner (2005) state that graphic organizers provide a visual or spatial framework for organizing the important conceptual relationships among new vocabulary words and help students who have difficulty understanding a concept. In addition, Santa (2006) states that to help students activate their background knowledge, think-pair-share is a very good strategy to help students by asking each pair to think about a topic and write down what they know about it, and then share their knowledge with the whole

Experiential learning

Literature for ELL students

Pierson and Glaeser (2003) state that “the language experience approach (LEA) to reading is a technique that draws upon the real life experiences of students” (p. 123). One example of LEA involves having students dictate a story about an actual experience to a teacher, or partner. Next, they copy the story, illustrate it, and read it over and over. In this way, students’ actual language becomes their reading material. They suggest that there are several important strategies

connected to LEA such as daily journal writing, description of art, and community-based reading and writing.

Literature for LD students

Haager and Klingner (2005) state that the LEA has been found as an excellent way to get nonreaders started with beginning instruction, and help students who have experienced failure in their initial reading experiences. They define language experience approach (LEA) as a “whole-to-part, constructivist approach that has been widely recommended for students with learning disabilities (LD),” (p. 230), and note that “it is appropriate for diverse, inclusion classrooms” (p. 230).

Vocabulary

Literature for ELL students

Wiesen (2001) states that authentic texts bring learners closer to target language culture, which can be highly enjoyable and motivating. Problematically, Mastropieni, Scruggs, and Graetz (2003) identify that content textbooks typically do not present material in a reader-friendly fashion, but instead contain densely worded paragraphs that include an overwhelming number of concepts, facts and details with insufficient explanation. Nichols and Rupley (2004) suggest some useful reading strategies such as semantic word maps, webbing, semantic feature analyses, and teaching relationships among words. They are effective tools that incorporate many of the guidelines for the active processing of vocabulary. Such vocabulary activities enable students to expand their vocabularies, understand relationships between the new word and existing concepts, and ultimately learn the meaning of the new word. These strategies, when matched with the appropriate instructional design, can become part of pre-reading activities, during-reading activities, and post-reading activities. When used as a pre-teaching activity these visual displays of words can activate and construct key concepts prior to reading, which help motivate and set a purpose for the reading task, while at the same time reinforcing the cohesiveness between vocabulary development and reading comprehension. According to Barry's (2002) study, visual aids, analogies, graphic organizers, note-taking, writing-to-learn, study guides, vocabulary activities, anticipation guides, and K-W-L are frequently used by more than 50% of the middle and high school teachers she surveyed.

Rodriguez and Sadoski (2000) state that the keyword method explicitly brings into play both verbal and imaginal processes because the keywords and the target words affect the development of vocabulary in the second language. The use of mental images creates appropriate referential interconnections between L2 verbal representations and the imagery system. Zhang and Schumm (2000) point out that “experiences and prior knowledge affected comprehension and recall, and that vocabulary knowledge, typically, may be a highly significant variable in United States ESL learners' success” (p. 4).

Literature for LD students

Haager and Klingner (2005) mention that students with learning disabilities (LD) require careful, systematic planning and instruction to help them acquire new vocabulary. They argue that when LD students lack the background knowledge and experiences necessary to understand new words, learning can be quite difficult. Then, “the focus should be on helping students make connections or associations between new words and previously learned information” (Haager and Klingner, 2005, p. 347). Many researchers advocate explicit instruction. However, it is more difficult for students with learning disabilities to obtain direct instruction and repeated practice in a general education than in a special education classroom. In addition, Lee and Vail (2005) state that “computer programs can be valuable tools to teach and to provide practice of new vocabulary or concepts in a general education classroom. They could also save teachers' instructional and preparation time” (p. 6).

Comprehension

Literature for ELL students

Hickman, Pollard-Durodola and Vaughn (2004) recommend “using culturally relevant texts as well as those that incorporate aspects of students' life experiences to draw upon prior knowledge to promote comprehension and retention of text concepts and new vocabulary” (p. 1). Opitz (1998) reminds us that “comprehension instruction for all developing readers must be sensitive to the total orchestration of cognitive, linguistic, and cultural variables in order for the literacy learners to construct meaning for the texts they are reading” (p. 92).

Fitzgerald and Graves (2005) seek to persuade teachers that they should use scaffolding reading experiences (SREs) to help educate ELL students. The SRE framework consists of a set of pre-reading, during-reading, and post-reading activities to use with any genre of text, including fiction and nonfiction. These pre-reading, during-reading, and post-reading activities will break down a complex reading task into smaller chunks to help tailor lessons to ELL students' abilities and needs.

Taguchi (2002) proposes some useful reading strategies to help ELL students achieve comprehension when they are reading narratives. These comprehension strategies are paralinguistic cues, including vocal qualities, intonation, stress, pause, tone, or speech rate; adjacency pair rules such as the use of the knowledge of conversation structure; background knowledge/experience; key word inferencing; logical reasoning; and speaker's intention. In addition, Kruger (2000) suggests several comprehension strategies for ELL students: skimming material for essential information and underlining it; organizing ideas by category and labeling them or diagramming them; reading by phrases and clauses to increase comprehension; summarizing; identifying themes, sequences, and main ideas.

Literature for LD students

Haager and Klingner (2005) state that LD students are poor comprehenders and “lack both the meta-cognitive skills to monitor their reading comprehension and the ‘fix-up’ strategies to repair understanding when it breaks down” (p. 355). They emphasize that “comprehension strategies are helpful for all students, but are critical for students with learning disabilities” (p. 355). They advocate many useful comprehension strategies such as text-structure-based strategies, interactive instructional model, K-W-L strategy, directed-reading-thinking activity (DRTA), answering comprehension questions (QAR), and collaborative strategic reading (CSR). Text-structure-based strategies refers to “the way the text is organized to guide readers in identifying key information and making connections between ideas,” (Haager and Klingner, 2005, p. 363) including compare/contrast structure. According to Haager and Klingner (2005), the interactive instructional model was developed specifically for LD students but also benefits other students, particularly ELL students by helping them with text comprehension and content area learning.

Directed-reading-thinking activity (DRTA) is a predicting strategy for helping LD students understand content area text. It was “developed to help students refine their purpose for reading and apply prior knowledge to understand text” (Haager and Klingner, 2005, p. 365), including reciprocal teaching. Haager and Klingner (2005) state that LD students often have problems locating specific information in text. Answering comprehension questions (ACQ) is a way to assess students’ comprehension of text, including question-answer relationships (QAR). They point out that students are taught to identify the different kinds of information needed to answer comprehension questions, as well as where to find the information before, during, and after reading. In addition, describing collaborative strategic reading (CSR), Haager and Klingner (2005) state that “initially the teacher presents the strategies (preview, click and clunk, get the gist, and wrap up) to the whole class using modeling, role-playing, and teacher think-alouds. After students have developed proficiency applying the strategies through teacher-facilitated activities, they are then divided into heterogeneous groups where each student performs a defined role as students collaboratively implement the strategies” (p. 367).

Mastropieri, Scruggs, and Graetz (2003) mention that frequently, secondary school content-area textbooks have readability levels that are even higher than the assigned grade levels. They emphasize peer-tutoring/peer-assisted learning strategies (PALS) that incorporate comprehension strategy instruction and elaborative strategies in history and science classes, tutoring interventions that appear to improve content-area learning while also improving reading comprehension strategies, and the use of Inspiration software that generates spatially organized graphic organizers to facilitate comprehension of content-area instruction.

There is no text that is completely explicit, students, especially LD students, must be skilled/trained at making inferences in order to fully comprehend what they read. Eilers and Pinkley (2006) state that the reading comprehension of students will be greatly affected by explicit instruction. Alfassi (2004) also claims that “the teacher's role is to explicate strategies for learning from text so that students perceive them as useful, meaningful, and beneficial” (p. 173). Teachers need to use direct instruction to directly teach students how to use inference to strengthen comprehension. The direct instruction includes explanation, modeling, and scaffolding to help students until they can be successful independently of the classroom environment.

Study and application

Literature for ELL students

Referring to ELL students, Wiesen (2001) suggests that “authentic texts are basic to communicative and proficiency-oriented foreign language teaching, because they contribute to authentic linguistic and strategic skills and are more interesting than edited texts” (p. 2). Nonverbal communication is an effective teaching strategy and needs to be given more attention in teacher development programs. Teachers must become aware of its largely culturally specific nature as well as the ways they actually use it and how it can be best exploited in ELL teaching (Lazaraton and Ishihara, 2005). Swanson (2005) has stated many strategies for helping students learn to read such as checklists/organizers. She recommends breaking tasks into small steps, and using simple lists to let a child know what steps to follow. In addition, she supports the strategy of adjusting students’ first language based nonverbal behavior so as not to confuse students when the first language based nonverbal behavior is employed concurrently with the verbal target language.

Literature for LD students

Lenz and Deshler (2004) suggest that cooperative learning, peer learning, and structured small group practice will help LD students improve their reading abilities, interpersonal skills, and social and problem-solving skills. They mention many organizers to help students catch the main ideas and make connections between other information and the text when they read such as visual organizers, structure organizers, and semantic organizers. Reciprocal reading is another effective method to enable LD students to activate four different comprehension strategies - predicting, questioning, clarifying, summarizing - which they apply collaboratively to help each other understand a text they are reading (Lenz and Deshler, 2004).

Paraprofessionals’ supplemental daily tutor scaffolding and individualized corrections may provide critical support in context reading skills (Vadasy, Sanders, and Peyton, 2005). Calhoon (2005) states that peer-assisted learning strategies (PALS), a reading comprehension strategy program at the high school level, significantly increased the reading comprehension skills of students with reading disabilities. Recent studies have shown that peer tutoring is very

effective for teaching reading comprehension strategies in remedial reading classes and in English classes at the middle and secondary levels (Mastropieni, Scruggs, and Graetz, 2003).

Conclusion

By drawing parallels between ELL and LD teaching strategies, the researcher aspires to introduce to both schools new teaching methods for promoting the COBRA skills set. While recognizing the inherent differences between LD and ELL student needs, this article provides for both LD and ELL teachers proven and effective methods of teaching core reading skills. Her study provides teachers of these two types of students (ELL and LD) with more sound and effective methods for teaching reading. A significant aspect of Lee's (2007) study is that it helps school administrators in the public school setting make decisions about how to evaluate cross-curricular teaching methods related to ELL and LD reading instruction. The literature for each of the five COBRA goals for English language learners (ELLs) and learning disabled students (LD) above shows rich support for the idea that the COBRA model is beneficial for teaching English language learners (ELLs) and learning disabled students (LD) in content area subjects.

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The Promise and Challenge of Global Higher Education Integration

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Abstract

In order to stay competitive and also increase global access, internationalization strategies as an applied principle, draw on certain assumptions of globalization. While this approach has catalyzed promising innovations in educational delivery, it has also revealed the challenges of applying globalization principles to the core goals of education and recently, the pursuit of higher education integration. What are these promises and challenges? And how can we move beyond them?

This paper addresses these questions by exploring the conceptual goals of internationalization and globalization, key debates on the implications of globalization on higher education and the assessment of particular experiences of selected institutions on internationalization projects. Drawing on these sources, this paper aims to provide another sense of relationship between internationalization and globalization. By proposing a theory of complementarity that brings together internationalization and globalization principles, I argue that complementarity offers a conceptual framework for increasing access to higher education by working towards three goals: Internationalization strategies must grow beyond the dominant influence of building economically competitive higher institutions to other goals aimed at attaining international solidarity and educational partnership; Reshape trade liberalization in fair terms that globalization can deliver economic promises that can empower peripheral higher educational systems to build infrastructures necessary to attract cross border educational exchange especially those proposed under the General Agreement in Trade and Services (GATS) and build governments that are keen about making the dividends of global trade compliment institutional goals of research, multicultural growth, and increased access to quality education through internationalization.

The Promise and Challenge of Global Higher Education Integration

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Introduction

The enormous transformation of university role from one that was based on producing research and the skills for national economic and social development to one that now extends largely to developing the capital skills required to sustain a growing global market economy has increased the vulnerability of university to global economic influences.

Those who take an upbeat view of an economic encroachment argue that higher education serves the economic interests of governments and plays a significant role in the development of modern societies. Several studies on the particular indicators of societal growth have reinforced the developmental role of higher education. For instance, studies have shown that the underlying long-term growth rates in OECD economies depend on maintaining and expanding the knowledge base (World Bank, Washington, DC).

However, critics of an economic encroachment have argued that even though knowledge contributes to the empowerment and development of all sectors of society (Burch 2005), current economic encroachment, as Jiang (2006), argued are deliberate effort of neoliberal world institutions such as the World Trade Organization and the World Bank to use knowledge and information interchangeably to serve their profit-seeking purpose. To this extent, they strongly advocate the economic value of 'knowledge' in the knowledge economy, and link it to technological innovation and economic prosperity (Jiang 2006).

Also, the internationalization activities noticeable in curriculum, commercial presences, student and academic exchanges, research collaboration, and institutional partnerships are sizeable practices that tend to build the infrastructure for a systemic integrated global academia. Philip Altbach and Jane Knight, (2006) note that the prospect of an integrated higher education is high as globalization continues to be a strong rationale stimulating substantial effort of international academic partnership and academic mobility.

The paper primarily responds to some of the concerns about the relationship between globalization, internationalization, and higher education integration as to whether they are three essential complimentary ingredients or three mutually exclusive concepts necessary for contemporary global higher education development. Although, it appears that the three concepts, globalization, internationalization and global higher education integration, are conceptual peers that can be either in harmony with each other, in conflict with each other or independent of each other. However, the interpretations of these terms and the relationships among them are complex

and multi-dimensional and can be framed differently in various contexts depending on the underlying ideology of the discourse.

From one, and dominant perspective, both Philip Altbach and Jane Knight conceive the relationship between globalization and internationalization as catalytic. Here, globalization is the economic, political, and societal catalyst propelling 21st century higher education toward greater international involvement (Altbach & Knight, 2006). From this perspective, the relationship between the three concepts may be interpreted accurately as causal. In which case, globalization, under an economic rationale is the compelling force that causes higher education to move towards greater global involvement and the idea of increasing global international education involvement can arguably be conceived as a measure of success in a globalizing economy that institutions must achieve.

From the perspective I take in this paper, the concepts of globalization, internationalization and higher education integration are differentiated yet uneasily fused together and intimately linked by the notion of complementarity. In this perspective, I propose that the merging of economies and its effect on higher education specifically in terms of universities practices of internationalization and integration through partnerships and collaboration are not necessarily causal. Rather, globalization as a theory and process has provided an influential economic framework that provides incentives for a voluntary participation in internationalization and integrative processes.

Globalization, Internationalization, and Global Integration Conceptualized

Globalization is widely accepted amongst scholars as an irresistible force transforming all aspects of contemporary society, politics and economy (Wolf, 2004). Its influence on economic systems is very profound and as a result, can be conceived from an economic perspective as a phenomenon by which economic agents in any given part of the world are much more affected by events elsewhere in the world (Wolf, 2004). Through the liberalization of trade, competition, free capital mobility and easy migration, blurring national borderlines national economies of the world tends to be integrating into one global economy (Currie et al. 2003, 11).

In the realms of higher education, globalization is a wake- up call for survival in the international environment (Suwanwela, 2007). This has led especially in the western world to the development of overall strategies for the organization of higher education institutions by public authorities, as well as to strategies by higher education institutions aiming to position themselves within the emerging higher education systems (Bleiklie, 2005). This is exemplified clearly by the European Commission Bologna Process, which is partly the European approach towards improving quality and international attractiveness of European higher education, its global positioning and converging systems of higher education (Gidley, J.M., Hampson, G.P., Wheeler, L., & Berded-Samuel, E. (2010).

Through internationalization activities, higher institutions continue to promote the interest of governments and private investors. Altbach (2009) defined Internationalization of higher

education as the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution. This definition only understands internationalization as a process and a response to globalization. Traditional international activities include the study abroad programs that allow students to learn about other cultures to providing access to higher education in countries where local institutions cannot meet the immediate national demand. Other related activities stress upgrading international perspectives and skills of students, enhancing foreign language programs, and providing cross-cultural understanding (Altbach & Knight, 2006). However, because the stimulation of globalization continues to expand the international activities of universities in volume, scope and complexities, the tendency is large too, to confuse internationalization with the process of globalization even when it is not economically motivated.

Marek 's (2001) discussion of internationalization gives a hint about the nature of higher education integration as the means to adapt the academy in different countries to the requirements of rapidly changing external world, especially by rearranging research, teaching and administration in ways that conform to a global standard. In fact, Susan Buck Sutton (2010) had argued that internationalization is increasingly turning to an outward process of positioning our institutions in global networks of learning and discovery, and engagement so as we are becoming part of an academic world larger than our institutions, hence we must reconsider internationalization in this light. Mostly, global integration in higher education has been triggered by a recent awareness of the potential of the knowledge society.

Reforms towards Global Integration

Universities around the world do not have equal means to conform to the emerging global standard. This has in part raised institutional competition and has become politically attractive in nations across the world to situate at least one if not more of their universities among top-ranking institutions. The motivation towards this strategic positioning of universities usually draws from a variety of economic, sociopolitical, and cultural notions of globalization.

The Caribbean and Latin American higher education institutions for instance actively pursued opportunities for cooperation with each other, building on existing strengths, in regional networks and with regional and international organizations. Both systems assumed that these processes are essential mechanisms for regional integration and internationalization, and must be an essential part of the agenda of the region's governments, and academic institutions

Also in Germany the education and research federal minister made a proposal to identify Germany's top-level institutions that can stand as lighthouses to secure Germany's competitiveness and economic future in the emerging knowledge society and to strengthen the international visibility of German universities as highly-quality institutions (Robertson, 2010). Generally in the past ten years, European higher education systems appear to have undergone exceptional integration. This is most clearly evidenced by the Bologna process. The Bologna

process is framed within the concept of internationalization as a systemic effort designed at making higher education more responsive to the requirements and challenges of global societies, economy and the labor market. It is a way of taking control of globalization and responding to its challenges (as cited in Doh, 2008).

Perhaps, the clearest example of integration reform is in the example of Brazil. In 2009, Brazil's Senate granted official authorization for the creation of a new kind of university – the Federal University for Latin America Integration, otherwise known as UNILA (Robertson, 2010). UNILA is one of three regional integration universities established by Brazil's President Luiz Inácio Lula da Silva in 2006 to promote Brazil's interests within the region and globally. Two other university projects created for similar purposes are the Afro-Brazilian University of Integration, and the University of Amazonian Integration. These Brazilian initiatives were the recent addition to a rapidly changing higher education landscape around the globe (Robertson, 2010).

These initiatives have in common a shared ambition to use international higher education networks to advance cultural, political and economic projects. However while the German initiative is aimed at transforming some its universities to world class positions, the Brazilian development projects were aimed at creating a 'supranational', 'global' and 'regional' university respectively, drawing upon staff and students from within the wider region, or from across south-south networks (Robertson, 2010).

In the last decade, there has also seen a veritable explosion in numbers of programs and institutions that are operating internationally. Qatar, Singapore and the United Arab Emirates stand out as examples of countries that have boldly promoted internationalization as a matter of national policies. They have recruited prestigious foreign universities to establish local campuses, with the purpose of increasing access for the local student population and serving as higher education center for their regions (Altbach, Reisberg, & Rumbley, 2009)

Integration Reforms: Opportunities and Challenges:

Keeping in mind that major national reforms are typically government policy driven, and given the manifestations of globalization, it is important to examine what opportunities and challenges the present day global context pose for universities throughout the world. In addressing this question, I want to pay particular attention to three principles of global capitalism, namely deregulation, privatization and standardization. These principles characterize the foundation upon which major government economic initiatives are built. Their impact on global higher education is enormous.

Deregulation.

In order for nations to easily engage in entrepreneurial activity, there is a movement to deregulate economic mechanisms and free up organizations and individuals. In the United States, The Virginia Commonwealth's commitment to decentralization and deregulation stretches well beyond the last decade, and the effort of the State Council of Higher Education for Virginia to establish a study to understand the strategies for advancing decentralization and deregulation of higher education is a testament to the impact of globalization on higher education

In some other national contexts, such as the People's Republic of China (PRC), the deregulation of higher education is discussed in terms of decentralization. The Chinese Communist Party acknowledged that over-centralization and stringent rules are detrimental to the initiatives and enthusiasm of local educational institutions (as cited in Rhoads, 2006). Hence, the Chinese Communist Party called for reform aimed at decentralizing the nation's higher education sector by devolving decision-making power from the central government to individual higher education institutions. A step like this allows more autonomy and flexibility to local governments and educationalists in directing the course of educational development (Rhoads, 2006). Translated to the higher education arena, universities throughout China are increasingly operating in an environment in which they are freer to make their own economic choices, and, in fact, with reduced funding from the national government seem to have no other alternative.

The expansion of deregulation is a clear attempt of escalating the role of entrepreneurialism in higher education. In many western countries, especially within the public university sector, deregulation policies had gone hand-in-hand with decreased state support and has created forms of economic entrepreneurialism some scholars have described as "academic capitalism"—a situation in which the primary objective of the university increasingly revolves around the generation of revenue and not essentially teaching and learning (Slaughter & Leslie 1997)

Opportunities and challenges in the practice of higher education deregulation. When deregulation goes along with substantial financial support by the state, then deregulation presents universities with the prospect to expand their agenda through their own inventive means. On the other hand, when deregulation is accompanied by reduction in state support, which happens to be the most common circumstances, universities are outwardly coerced to become entrepreneurial institutions and in many cases follow a path of increasing dependence on tuition and fees (Rhoads, 2006).

Privatization.

Another way in which global capitalism is reshaping university reform revolves around privatization. In some ways, deregulation and a decrease in support are the means for achieving a specific end, which is privatization. In a broader philosophical sense, this trend represents private interests assuming priority over the broader social good that higher education stands to fulfill. Furthermore, the deregulation of higher education has made "for-profit" and private universities increasingly viable. For example, in the United States, this trend is more evident in the "for-profit" higher education, where institutions such as the University of Phoenix quite successfully have carved out their own slot by stressing practical and vocational education over some of the more esoteric forms of learning characteristics of many U.S. universities (Rhoads, 2006). In the People's Republic of China, the private sector has appeared to help meet the challenging

demands of a massive population, as the nation increasingly seeks to build a workforce capable of competing in a global market place. However, and as a result of deregulation, the quality of private colleges and universities, as well as the for-profits, ranges quite significantly.

Privatization may also lead to increases in tuition and fees, since many public universities are compelled to shift to user-fees as primary sources of funding. By this, privatization can influence universities away from the ideal of increasing access for those at the bottom of income level low-income and making a university education more exclusive for the well-off.

Standardization.

The last area connected to the extension of global capitalism is a movement toward increasing standardization. This largely echoes the broader capitalist effort to standardize products and commodities for the benefit of global trade. The idea behind this is that when products and services are guaranteed to meet specified standards, then the risk to international exchange is decreased and global trade is enhanced (Rhoads, 2006). The same ideology has been promoted by the World Trade Organization (WTO) in their particular effort to treat higher education as a tradable commodity to be governed by similar rules guiding multinational trade agreements. In such policies as GATS, the WTO has attempted to frame the ways in which universities and their entrepreneurial personnel interact with other universities. Altbach, et al. (2009) however argued that globalization, regional integration, and the ever-increasing mobility of students and scholars have also made the need for internationally recognized standards among and between nations more urgent.

In many developing countries, public university programs do not have sufficient capacity to educate all those students who want to prepare themselves for global employment hence private universities, often of questionable quality – typically spring up to meet the demand. The process of enforcing global accreditation standards is arguably a response that serves the goal of standardization, and incorporating only institutions with the means of international reach around the world into common standards. Notable organizations such as the WTO and the United Nations Educational, Scientific, and Cultural Organization (UNESCO), have sought to develop an international quality-assurance agency to monitor global higher education projects. Rhoads (2006) notes that to resist these accreditation processes will result to situating one's university on an isolated island, away from the global market and the economic benefits of academic capitalism.

There are opportunities here in that as states withdraw their financial support they also lose a degree of control. And so many universities today are freer to be entrepreneurial and shape their own destinies. In the United States, for example, we see a flourishing for-profit sector of higher education that increasingly challenges the customary university for students. At the same time, we see a reduction in financial support for low-income students, as universities are forced to raise tuition in the face of massive budget dearth.

Bridging the gap: complementarity as a new form of assistance

Marginson (2004) illustrated that the current transnational markets in higher education are structured as a segmented hierarchy which reflects dominance in three aspects: between 'developed' and 'developing nations'; between English and non English language universities; and between the hegemonic power of the United States in world higher education' and higher education in the rest of the world. The unequal reputation, status and infrastructures create differences in opportunities and competitiveness. The noticeable gaps and rivalries however, can be overcome by goodwill and pursuit of mutual benefit. This will also translate into globalization, internationalization and integration processes delivering more measures of success.

The type of partnership exemplified in the case of a Nan Learning Center established by Chulalongkorn University, based in Bangkok, in collaboration with the newly upgraded Rajmongkol University at Nan, mirrors how institutions with more resources can compliment, and aid universities with lesser capacity in achieving their institutional goals. Suwanwela, (2007) noted that instead of Chulalongkorn University raising competition by starting a new campus at the northernmost province of Nan, a learning center was built on the Rajmongkol campus with relevant research laboratories and facilities to access to the library system at the main Chulalongkorn University. It provided advanced amenities to faculty and students at Rajmongkol as well as opportunities for researchers to conduct research on the ground. This gesture clearly demonstrates that the collaboration is geared towards mutual benefit.

Another example of university partnership embedded in complementarity is the Sasin Graduate Institute of Business Administration at Chulalongkorn University established about 30 years ago in collaboration with Kellogg School of Business at Northwestern University and the Wharton School at University of Pennsylvania. The College of Petroleum and Petro-chemistry at Chulalongkorn University began fifteen years ago in collaboration with the University of Oklahoma, Western Reserve University and Akron University. Suwanwela, (2007) stated that both cases were in response to the need in the region for particular manpower and research. To kick start the projects, professors from top universities in the United States came to teach and conduct. Students from Chulalongkorn University were allowed to spend research time at the United States counterparts. The financial obligations and management belonged to the Chulalongkorn University; both universities from the United States approached the relationship on the basis of moral imperatives upon which the idea of complementarity is founded. The collaboration certainly helped expand the sphere of reputation for the prestigious universities from the United States; the programs are unquestionably of goodwill to Chulalongkorn University in the pursuit of new advances.

With reference to the prestigious and competitive position of both Kellogg School of Business at Northwestern University and the Wharton School at University of Pennsylvania, internalization and collaborative effort could have been motivated by economic globalization precepts. As a result, such opportunities could have been perceived as an economic or business opportunity to amass profit from institutions with unequal capacity. With economic globalization conceived as a phenomenon by which economic agents in any given part of the world are much more affected by events elsewhere in the world, internationalization effort need to respond to globalization

forces with a caution of goodwill. By this, such capitalist principles that encourage the reduction of barriers to educational exchange globally can be couched to aid internationalization efforts only embedded in the traditional international activities that include programs that allow students to learn about other cultures to providing access to higher education and research facilities in countries where local institutions cannot meet the immediate national demand. Therefore, principles of deregulation, privatization and standardization when applied to higher education must pursue interests that generate educational benefits, and not primarily economic revenue. With a foundation in complementarity, the whole global university system appears at an advantage and better with such generous attitude.

Conclusion.

To conclude I want to stress that the increasing role of academic capitalism in shaping university relations suggests many opportunities and challenges for universities in globalizing times. As an example, I want to call upon the idea of 'offshore campuses in which universities in many advanced nations build a center in a host country, or what has been famously described as 'commercial centers'. Here academic capitalism brings universities in high demand to the doorstep of the consumers. Prior to this time, the only possible way to receive international education was through physical travel abroad. In some ways, one might argue that this trend may benefit the host country by reducing the problem of brain-drain that a travel abroad could have potentially caused when international students decide not to return to their home country.

However, within the context of academic capitalism, generating revenue becomes an end in itself, and many universities thinking of building offshore campuses come to tailor their lines of development to where the money is – just as we see in the commercial presences of American universities in Dubai. Sometimes these projects are carried out with little regard for the moral and social consequences of their actions. Just as entrepreneurship can sometimes lure corporations to engage in less than ethical acts, the same is true of universities and the pressures connected with academic capitalism. In my view, the most important challenge that the present-day environment poses for universities around the world is to find a socially just manner by which to embrace elements of academic capitalism that can foster internationalization efforts that increases access to university education, cross-cultural, and research exchange. Most importantly, we need to find a veritable balance between the need to generate revenue and the ideals of advancing a more just global educational community. Finally we need to develop frameworks for increasing access to higher education by working towards three goals: Internationalization strategies must grow beyond the dominant influence of building economically competitive higher institutions to other goals aimed at attaining international solidarity and educational partnership; liberalization trade liberalization in fair terms that globalization can deliver economic promises that can empower peripheral higher educational systems to build infrastructures necessary to attract cross border educational exchange especially those proposed under the General Agreement in Trade and Services (GATS), and national governments must be keen about making the dividends of global trade compliment institutional goals of research, multicultural growth, and increased access to quality education through

internationalization. Merely leaving universities and their international operations to the whims and caprices of the free trade is unlikely to achieve such a goal.



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“Does Gender Matter?”
An Experimental Study of Gender Differences
on Music Learning

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ABSTRACT:

The purpose of this study is to exam whether the gender differences would cause different music learning efficiency for the 1st grade elementary students and to determine whether there were any significant gender differences in music learning in Hong Kong, China.

The results of this study showed that both genders are equally interested in participating any music activities held in the classes. However, the results revealed that girls demonstrated better concentration during the class and better comprehensibility than boys on rhythmic dictation. Moreover, girls performed better on playing rhythms on the provided small percussion during the experiment. In the aspect of music reading and singing, girls not only had better understanding; but girls also sang more accurate pitches in singing songs than boys.

To conclude, in order to have the best results of music teaching and music learning, music teachers need to be alert the differences of learning ability on both genders, esp. many young boys usually have difficulty to sing in correct pitch in the early stage of music learning, and comprehend different combination of rhythmic patterns. Furthermore, more music activities and body movements can be included in music class so that children can learn music concepts, such as, rhythms, dynamics and tempos in the most nature and interesting way. At last, the music teachers should be careful the progression of teaching contents and keep track the progressions of each individual in the class.

Keywords: Music Education, Orff Method, Music Classroom, Learning Difference, Gender

**“Does Gender Matter?”
An Experimental Study of Gender Differences on Music Learning**

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PURPOSE OF THE STUDY

Many researches and reports have proved that male's and female's brains function differently. For language learning, male usually uses only left side of hemisphere of their brains, while most of females are able to use their both sides hemisphere of their brains, and this fact provides most female an advantage on language learning. Moreover, although men have more brain cells than women, women's brain cells have more neural connections among each brain cell, therefore, women have greater access to transfer data from left to right hemisphere areas. (Wang 2003) All of the above have shown that the different brain structures and functions between male and female may cause different behavior results in many aspects between the two genders.

This study is to examine the learning curve between 1st grade boys and girls in the music classroom in Hong Kong, China. The purpose of this research is to find out if there are any major learning differences and challenges between two genders in music learning at elementary school students so that the music teachers can be aware of the potential problems and have further solutions. Furthermore, the researcher also gives recommended music practices and activities which can be used in future music classes according to the results.

METHODOLOGY:

There were total on hundred randomly selected 1st grade students (fifty boys and fifty girls) with the age of 6 -7 who registered at the 1st year of two local elementary schools in Hong Kong, China participated in this study in the year of 2008. All of the randomly selected students equally had previously one semester music training at the local elementary school. The researcher divided the one hundred participated students into four classes with the number of 25 students in each class. All of the students were equally given pre-test and post-test in order to get the most fair and average results. The study was controlled in the sense that the four experimental classes were

ascertained to be of equal ability in their understanding of music before the experimental factor was applied. As well, there were no significant differences in age and mental capacity.

The purpose of this study is to exam whether the gender differences would cause different music learning efficiency for the 1st grade elementary students in Hong Kong, China. The methods of experiment included: rhythmic dictation and music class observation. “The Rhythmic Dictations” were planned as pre-test and post-test which were designed based on the level and concepts of their music textbooks and training in the previous semester before the experiment. Both of the questions of pre-test and post-test were identically same so that the results can reflect the truths and fairness of the study. The purpose of the pre-test and post-test revealed that although both male and female participants’ were under the same learning circumstance and environments, the results of the tests reflected the learning differences between two genders. “The Music Class Observation” can reflect students’ interests and willingness toward the music class. By observing students’ class participation, the music teachers and the researcher can discover the experimental students’ reaction and learning outcomes toward the current music activities and modify music methods used in the current music class.

In order to track students’ learning progress and differences, the authors also designed questionnaire for the music teachers during the period of experiment. The questionnaire seeks four types of information: (1) Teachers’ personal information; (2) Students’ music learning progress; (3) The current music materials and approaches used in the classroom; and (4) The weekly journal taken during the period of the experiment. The author believes that the responses of this questionnaires provides the most fair and reliable records of students’ learning progress. Not only can the teachers’ teaching methods and materials be traced and, but the process of each students’ learning progress were also recorded during the period of the experiment. Furthermore, the teachers' expectations and the weekly journal from the experiment were all included in this questionnaire.

RESULT AND CONCLUSION

The results of this study showed that both genders were equally interested in participating any music activities held in the experiment. However, the results revealed that girls demonstrated better concentration during the class and better comprehensibility than boys on rhythmic patterns clapping and dictation. Sax (2007)

advices parents and teachers in order to increase boy's attention and learning motivation at school by limiting boys' focus so that boys can be more concentrate in class. According to both pre-test and post-test, majority of girls showed better scores than boys. However, the results can not 100% indicated that the participated girls' "music ability" were better than boys'. The results of the tests might imply the personal interests toward the subject between two genders. In the experiment, girls also performed more accurate on playing rhythms on the provided small percussion during the experiment while the boys were more interested in playing the percussion instruments. In the aspect of music reading and singing, girls not only demonstrated better understanding on both exercises but girls can also sing more accurate pitches than boys.

The results of the questionnaire reflected that although 95% participated music teachers know what Orff Music Method, Kodaly Music Method and Dalcroze Music Methods are, there were only 34% of the music teachers used the approaches in their music class before. The lack of using the above mentioned international well-known music methods may cause the music class less motivated and inspired toward students. (Wang 2008). The results also revealed that more than 68% music teachers were aware that girls demonstrated better performance in the music class over boys while only 22% teachers believed that both genders perform equally well during the experiment. The result of the questionnaires was surprisingly shown that there were 46% teachers believed that the boys and girls can have better progress and perform equally well if the music teachers change their music methods and approaches in the class while there were only 12 % music teachers believes that the learning differences will be the same no matter if the approaches change or not.

The main finding of this study was to prove children in Hong Kong, China learning music differently due to the gender differences. As well, the results advice the local music teachers teach different gender students should use different approaches and strategies. The author suggests that in order to have efficient music teaching and learning, music teachers need to be alert the differences of learning ability on both genders, esp. many boys usually have difficulty to sing in correct pitches, and have challenges to comprehend different combination of rhythmic patterns. Kovalik (2008) also states that girls demonstrated better ability and comprehensibility on receiving and hearing music over boys. Furthermore, more music activities and body movements should be included in music class so that children can learn music concepts, such as, rhythms, dynamics and tempos in the most nature and motivated way. Moreover, music teachers should find solutions to help young boys comprehend different combination of rhythmic patterns so that boys can learn music efficiently. At

last, the music teachers should be careful selecting teaching contents and keep track of the progressions of each individual in the class. Music class can be more interesting and motivated if the teachers includes more music activities with the well-known international music methods in their music classes so that children can also learn music concepts, such as, rhythms, dynamics and tempos in the most nature way.



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A Chinese Checkers Game for Active Learning

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Abstract - Artificial Intelligence (AI) is one of the mostly used technologies nowadays and it is also one of the key learning areas for students in the field of computer science. The game of Chess was, for a long time, known as the "fruit fly" of AI. In order to facilitate students practicing their programming techniques and understanding the quality of their own program algorithm, one of the most effective ways is to organise AI programming competition.

Chinese Checkers is a well-known game in Chinese society, and The Association for Computing Machinery (Hong Kong Chapter) holds a programming contest of Chinese Checkers every year. The paper aims to develop a Chinese Checkers Game platform (mediator program) which serves as a communication channel facilitating two AI player programs developed by students to compete with each other, to judge the correctness of the moves and to identify the winning program. Game of Chess has been considered as an effective mean for people to train and develop logical, strategic and conscientious thinking. The Chinese Checkers platform provides not only an innovative learning environment for students practicing AI programming techniques, but also stimulate students' interest to learn actively. Through participation in the game, students actively study and develop their own AI programming algorithm and strive for improvements to be more successful in the game setting.

1. Introduction

Artificial Intelligence is one of the mostly used technologies nowadays, from computer games to household wares. Especially in the recent years, online computer and video games are widely developed. This make the Artificial Intelligence (AI) become more important because most of the games need the AI. It is foreseeable that the development of Artificial Intelligence will continue in the coming future [1]. It will help humans to make decision and solve problems, and understand further on human needs. The term "Artificial Intelligence" was defined in the mid-1950s. Nowadays it is defined as "the subfield of computer science concerned with the concepts and methods of symbolic inference by computer." The first project utilizing A.I. was traced back to 1955 when Carnegie Mellon University researchers developed a computer program to work through proofs resulting in theorems. In the late 50s, McCarthy developed a computer language known as LISP (LISt Processing). This is the language used for most artificial intelligence projects [1].

The Chinese Checkers is played on a game board which is in the shape of a six pointed star. It is playable with two up to six people at the same time. Each player uses pegs or markers in different colors and placed them within one of the points of the star. The objective is to move all the ten pegs across the board (move one step at a time or jump over adjacent pegs) to occupy the star point directly opposite. The player who first gets all pegs across wins. The game does not actually originate from China (nor is it a variation on checkers or Chinese chess), but was given that name in the United States to make it sound more exotic. When it was first released in Germany, it was called Stern-Halma, as it is similar to the older game of Halma except that the board is star (stern) shaped. The Chinese checkers board is laid out in a six-pointed star. The game pieces are usually six sets of colored marbles, ten of each color. The ten marbles are arranged as a triangle in the starting position in one of the corners of the star. Chinese Checkers is a common game in Chinese Society [2, 3]. The Association for Computing Machinery (Hong Kong Chapter) held a programming contest of Chinese checkers every year [4].

Game of Chess has been considered as an effective mean for people to train and develop logical, strategic and conscientious thinking [5]. In this project, it aims to develop a Chinese Checkers platform (mediator) to support active learning for students in the field of computer science. The system, built in Java programming language, facilitates two AI player programs developed by students to compete with each other, to judge the correctness of the moves and to identify the winning program. This allows the students to practice their AI programming skills.

2. Literature Review

2.1. Artificial Intelligence

Artificial Intelligence (AI) is the area of computer science focusing on creating machines that can engage on behaviors that humans consider intelligent. The ability to create intelligent machines has intrigued humans since ancient times, and today with the advent of the computer and 50 years of research into AI programming techniques, the dream of smart machines is becoming a reality. Researchers are creating systems which can mimic human thoughts, understand speeches, beat the best human chess player, and countless other feats never before possible. There are generally four possible goals to pursue in artificial intelligence [6].

2.1.1. Acting Humanly: The Turing Test Approach

The Turing Test, proposed by Alan Turing [7], was designed to provide a satisfactory operational definition of intelligence. Turing defines intelligent behavior as the ability to achieve human-level performance in all cognitive tasks, sufficient to fool an interrogator. Roughly speaking, the test he proposed is that the computer should be interrogated by a human via a teletype, and passes the test if the interrogator cannot tell if there is a computer or a human at the other end. For now, programming a computer to pass the test provides plenty to work on. The computer would need to possess the following capabilities.

- **natural language processing** to enable it to communicate successfully in English (or some other human language);
- **knowledge representation** to store information provided before or during the interrogation;
- **automated reasoning** to use the stored information to answer questions and to draw new conclusions;
- **machine learning** to adapt to new circumstances and to detect and extrapolate patterns.

Turing's test deliberately avoided direct physical interaction between the interrogator and the computer, because physical simulation of a person is unnecessary for intelligence. However, the so-called total Turing Test includes a video signal so that the interrogator can test the subject's perceptual abilities, as well as the opportunity for the interrogator to pass physical objects "through the hatch". To pass the total Turing Test, the computer will need to feature computer vision to perceive objects, and robotics to move them about.

2.1.2. Thinking Humanly: The Cognitive Modeling Approach

To understand how human thinks, understanding of the actual mechanism of human minds is essential. There are two ways to do this: through introspection - trying to catch human thoughts as they go by - or through psychological experiments. Once a sufficiently precise theory of the mind is identified, it becomes possible to express the theory as a computer program. If the program's input/output and timing behavior matches human behavior, that is evidence that some of the program's mechanisms may also be operating in humans. For example, researchers developed GPS in 1960s, the "General Problem Solver" [8], were not content to have their program correctly solve problems. They were more concerned with comparing the trace of its reasoning steps to traces of human subjects solving the same problems. This is in contrast to other researchers of the same time [9], who were concerned with getting the right answers regardless of how humans might do it.

The interdisciplinary field of cognitive science brings together computer models from AI and experimental techniques from psychology to try to construct precise and testable theories of the workings of the human mind. Cognitive science, however, is necessarily based on experimental investigation and the reader only has access to a computer for experimentation. It is noted that AI and cognitive science continue to fertilize each other, especially in the areas of vision, natural language, and learning [10].

2.1.3. Thinking Rationally: The Laws of Thought Approach

The Greek philosopher Aristotle was one of the first to attempt to codify "right thinking", that is, irrefutable reasoning processes. His famous syllogisms provided patterns for argument structures that always gave correct conclusions given correct premises. For example, "Socrates is a man; all men are mortal; therefore Socrates is mortal." These

laws of thought were supposed to govern the operation of the mind, and initiated the field of logic [11].

The development of formal logic in the late nineteenth and early twentieth centuries, provided a precise notation for statements about all kinds of things in the world and the relations between them. (Contrast this with ordinary arithmetic notation, which provides mainly for equality and inequality statements about numbers.) By 1965, programs existed that could, given enough time and memory, take a description of a problem in logical notation and find the solution to the problem, if one exists. (If there is no solution, the program might never stop looking for it.) The so-called logicist tradition within artificial intelligence hopes to build on such programs to create intelligent systems [1, 6].

There are two main obstacles to this approach. First, it is not easy to take informal knowledge and state it in the formal terms required by logical notation, particularly when the knowledge is less than 100% certain. Second, there is a big difference between being able to solve a problem “in principle” and doing so in practice. Even problems with just a few dozen facts can exhaust the computational resources of any computer unless it has some guidance as to which reasoning steps to try first. Although both of these obstacles apply to any attempt to build computational reasoning systems, they appeared first in the logics tradition because the power of the representation and reasoning systems are well-defined and fairly well understood [1, 6].

2.1.4. Acting Rationally: The Rational Agent Approach

Acting rationally means acting so as to achieve one’s goals, given one’s beliefs. An agent is just something that perceives and acts. In this approach, AI is viewed as the study and construction of rational agents. In the “laws of thought” approach to AI, the whole emphasis was on correct inferences. Making correct inferences is sometimes part of being a rational agent, because one way to act rationally is to reason logically to the conclusion that a given action will achieve one’s goals, and then to act on that conclusion. On the other hand, correct inference is not all of rationality; because there are often situations where there is no provably correct thing to do, yet something must still be done. There are also ways of acting rationally that cannot be reasonably said to involve inference. For example, pulling one’s hand off of a hot stove is a reflex action that is more successful than a slower action taken after careful deliberation [12].

The study of AI as rational agent design therefore has two advantages. First, it is more general than the “laws of thought” approach, because correct inference is only a useful mechanism for achieving rationality, and not a necessary one. Second, it is more amenable to scientific development than approaches based on human behavior or human thought, because the standard of rationality is clearly defined and completely general. Human behavior, on the other hand, is well-adapted for one specific environment and is the product, in part, of a complicated and largely unknown evolutionary process that still may be far from achieving perfection. This will therefore concentrate on general principles of rational agents, and on components for constructing them. We will see that despite the apparent simplicity with which the problem can be stated, an enormous

variety of issues comes up when we try to solve it. To achieve perfect rationality, it may not be possible in complicated environments because computational demands are just too high [12].

2.2. *Artificial Intelligence in Chess Game*

AI-based chess game programs combine intelligence with entertainment. On game with strong AI ties is chess. World-champion chess playing programs can see ahead twenty plus moves in advance for each move they make. In addition, the programs have an ability to get progressively better over time because of the ability to learn. Chess programs do not play chess as humans do. In three minutes, Deep Thought (a master program) considers 126 million moves, while human chess master on average considers less than 2 moves. Herbert Simon suggested that human chess masters are familiar with favorable board positions, and the relationship with thousands of pieces in small areas. Computers on the other hand, do not take hunches into account. The next move comes from exhaustive searches into all moves, and the consequences of the moves based on prior learning. Chess programs, running on Cray super computers have attained a rating of 2600 (senior master), in the range of Gary Kasparov, the Russian world champion [13].

2.3. *Chinese Checkers*

Chinese Checkers was first patented by Ravensburger, the famous German games company, under the name Stern-Halma in Germany in 1892. It was originally called “Hop Ching Checkers Game”. In Chinese Checkers, which can be played by 2 to 6 people, each person starts with a set of uniquely coloured pieces in the point of one of the stars. The objective is simply to be the first to move all the pieces across the board and into the star point opposite. Pieces move a single point or else hop over other pieces in order to advance their pieces as quickly as possible. The middle part of the game becomes quite a challenge as the options for hopping vary rapidly as the game changes shape. The player who can best create and take advantage of hopping opportunities will tend to win. The game is both complex but is also easy to play and learn, and it is considered as a suitable first game for very young children [2]. Chinese Checkers is one of the classic Chinese-Cultural board games. It also called “Marble Game”, as the main pegs of the game are marbles of various colors. The gaming board is a six-vertex star shape board that contains 121 positions for placing the marbles (Figure 1).



Figure 1 Chinese Checkers

2.3.1. *General Game Rules*

There are different variations of game rules and one of the popular one called “hop across”. In this game variant, each player puts his or her own colored marbles on one corner of the star and attempts to relocate them all to the opposite corner. Players take turns moving one marble, either a single step or a chain of one or more hops. A step consists of moving a marble to an adjacent unoccupied space in any of the six directions. A hop consists of jumping over a single adjacent marble, either one’s own or an opponent’s, to an unoccupied space directly opposite. The basic strategy is to find the longest hopping path instead of moving step by step. However, since one or more players can make use of whatever hopping ladders an opponent creates, more advanced strategy requires a player hindering opposing players in addition to helping himself or herself. Of equal importance are the players’ strategies for emptying and filling their origin and destination triangles. In the fast-paced variant of the game, game pieces may hop over non-adjacent pieces. A hop consists of jumping over a distant marble to a symmetrical position on the opposite side. However, jumping over two marbles in a single hop is not allowed [2]. This is the game rules that would be implemented and adopted in this project.

2.4. *Active Learning*

Unlike traditional lecture methods, active learning is a process in which students are encouraged to actively participate in the learning process, rather than “passively” absorbing lectures. It involves reading, writing, discussion, and engagement in solving problems, analysis, synthesis, and evaluation. Besides, it emphasizes on teamwork that partners or group members work cooperatively to solve problems [14]. Team learning is especially beneficial in that “weaker” students are taught by “stronger” students who can reinforce their knowledge by explaining the material to others. This ensures that all students within the group really understand the concepts being covered. Discussion is one of the most common strategies promoting active learning. If the objectives of a course are to promote long-term retention of information, to motivate students toward further learning, to allow students to apply information in new settings, or to develop students’ thinking skills, then discussion is preferable to lecture [15]. The idea of “Active Classroom” has been promoted as an effective teaching and learning approach to students [16, 17].

In this project, a Checkers Checkers platform is developed. In addition to facilitate the students with the opportunity to practice their AI programming skills and techniques, this creates a competition setting for the students. On one hand, it is natural for students to compete and to have an innate desire to compare themselves with others in every way. On the other hand, competition may be found vital in adult life that a society especially educates their young to compete. Thus, it is necessary to incorporate competition into education to help students get used to it in later life. Although there is no general agreement as to what constitutes the best way of putting competitions in education, many

educators support the use of competitions to drive learning benefits derived from adding competitive elements in the regular curriculum [17, 18, 19].

3. System Architecture and Implementation

3.1. System Architecture and Flow

The systems flow of the platform is shown in Figure 2. There are three main modules including the player module, the game judge module, the replay module and the display module.

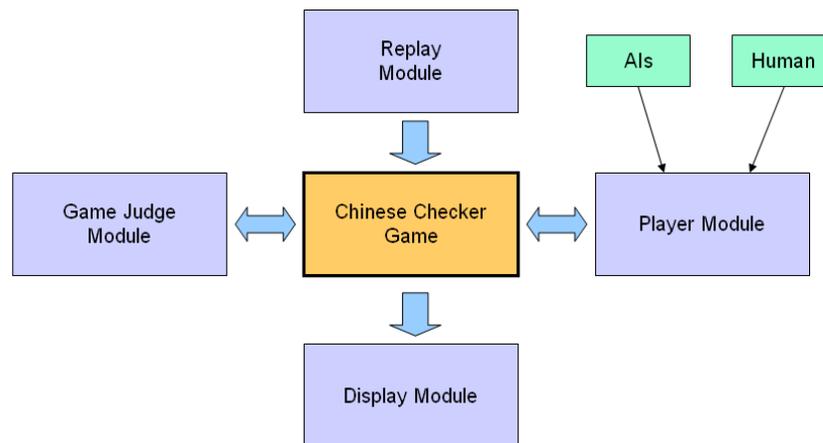


Figure 2 The System Flow

3.1.1. The Player Module

The player handle module is built to handle the players data. The module communicates with this module. It handles the AI's parameters from the player programs and to inform the AI players of the game details, e.g. which AI players to move, available position on the board, etc. In this platform, the system is able to handle 2 processes for the 2 AI and establishes connection.

The mediator platform starts the game by sending a message to each player, it first sends out a first message which is the sequence number of the player. The message contains the number "1" for the players who make the move first while the message contains the number "2" for the player who is expected to make the second move. The 121 positions of the playing board are numbered 1 to 121 from bottom to top, left to right. The AI players' home area is always numbered 1 to 10. The mediator platform gets a message from first player which contains the value of the position of the marbles move from and move to. For example, an AI player provides a value move from position "2" to position "5" (Figure 3). When the mediator platform receives the message from the AI player, the system clock stops, the mediator announces its move to its opponent AI player. At the moment, the opponent's clock restarts. The second player then starts his turn. The opponent player receives the changed position value of the opponent. The AI players

must maintain information on the current board configuration and must also ensure that each move it makes is valid.

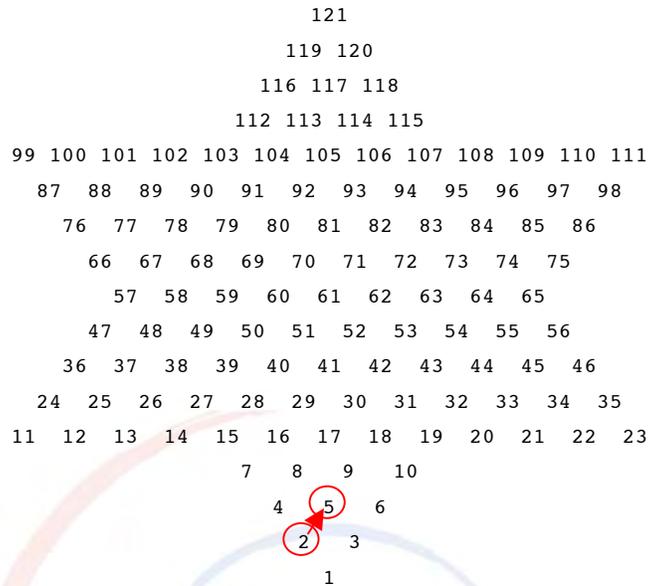


Figure 3 An Example of Movement

The clock in the mediator platform is different from a clock in a real chess game. During the time which one player is computing its next move, the other player may not carry out any computation. The mediator ensures this by suspending a player after receiving a move from it and resuming it before sending its opponent's move to it. Each AI player is given five minutes to make all its moves. Since the players and mediator run on a multiprogrammed operating system, the time used by a player is the time used by its process. The player must not fork any other processes. The player may decide to spend more time making certain moves and less making others. When a player fails to make all its marbles reach its opponent's home area within five minutes, each move thereafter must be made within one second. In other words, the mediator maintains two clocks, one for each player, initialized to zero at the beginning of the game. At any given time, only one of the clocks runs: that of the player who is computing its next move.

3.1.2. The Game Judge Module

For a 2-players game, the objective of the game is to move all of one's marbles into home area of one's opponent before one's opponent moves all his marbles into one's own home area. A game is considered a draw if player 1 makes the first move of the game, and player 2 moves all his marbles into player 1's home area one move after player 1 moves all his marbles into player 2's home area. At the beginning of a game, each player's ten marbles occupy a triangular area at an opposite side of the board. This is called the home area of a player. The four other triangular areas are calling neutral zones. Since the board is embedded in a hexagonal grid, each position on it is generally connected to neighbors in six directions, except when located at the boundary or a corner, in which case the

position has 5, 4, or 2 neighbors. At each turn, a player can move any one of his marbles into a neighboring position, provided that such a position exists and is not already occupied by another marble, either belonging to him or his opponent. A marble may also in one move, make a sequence of jump over other marbles, which either belongs to the player or his opponent. Each jump must be made according to the follow rule. Suppose that a marble at A jumps over a marble at B. The former will land at position C, where B is equidistant from A and C, and A, B, and C are collinear. The jump is only allowed if every position on the line AC (inclusive) exists, and none of these are occupied before the jump except A and B. When a marble is moved to an adjacent position, or takes a sequence of jumps, it may not end up in a position in a neutral zone. The intermediate steps of a sequence of jumps, however, may use positions in the neutral zones.

The game judge module provides static method to implements the above rules of movement and jumping. It checks whether a position is allowed to place marble, allowed to pass, or the position is out of board. The judge goes though all marbles to obtain a list of possible move. It checks the validity of marble movements. The platform checks firstly the nearest marble for the moving marble to identify whether the moving marble can jump over the nearest marble and whether number of jumps allowed from that position. Any checked vacant position is recorded, this avoids an infinite recursion. The checked vacant positions become the end result of checking because the positions recorded are the valid ones. Finally, the module also checks to see if the marble can move in a position next to it. The module also provides end-game checking, this is done by checking if all positions from 001-010 and the 112-121 are filled with opponent's marbles. Also if the AI gives an invalid move, the judge considers as losing the game.

3.1.3. The Replay Module

To let other programmers watch the passed competition. The replay can read the log files which have stored the turn and movement data, and then use theses data to display the movement of a game. The purpose of this module is not for competition, but to illustrate and replay any game records. This facilitates students to learn how an AI player performs in a particular game.

3.1.4. The Display Module

The display module is used to handle all the onscreen and visual elements. This includes menu of the mediator platform (Figure 4), the game status and the system clock (Figure 5), game results and ruling (Figure 6), etc. The user interface of the platform is designed to be simple and clear.

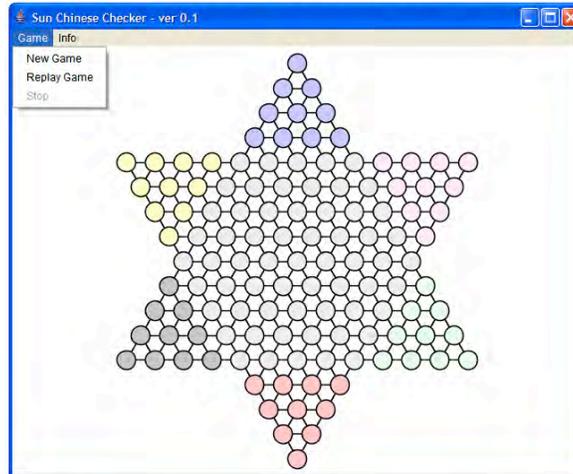


Figure 4 The System Interface and Menu

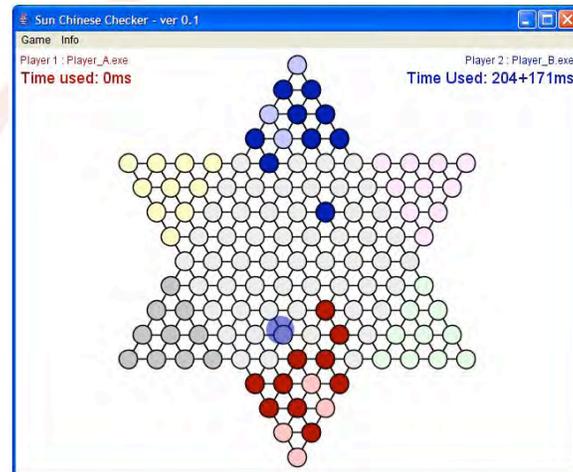


Figure 5 Game Status and System Clock

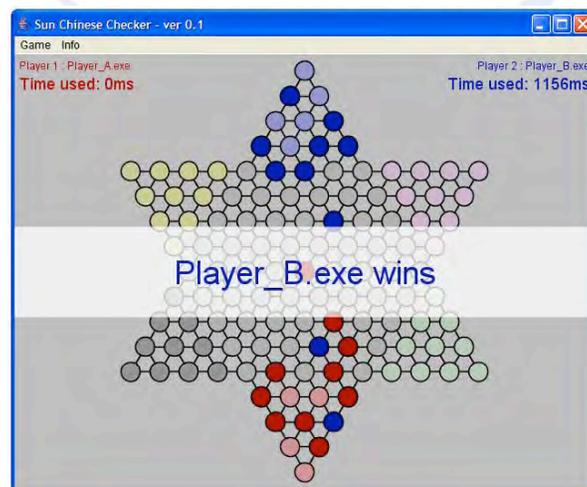


Figure 6 Game Results and Rulings

4. System Application

In the Chinese Checkers game competition, two AI playing programs, executing as separate processes on personal computers or workstations running Unix, play against each other using a common protocol mediated by mediator platform executing as yet another process.

Students are trained during the lecture about AI program algorithm. They are provided with the mediator program and an executable program developed by an ex-champion in the game competitions. The students can make use of the ex-champion program to compete with themselves and the AI programs they developed. In the development process, the students may amend and improve their AI programming algorithm in comparing their developed programs with the ex-champion. Students are required to work as team for the program development and the student would enter to the system for competition. This competition encourages students to think, discuss and apply the concepts delivered in lectures, together with the team-based approach, active learning is achieved. Besides, the champion in class would be encouraged to join the competition held by The Association for Computing Machinery (Hong Kong Chapter). This further enhances students to learn from students in different universities in Hong Kong.

5. Conclusion

This project is to implement a Chinese Checkers Game platform (mediator program) which is capable to facilitate two computer AI players to compete in a game. The system provides learners with greater convenience in terms of accessing the effectiveness of the computer programs they developed. On the other hand, active learning like game competition encourages learners to actively absorb the teaching materials through frequent thinking, tasks and discussions.

This new learning environment developed based on the latest technology and new educational research findings can help students to efficiently and effectively absorb the teaching contents. The platform provides not only an innovative learning environment for students practicing AI programming techniques, but also stimulate students' interest to learn actively. Through participation in the game, students actively study and develop their own AI programming algorithm and strive for improvements to be more successful in the game setting.

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MANAGE AND PRESERVE A CULTURAL ASSET FOR YOUTH THROUGH A VIRTUAL GAMES (EDUTAINMENT GAMES)

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Community, Culture, Globalization and Internationalization

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CHAPTER I INTRODUCTION

The year to year era development creates the changing and shifting of both habit and culture of the people who live in a certain place. This development not only gives the positive impact and benefits for the people but also the negative ones.

One of the impacts of the development is the facilities of children's games which are becoming more various and modern. The variety of games provided by the games producer makes the young generation has freedom to choose the games they like. These video games are very modern and well-known by the young generation. We also can find these games in public games area to fulfill the needs of the young generation to play. Parents also can let their children play in this place because it is easy to be found in malls or near their houses.

Playing is the the basic needs for the children. That is why the games producers consider the children as a good segment for their marketing target. All of this makes sense because parents will try to do their best to fulfill their children's needs. Nowadays, based on the technology development, the popular games for young generation are video games such as SEGA, SPICA, Nintendo, playstation, tamiya etc. All of these stuffs are digital and up to date.

The modern games are adaptation from western culture into our culture. This is one of the factors that shift our own culture to western culture. The development of games automatically changes the habitual and cultural activity that will creates the changes of people's behavior and culture in the community. Actually, Indonesian people have their own children's games--traditional games rooted from people's culture in that community. There are many kinds of traditional games that are also interesting compared to the modern games. The traditional games are inherited but unfortunately their existences fade away and considered not up to date to the technology development. If we let this happened, these traditional games will be extinct.

The traditional games are the creativity from local culture rooted from the community. They are the picture or description of people who live in the community and they become the tradition. These games should be preserved and considered as valuable assets that can give positive contribution to the community and the nation in the future.

If we observe, actually there are basic differences between the traditional and modern games. The traditional games are not bought because they are created by using local material. The people's limitation of purchasing power created high imagination and creativity to create something. The limitation factors such as no appropriate equipments, materials, or facilities become good factors for the children to make them sociable and tolerant to share and play in groups so that they can enjoy it together. Because most of the local games are in the form of groups, these games can be a good entertainment, can develop cooperation, and create solidarity to each other. The value from traditional games is very high. Besides it is useful to train our five senses, languages, or other part of body, it also trains the interaction skills among the players (interpersonal potential).

Most people and parents consider that the traditional games are dangerous for children because the games use the available material; they are not up to date, dirty, and hick. These are the causes that make the children cannot enjoy these games or even do not know about them. This is irrational because the people do not know the advantages of the traditional games.

The modern games such as SEGA, SPICA, Nintendo, playstation, tamiya etc need children's high concentration to coordinate their hands, eyes, and mind. Generally, these modern games can give positive impact for the children because it creates the children to be more adept and imaginative. But unfortunately, most of these games are individual games and only can be played individually or in pairs so that there is no socialization and no direct interaction between the children. In modern games, children enjoy their own world without any verbal communication with their partner. Sometimes, they also do not want to share or lend their games to their friends. These will create the children to be more egoists, easily get angry, and it can trigger the fight. The modern games use the coordination of eyes, hands, and mind but only a little use of other body reflects so that the children tend to be passive. The characteristic of the modern games that is played individually makes these children easily get bored so that they tend to be consumptive. If they feel bored with the games, they will ask for the other new games and of course the price of the new games cannot be categorized as relatively cheap. Sometimes, the modern games display violence in the games such as wars, firing, and that can be kept in children's memory. Sometimes, children cannot differentiate that imagination in reality.

From the explanation above, we can see that children's games can shape the characteristics of young children from a very young age. Therefore, as parents, we cannot pretend that we do not care because this is about our children's characteristics that will shape who they are in the future.

CHAPTER II

RESEARCH OBJECT

West Java is a province in Indonesia. Its capital city of Bandung. Development of the Province of West is the first established in the territory of Indonesia . West Java Province is a province with the highest population in Indonesia. The Northwestern part of West Java province directly adjacent to the Special Capital Region of Jakarta, capital city of Indonesia. In 2000, the Province of West Java, Banten province divided by the establishment, which is located to the west. We have the discourse to rename the province of West Java Province Pasundan, taking into account the historical aspects of this region.

Ethnic Sundanese is an ethnic group that derived from west java. West Java is the province which have the highest population in Indonesia. West Java is close by with Jakarta as the capital city of Indonesia.

Sundanese culture is one of the many culture which is a source of wealth for Indonesian Nation. Area administrative boundaries in West Java divided into:

- North of Bandung District is bordered by West Bandung regency
- West side is bordered by West Bandung regency and Cimahi
- East of Bandung District is bordered by Bandung regency
- South of Bandung District is bordered by Bandung regency

Based on these positions, the city of Bandung is at a strategic location, in terms of communication and economic potential

Bandung population reaches 2,358,206 inhabitants with a total of 1,197,849 men and women soul 1,160,357 inhabitants.

Bandung Population by age and sex describes as follow:

CHILD AGE AND ADOLESCENT GROUP	MALE	FEMALE
0-4	93690	89239
5-9	84811	81945
10-14	87565	88710
15-19	114801	122642
TOTAL	380867	382536
TOTAL MALE AND FEMALE	763403	

This age group is actively playing educational games. Child age and adolescent group have 3 % of the overall total population. Bandung city population growth per year is 7,68% . The estimated number of residents in the coming year is 2,539,316 so the estimated number of child age and

adolescent group in the coming year is 7,617,948.

This is a very large quantity of population if more and more young age and adolescent group who do not care about traditional games then the virtual games so it can be estimated this game will be extinct in the near future.



CHAPTER III LITERATURE REVIEW

Through games, children will feel very happy. Their happiness makes the neuron in the brain connect to each other very fast to create new memory. That is why children learn something easily through games. The things learned by the children through games are:

- **Learning by playing**
When the children play, they also learn by keeping the balance of gross and fine motoric. As Reamonn O Donnchadha said in his book *The Confident Child* “games will give them opportunity to learn how to face personal life situation and also how to solve it.”
- **Games develops right brain hemisphere**
Through playing, the children have the opportunity to test themselves with their friends. Playing is the activity that uses right brain hemisphere and left brain hemisphere is sharpened when they are learning.
- **Games develop the pattern of socialization and children’s emotion**
Through playing, especially in group, children learn to socialize, to control their emotion, to share, to get and to refuse the situation they face. Through playing, children learn to develop emotion, self-esteem, and problem solving.

KINDS OF GAMES

Kinds of games are devided into:

Sports Games	Body contact	Mechanical Games	Fantasy Games
We can find sports games in children’s games. Sports are considered as an entertaining and fun activity.	This game is usually created because of the children’s imagination after they watch violence in movie or in modern games they play. This game is very dangerous and can result a serious effect for the children’s mental development.	This game uses computer or equipments like in modern games.	This game is created because of children’s imagination. In this game, children can imagine and create things based on their fantasy. We can find this game both in tradisional and modern games.

ADVANTAGES TRADITIONAL GAMES

Considering the importance of playing for children, parents should really pay attention and choose the most appropriate games for their children in order to develop children’s characteristics. It is very important because we want to shape our children’s characteristics to be a well-being individual.

Based on the explanation above, it is very clear that traditional games have more advantages than modern games. Traditional games have many forms and variations. At least, there are 750 kinds of traditional games and more still have not been listed.

West Java as part of Indonesia is one area that has many traditional games. Let us see what are the influences and advantages of traditional games children’s mental development. They are:

1. Developing children's creativity and natural intelligence

Usually in children's games, the material for games is directly made by the players by using the available material in their environment such as bamboo, orange skin, rocks, etc.

Sorodot Gaplok

This game uses flat stone with diameter around 20 cm. The number of players is 10 people divided into two groups. The draw is by throwing the stone. The team that can throw the stone to the nearest border line is the winner. The winning team then put the stone on the back of the foot and the other team arranges the stone in one of the line. From the distance around five meters, the team should ruin all the stones arranged by the opponent team. But if they cannot make it, they will take turn with the opponent team.

Gatrik

This game include two teams by using two pieces of wood or branch with different length. The player's skill to pry and hit the shorter wood with the longer wood without falling to the ground is the factor to decide which team wins the game. The players can collect score in *getok lele* stage. In this stage, the players pry and hit the shorter wood with the longer one. The player will be considered as the winner if they have passed the score that has been agreed at the beginning of the game.

2. Therapy for children

When they play, the children can shout, laugh, or even cry. This is good especially to develop their emotional stage.

3. Developing children's Intellectual Quotion (IQ)

Games can develop their knowledge by guessing something correctly. The examples of these games are:

Gagarudaan, Oray-Orayan

4. Developing children's Emotional Quotion (EQ)

Traditional games tend to be in form of group that create tolerant, sharpen emotional development, and create the togetherness such as:

1. Bebentengan,
2. Anjang-Anjangan
3. Kasti
4. Boyboyan

In this game, the players use tennis ball and smashed roof-tile that is as big as children's palm of hand. This game consists of ten children that are divided into two teams (attackers and keepers). The stack of smashed roof-tile should be rearranged by the attacker team. The keeper team should prevent the attacker from rearranging the stack of smashed roof-tile. The attackers should throw the tennis ball to the stack of smashed roof-tile and then they

should rearrange the stack. The keepers have to prevent them. The attacker team can be the winner if they are able to rearrange the stack and if the member of the team that is able to put the last stack shouts "Boy!" as the sign that the game is over.

5. Developing logics intelligence

In the traditional games, we also can find the games that use calculating technique especially for deciding the strategies or steps in the games, such as:

i. *Congkak*

Congkak is played by two people. In this game, they use congkak board with receptacles and 98 (14 X 7) tokens. Generally, congkak board is made by wood or plastics, and the tokens are made from cowrie shells, seeds, stones, marbles, or plastics. In congkak board, there are 16 receptables consists of 14 small receptables that face to each other and 2 big receptables in both sides. 7 small receptables and 1 big receptables on the right side are owned by the player.

The game is over if there are no tokens anymore to be taken by the players (all the tokens are in both big receptables of the players). The winner is the one who collects more tokens.

ii. *Lompat tali/Spintrong*

iii. *Bekel*

6. Developing children's kinaesthetics intelligence

The traditional games let the children move their body like jumping, running, twisting and turning.

a. The examples are:

i. *Lompat tali*

ii. *Sorodot Gaplok*

iii. *Heulang jeung Hayam*

iv. *Engklek*

v. *Enggrang*

The players use two bamboos with the height around 1.5 meters. In both bamboos, the player make place to stand on at around 15 to 30 cm height based on the capability of the children. The players stand in the place while they keep their balance. *Jajangkungan* or famous with *engrang*, can be played in many variations, like through playing soccer or taking the coin on watermelon by using mouth etc.

vi. *Balap karung*

Balap karung is usually played and very popular especially in our independence day. The players should put half of their body in a sack and then they should run or jump to the finish line. The winner is the player who comes first to the finish line.

7. Developing children's Spatial Intelligence

The roleplay (theatrical) is played by the children based on the concepts that they create.

8. Developing children's Musical Intelligence

The games use songs and traditional music instruments such as:

- i. *Ucang-Ucang Angge*
- ii. *Enjot-Enjotan*
- iii. *Calung*
- iv. *Wayang*

The game accompanied by *kakawihan* is telling us about the grandma's (nini) role as the children's keeper and grandpa (aki) who must take the children one by one. The grandpa should be very creative to persuade the grandma to give all children.

**CHAPTER IV
DISCUSSION**

TRADITIONAL GAMES VS MODERN GAMES/VIRTUAL GAMES

Some efforts have been done by many sides such as from cultural observers or related department to preserve the traditional games as cultural products that have high values and moral.

The last developed effort that will be conducted by Zaini and Hong community is a plan to build the Museum for Indonesian Games at Sasana Ganesha Bandung, but until now this effort has not been realized yet.

Besides that, many efforts that have been done by other cultural observers are by offering cooperation with the investors to develop their business by providing the local traditional games in their children's play ground. But unfortunately, no effort has been successful because the investors still consider this kind of investment cannot produce a lot of money and only small number of costumers gets interested in this business.

The effort that has been realized is so little and it just lasted for 2-3 months. After that, one by one, the business is closed. The effort to develop the traditional games is considered too idealistic for the business men so that they are still not interested to develop this business.

Games or video games are still number one choice for the young generation compared to the traditional games. Many games expertists from Indonesia create interesting games and those games have been marketed to the public. Unfortunately, the games that have been made by the gamers are adapted from abroad countries. Therefore, it will be better if the related department and cultural observers make the cooperation with the gamers to make the local games with local contents to preserve the traditional games into Indonesia games. If the children are introduced to the traditional games through video games, we expect that the children will know and get interested to play the traditional games.

This effort and the idea have not been realized yet. If they still cannot be realized, then what other efforts should be done to make the traditional games not only the name for our next generation. It is very sad if our next generation does not have cultural identity and they become egoistic and individualistic because their characters are developed through other culture and modern games.

TRADITIONAL GAMES THROUGHT EDUCATIONAL GAMES

Definition of **Educational games** from Wiklipedia are [games](#) that have been specifically designed to teach people about a certain subject, expand concepts, reinforce development, understand an historical event or culture, or assist them in learning a skill as they play. They include [board](#), [card](#), and [video games](#).

The following is brief list of game types:

1. Action:

Games that offer intensity of action as the primary attraction.

Reflex response is the primary skill needed to play these games well. The most common action games are shooters (Doom) and stealth (Metal Gear). Action games also include most sports titles, although some sports titles fall into the category of simulation.

2. Adventure:

Games that offer exploration and puzzle solving as the main attraction.

These games historically offered the most engrossing story, although their popularity has declined in the last 2 decades. Reasoning, creativity, and curiosity are the most common skills required of a good adventure game player. Pioneer adventure games include *Myst* and *Syberia*.

3. Puzzle:

Games that offer puzzles as the primary attraction to games. These games are most commonly released on low budgets via the web.

The people who play these games tend to be the oldest population of the game playing community. One of the most successful puzzle games is the famed *Tetris*, *Lemmings* and *Minesweeper*. *I.Q. Intelligent Cube* was another interesting puzzle game of limited success.

4. Role Playing:

Games that offer the player an opportunity to immerse themselves in the player character's situation.

Role Playing Games (RPG) continue their rich history in storytelling by embracing innovative ways to vary and report story. Characters tend to be rich, game play is long, and character management is technical in RPGs. Famous RPGs include, *Baldour's Gate*, *Fable*, *Might and Magic*, *Neverwinter Nights*, *Ultima*, and *World of Warcraft*.

5. Simulation:

The primary game play element of a simulation is its ability to match real world situations.

Simulations seek to provide enjoyment through reenactment. Combat simulations and racecar simulations are relatively popular in this game type. Simulations may also include social situation simulation such as *Sims* and *Leisure Suit Larry 1*. Major games include *Gran Turismo* and the *Tycoon* games.

6. Strategy:

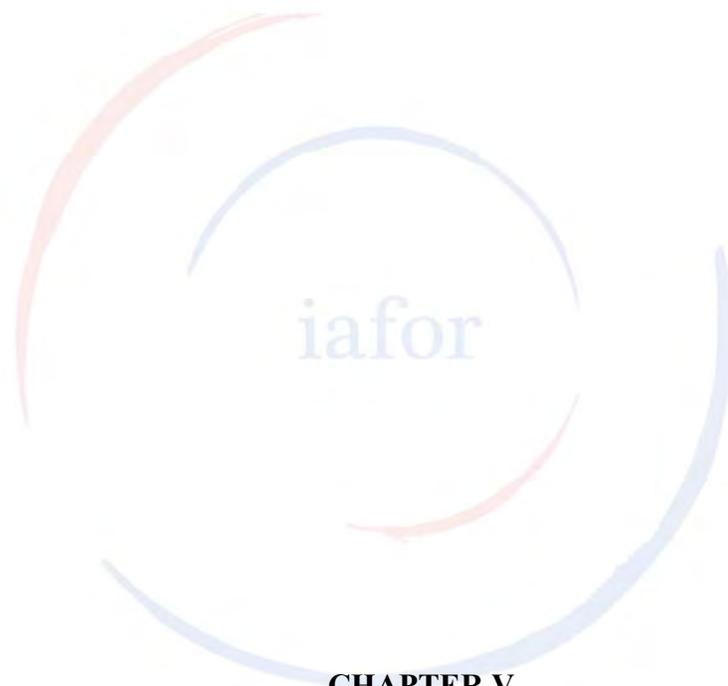
Strategy games entertain through reasoning and problem solving.

Early strategy games (e.g. *Civilization*) did not use much storytelling, although more recent games rely heavily on quality narrative. Games such as *Command and Conquer* are examples of story based strategy games.

In this research will be develop a game simulation type :

The primary game play element is a puzzle games. The reason for the selection of this puzzle games is because this type of game is easy to play and raises curiosity of young age to know what the image that used as object at this games. Puzzle seek to provide enjoyment through reenactment. This game type is the reason to manage national cultural heritage and to preserve cultural asset. Introducing traditional games through virtual situation games is to generate a sense of curiosity of young ages to know more a traditional games and eventually attracted to playing directly with their friends.

To revive traditional arts and culture, we must use the technology, management and marketing systems collaborated with with local cultural uniqueness. However, the content of art equipment based on local culture.

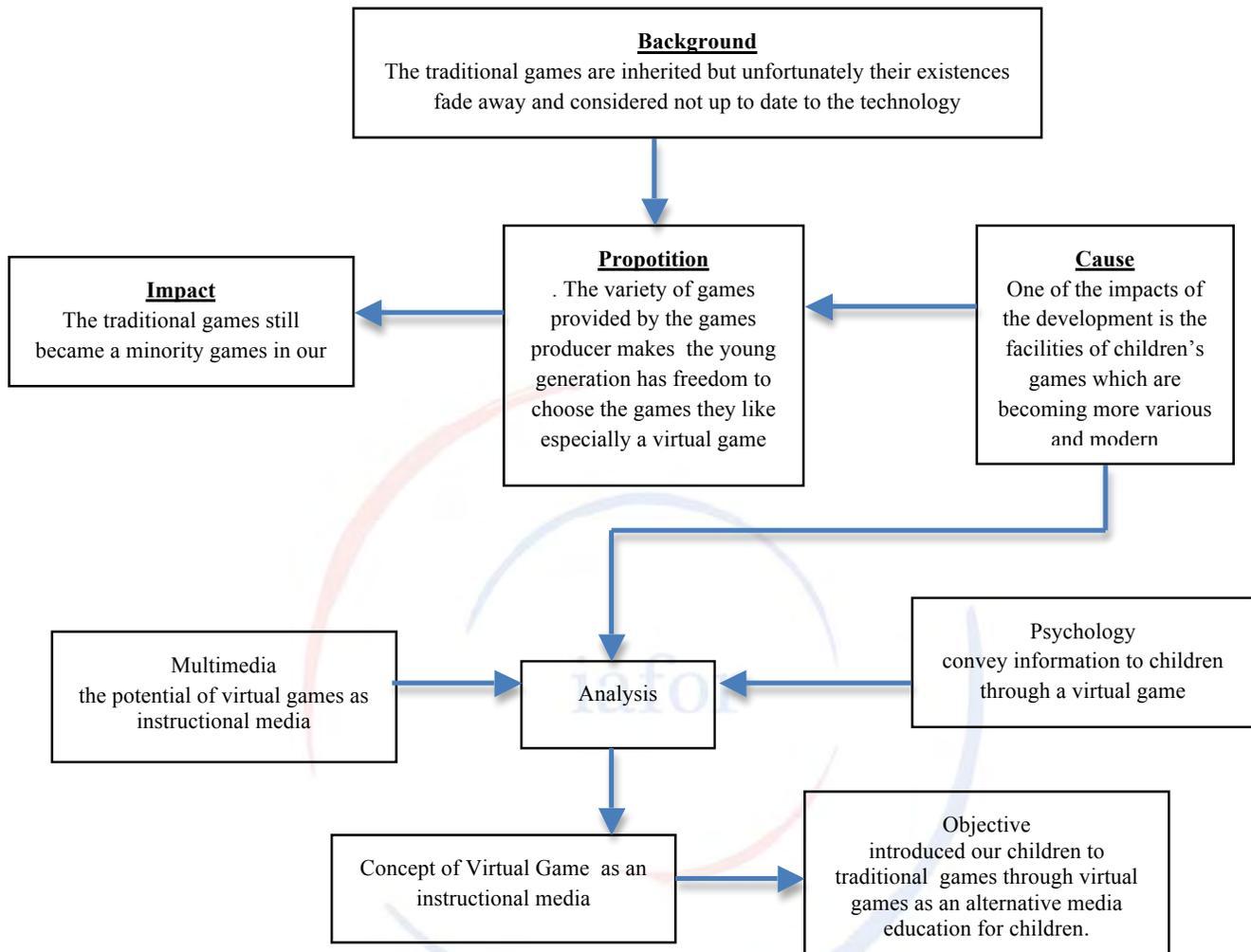


CHAPTER V CONCLUSION

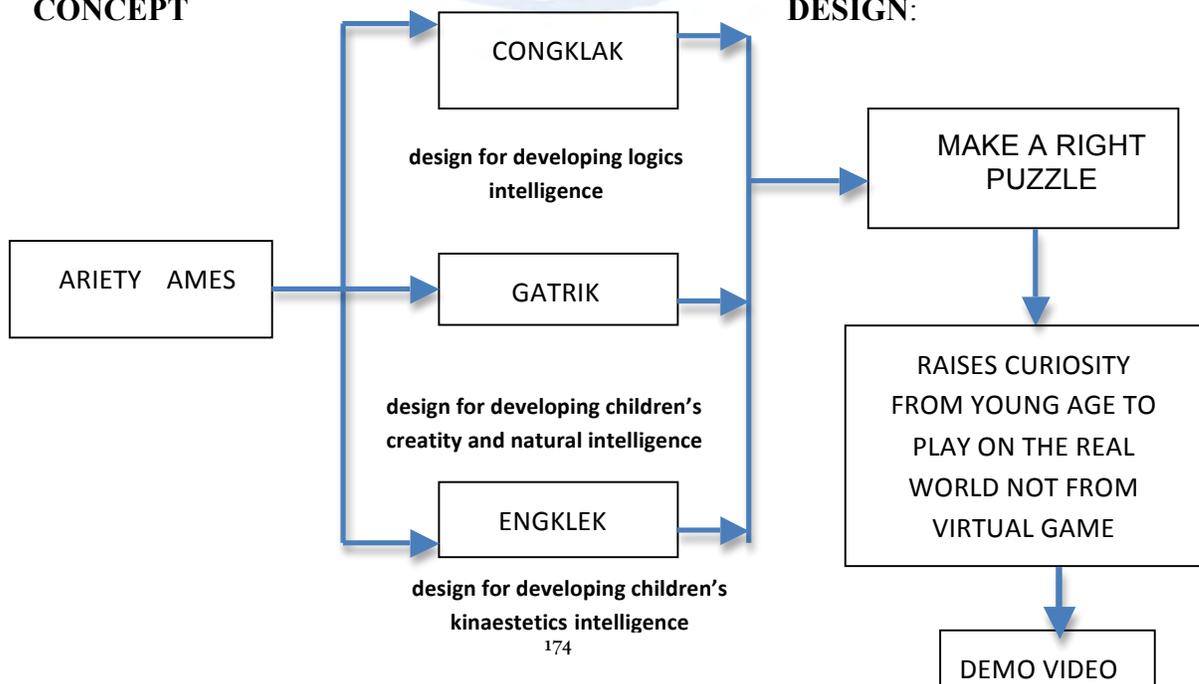
An educational computer game can be defined as an electronic medium with all the characteristics of a gaming environment that have intended educational outcomes targeted for manage and preserve cultural asset.

The simulation game selected because the simulation game which try to accurately depict real world situations, physics, and events as accurately as possible with others meaning a simulation is an imitation. So computer simulation games, are games that imitate a real-life situation. This is the best way for young age to know the best about their cultural asset and to stimulate them to make them interested so they want to know better and at the end they ultimately play in the real world with other children.

PATTERNS OF THOUGHT

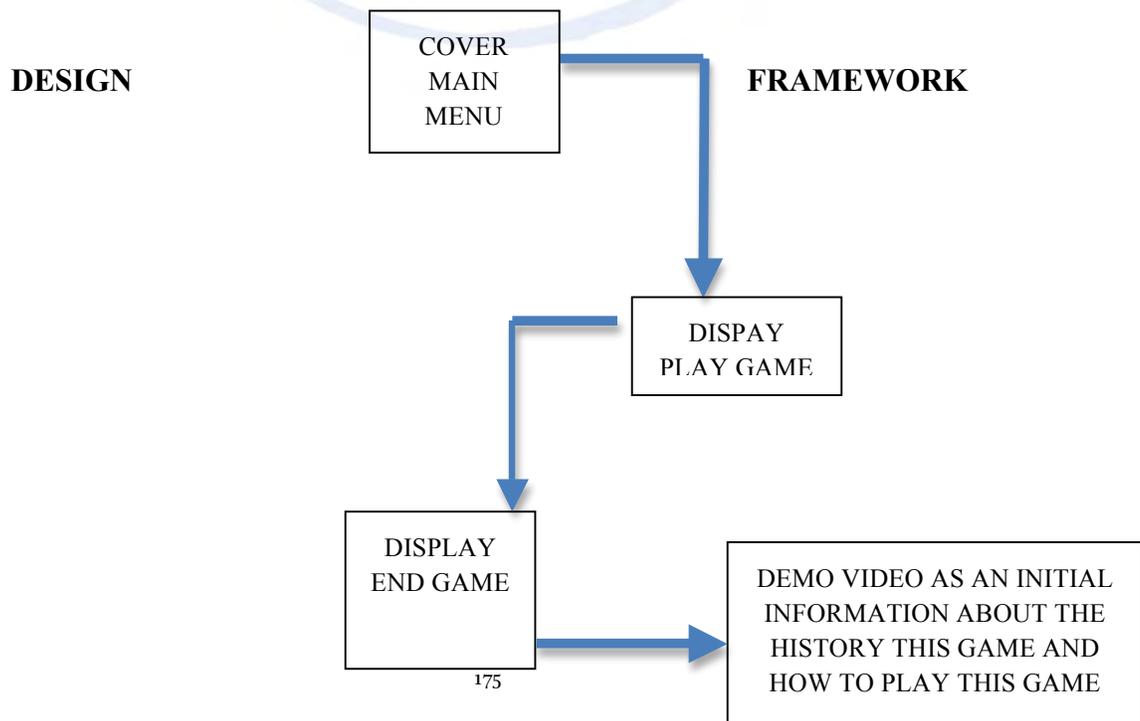


CONCEPT



The reasons for choosing the games mentioned above are due these games easy to play and easy to find materials/tools so the young age expected to be inspired to try this games. The third game above includes three different education functions for young age representing gender, age groups and interests.

- Congklak is the games that often played by girls aged 7-12 years . This game is expected to create interest in the traditional game which is becoming obsolete by girls at that ages.This game is design for developing logics intelligence .This game use calculating technique especially for deciding the strategies or steps in the games
- Gatrik is the games that often played by boys aged 7-12 years. This game is expected to create interest in the traditional game which is becoming obsolete by boys at that ages.This game is design for developing children’s creatity and natural intelligence.The material for games is directly made by the players by using the available material in their environment such as bamboo, orange skin, rocks, etc.
- Engklek is the games that often played by boys and girls aged 7-12 years. This game is expected to create interest in the traditional game which is becoming obsolete by boys and gilrs at that ages.This game is design for developing children’s kinaestetics intelligence .On this game the children move their body like jumping, running, twisting and turning.



This demo was created to manage four step education on young age :

1. Attention from young age to traditional games that they know variety games on traditional games
2. Interest to traditional games so the young age want to try to play this games in virtually first
3. Desire of young age to try this game directly in the real world with their friends.
4. Action to play in groups and make this game as activities in daily life

This AIDA system is using in marketing today because of a diversity of games products. Using a system like this, allows a general understanding how to target a market effectively. This demo is one method that used in this research as a function to set a processes for creating, communicating and delivering benefit of traditional games to young ages. On preserve a cultural asset we must used marketing management as the art and science of getting young ages as a target markets and keeping and growing them to preserve and develop traditional games as one of a cultural asset.

This edutainment games is expected to become one of the newest way to introduce West Java culture to young age. Initial idea of virtual games is a media for entertainment but the entertainment as a main factor on the game will be develop into the act of learning through a medium that both educates and entertains.

These games should be preserved and considered as valuable assets that can give positive contribution to the community and the nation in the future. We hope traditional games as a cultural asset no longer became a minority games in our society. Therefore, the related department and cultural observers should jointly develop design a media education for children .We hope this demo design can create sence of selfbelonging for their culture to create a new attractive games for young age with a local contents to preserve national cultural identity and also introduced our children to the physical and local games through virtual games as an alternative media education for children.

The logo for the International Association for Frontiers in Education Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The outer arc is a light red color, and the inner arc is a light blue color, matching the text. The arcs are positioned such that they appear to be part of a larger circular design, with the text sitting in the center of the inner arc.

iafor

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Students' yearning for practical and workplace experience

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Topic: Student learning, learner experiences and learner diversity



Students' yearning for practical and workplace experience

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Abstract: This paper examines students' reflection on their learning associated with a topic component aimed at introducing them to the workplace. Results are from two environmental topics, one of which comprised 73% international students. The component required the students to work in pairs and conduct a simple environmental evaluation of a business, write a report for their client, and reflect on their learning. Results show that the majority of students felt that they were not ready to enter the workplace as a professional. This may be partly attributed to the varying experience that the students had and the fact that some of the international students had only been in Australia for a short time. Although a number of students expressed feelings of apprehension prior to the placement, on completion of the assessment most students stated that they had enjoyed the real life experience and practical nature of the topic. International postgraduate students, in particular, expressed a desire for the placement to be of a longer duration and more dominant in their university topics. While most students expressed a low readiness for the workplace, many expressed an increase in confidence as a result of the experience and also a clearer idea of their future ideal career. While students did not learn many new professional skills because the placement was too short, they were able to practice existing skills in a new context and with responsibility. Furthermore, students identified ways that they could gain additional professional and interpersonal skills to further prepare themselves for the workplace.

Key words: reflection on learning; professional skills; international students

Introduction

On graduating most students would like to gain employment in a position in which they can use their tertiary education. Graduates with an awareness of employers' expectations or familiar with the demands of the workplace are deemed more readily employable (Thomas & Nicita, 2003). Furthermore, if tertiary students believe that their topic assessment is real and will assist them in obtaining a job or have some long term benefit they have a more favourable attitude to the assessment (Lombardi, 2008; Struyven, Dochy & Janssens, 2005), and are more interested and engaged in the learning process (Centre for the Study of Higher Education, n.d.; Freudenberg, Brimble & Cameron, 2008; Scott, 2005). Given these reasons an industry-based assignment aimed at introducing students to the workplace and improving their readiness for work in the environmental management industry was introduced into an undergraduate and a postgraduate topic in 2009. The term workplace or industry, as used in this paper, refers to an organisation in which students could apply their learning gained from their tertiary environmental education (see definitions). The dual purpose of the learning component was firstly to train students in basic environmental evaluation skills and professional reporting styles, which they subsequently practiced (applied) in an industry setting. Secondly, students were required to reflect on their learning and their workplace readiness.

The way a topic is taught and assessed has an important role in the development of workplace relevant skills. Academics need to have a clear idea of the purpose of assessment particularly when it is linked to new styles of teaching and learning (with which students may be unfamiliar) such as work integrated learning (McLellan, n.d.). Apart from having clear learning objectives in mind, academics need to clearly communicate the purpose of the assessment to their students (Knight & Yorke, 2003). The component outlined in this paper had a dual purpose (stated above), which was clearly outlined to the students at the outset.

Aim of the research

The aim of the research, reported in this paper, was to assess whether the learning component enhanced students' awareness of the workplace and their readiness to enter the workplace. Specific objectives were:

- To garner students' perceptions on the value of the component conducted in industry compared to if it were conducted as an on-campus practical,
- To identify the range of professional skills the students developed through the component,
- To identify the range of personal and interpersonal skills the students developed through the component,
- To garner students' perceptions on their readiness to enter the workplace.

Definitions

The topic component (industry-based assignment) that is described here can be classified as work-integrated learning (WIL). Flinders University (2010) defines WIL as 'directed or supported educational activities that integrate theoretical learning with its application in the workplace'. Atchison et al. (2002) define WIL as 'all educational programs which combine and integrate learning and its workplace application, regardless of whether this integration occurs in industry or in the university and whether it is real or simulated'. Defining terms such as WIL (McLennan 2008; Patrick et al. 2008), work-based learning (Delahaye et al. 2007), capabilities (Stephenson 1992), authentic assessment (Bennett et al. 2001), and work readiness are, however, complex and often broad. The associated assessment can also be defined as authentic assessment, which is 'where activities represent the types of complex tasks performed by professionals in the field' (Edith Cowan University 2009).

Methodology

This section opens with a description of the industry-based learning component of the topics and is followed by an outline of the data collection methodology.

The component—which comprised five preparatory lectures, a brief industry placement and two associated assessments—was introduced into an undergraduate (n=29) and a postgraduate (n=11) topic in 2009. International students comprised 7% of the undergraduates and 73% of the postgraduates respectively. Only one of the international students spoke English as a first language.

Undergraduates and postgraduates received the same preparatory lectures and guidance and conducted the same assessment tasks. The reason that the component was the same for topics was that the postgraduate topic primarily served as an introduction for postgraduate students who were new to the discipline. The postgraduates were enrolled in a program of study (Masters of Environmental Management) that attracts students who want to re-train for a new career path. The postgraduate students had backgrounds ranging from dentistry, pharmacy, engineering, publishing, and political science, to other non-environmental disciplines. Despite being given the same assignment, the learning experience and assessment was student-driven, and the students could complete the component in a manner befitting their educational level.

The assignment required the students to act as Environmental Consultants to an industry. After being allocated an industry the students (working in their chosen pairs) were responsible for liaising with their client, establishing a time to conduct the evaluation, determining the depth and duration of the evaluation in conjunction with the client, conducting measurements and writing and delivering their final report to the client. The environmental evaluation entailed assessing the industry for opportunities where low cost, simple changes could be made to water, energy and waste related activities that would have potential environmental benefits, and not necessarily, potential efficiencies or cost savings for the industry. The report that was submitted to the client was purposefully not checked by the topic coordinator thereby placing full responsibility on the student. On completion of the component

students were required to reflect on their learning outcomes in a two-page individual assignment (worth 10% of the final topic grade) in which they were asked to answer the following questions:

- What are your perceptions of your industry experience compared to if this work was done as a university-based practical?
- What professional skills did you develop through the environmental evaluation of industry?
- What personal attributes did you develop through the environmental evaluation of industry?
- Comment on your 'readiness' to enter the environmental workforce. What skills (professional, personal, interpersonal) do you feel you still need to develop to ensure you are ready for work in the environmental workplace? How do you plan to gain these skills?
- Provide additional insights into your learning experience in this component.

The data presented in this paper were drawn from three sources—the two-page reflections assignment (that all students completed); a more detailed follow-up questionnaire on the learning process and outcomes (anonymous, voluntary); and students' evaluation of the topic obtained through an automated, online survey (anonymous, voluntary). The 22-question questionnaire sought to delve deeper into the underlying reasons for the answers given in students' earlier reflections. Approval to conduct the research was granted from the Flinders University Social and Behavioural Science Ethics Committee.

Potential sources of bias in the study

It is possible that the results obtained from the two-page reflections assignment may be biased because the assignment was worth 10% of the topic grade. The purpose of the assignment was however clearly emphasised and students were asked not to write notes on their perceived correct answer, but rather to reflect on the value of the learning experience. That is, if students' perceived the component to be a waste of time they were asked to provide reasons why they had learnt nothing from the process. Although a potential source of bias, the authors' believe that this was minimal as the students' reflections were remarkably candid. There was a 100% response rate to the reflections assignment, but only a 21% and 36% response rate to the voluntary questionnaire from the undergraduates and postgraduates respectively. The low response rate may be attributed to the fact that three months had lapsed and all the students had passed the topic by the time the questionnaire was distributed to the students (via email). Due to the low response rates to the voluntary questionnaire comparisons between the two sets of data were not possible.

Results

Students' perceptions of the industry experience compared to if the work was done as a university-based practical

Results showed that the majority of students (76% of undergraduates and 91% of postgraduates) perceived the industry-based assignment to be a useful exercise and a better learning experience than if it had been conducted as an on-campus practical under the topic coordinators supervision (Table 1). Students commented that if it were conducted as an on-campus practical it would not have been as 'real', nor would they have taken it as seriously because in industry they '...had to act as a professional...' and be '...more focussed and precise...'. Results highlight students' positive perceptions of the value of practical components of the topic. Students commented that the best aspects of the topic were the '...field work and practical learning outside the class', being able to see 'real environments and evaluate how they work' and the practical nature of the industry component as it '...gave an insight into the practical applications of our learning and knowledge and how these can address environmental management issues'.

Table 1: Students' perceptions of the learning experience associated with the assignment

	Better learning experience because it was based in industry (%)	It would have been better as an on-campus practical (%)	Did not answer or ambivalent (%)
Undergraduates	76	3	21
Postgraduates	91	0	9

Some students commented that the assignment was exciting and they felt more enthusiastic about it because it was real. A number of students expressed feelings of apprehension prior to the placement, stating that '...it was a more frightening experience dealing with an unknown industry' and forced them out of their 'comfort zone', however, they added that they had 'worked harder as a result'. Of note are the reasons for the feelings. The international students who expressed concern did so mostly in relation to their perceived inadequate English and communication skills (particularly as they would be dealing with industry professionals as opposed to their topic coordinator, who was accommodating in dealing with students from non-English speaking backgrounds). Other reasons for students' apprehension included the fact that they would be dealing with an organisation outside the university (and hence outside their 'comfort zone'), and also concerns over their readiness for the exercise. Students noted that they overcame the latter concern through thorough preparation prior to the placement. Many students expressed the value of having a team member with whom they could discuss ideas, provide mutual support and an opportunity to learn from each other—all of which helped them overcome feelings of apprehension. On completion of the component the majority of students stated that they had enjoyed the experience, had found dealing with the industry personnel to be less frightening than anticipated and felt they had successfully passed the assessment. Although the students' concerns were alleviated, they pointed to an area in the assignment design that needed addressing by the topic coordinator in future iterations of the component—this is addressed later in the paper.

The development of professional skills and personal attributes

Results show that while students did not learn many new professional skills because the placement was too short, they were able to practice existing skills (Table 2) in a new context and with a new position of responsibility. Many students commented on their increased confidence as a result of the industry-based assignment, and stated that as a result of the experience they now had a clearer idea of their ideal future career. Most undergraduate students stated that they had gained confidence as a result of the experience, although a relatively small number specifically listed (Table 3) confidence as a *skill*. Most students developed or reinforced interpersonal skills (Table 3). Interpersonal skills acquired through working with peers, increased confidence and communication skills were the most common skills listed by the undergraduates. As prompted by their assignment question, many students identified (Table 4) ways in which they could gain additional professional and interpersonal skills to better prepare themselves for the workplace.

Students' perceptions of readiness to enter the workplace

Over 70% of the students recognised that they were not yet ready to enter the workplace as a professional. Results showed little difference between the undergraduates' (74%) and postgraduates' (70%) perceptions. The main reasons given for a lack of readiness by undergraduates was that they needed to know more, needed more skills and more experience. Around 21% of students (Table 4) articulated that the readiness would come through university topics. The low level of work readiness among the postgraduate students may be attributed to the fact that 73% of the postgraduate students were international students, a number of whom had only been in the country a few months. Another reason was the varying prior environmental experience that the international students had, for example, some did not have any prior environmental education or environmental work experience (as outlined in the methodology). Others felt under-confident about their English speaking abilities. Even the

students who felt ready to enter the workplace identified aspects of their knowledge, skills, experience or attitudes that still required work to enhance their chance of gaining course-related employment. The few students who expressed both a readiness to enter the workplace and self confidence to conquer challenges had over 30 hours of environmental work experience (unlike their peers).

Table 2 The range of professional skills that students gained or practiced in the industry-based assignment. Each student could list any number of skills.

Skill	Undergraduate	Postgraduate
Workplace ethics	2	2
Decision-making	2	0
Professional communication	23	7
Time management; expediency	6	5
Work allocation	1	1
Information technology	1	0
Preparation, planning; organisation	16	4
Concise writing aimed at a professional reader; editing	12	5
Research; analysis	11	7
Professional conduct	8	4
Listening	3	0
Editing	1	0
Initiative	3	2
Observation	3	3
Problem solving; adaptability	1	1

Table 3 The range of personal and interpersonal skills that students gained or practiced in the industry-based assignment. Each student could list any number of skills.

Skill	Undergraduate	Postgraduate
Teamwork; cooperation	12	8
Communication within the team; listening	7	2
Confidence	8	2
Punctuality	2	1
Diplomacy	5	1
Compromise; flexibility; patience; respect	5	6
Assertiveness	1	1
Leadership	1	1
Conflict avoidance	2	2
Ability to motivate others	0	2

Table 4 The ways in which students planned to acquire more professional skills. Each student could list any number of ways.

	University topics	Course-related work experience	Environmental volunteer work	*Other	Did not answer this question
Undergraduates (%)	21	38	14	28	14
Postgraduates (%)	36	55	18	9	9

*Other included: learn from others; join a toast masters group or a range of societies; take on more public speaking opportunities; write reports; work on my curriculum vitae; better time management; communicate more; more contact with environmental organisations.

Another difference between the undergraduate and postgraduate students was that most of the postgraduates stated that they would have preferred the environmental evaluation of industry to be a larger proportion of the topic and much longer in duration. The majority of postgraduates stated that a four week period would be ideal, one student felt that six months was ideal and another wanted half of every topic to comprise work integrated learning. On the contrary, while undergraduate students recognised the value of becoming work ready and saw value in the industry component of the topic, nonetheless, they did not want the placement to be longer at the expense of the earlier content of the topic. This may be a reflection on how much they enjoyed the earlier component of the topic rather than a slight on the latter component, and their more distant graduation date (and concomitant need for work readiness). Undergraduates thought that they would have acquired (Table 4) more industry-specific skills by the time they were looking to enter the workplace—again, this perception may be attributed to their predominantly second year status. In contrast, the postgraduates' desire for the industry-based assignment to be longer shows a heightened career-mindedness which comes from having recently been in a career, their anticipated earlier date of entering the workplace (than the undergraduates), and also because some of the international students aimed to remain in Australia and apply for permanent residency (for which they would need secure employment).

Reflections on how to improve student learning outcomes

Based on personal reflection by the topic coordinator and student feedback some potential ways of improving student learning outcomes were identified for implementation in the 2010 iteration of the component (which was in progress at the time of writing this paper). These are outlined below.

Firstly, to overcome the students' feelings of apprehension prior to the placement students were a) provided with more information on the 'learning' nature of the exercise and the realistic expectations of the industry clients (i.e. the clients understood that they were dealing with students, even though the students were serving them in an Environmental Consultant capacity); b) students were encouraged to work in mixed groups (Australian and international students; postgraduates and undergraduates); and c) the content of the five preparatory lectures was changed to better prepare the students on how to conduct the environmental evaluation.

Secondly, given that the aim of the component was to introduce students to the workplace and improve their readiness for work in their chosen discipline, an alternative learning component was offered to students in 2010. The alternative component was a 20-hour (minimum) unpaid, work placement in an environmental organisation with an associated reflective assessment (worth 20% of the topic grade). Each student choosing this option was responsible for organising their own placement (they were not accompanied by peers in the topic). Students were advised to choose an organisation or discipline-focus (environmental management is a broad field) that they hoped to work in, in their future career. The anticipated value of this option was as follows: a) employers want students with prior environmental experience—volunteer experience is highly regarded by potential employers as it shows a deeper level of commitment (because it is unpaid); b) it provides students with an opportunity to prove their capabilities and get known by potential employers, who could also serve as referees in future job applications; c) develop and practice new skills specific to their ideal future career; d) it provides an opportunity for students to identify gaps in their abilities, knowledge and skills and an opportunity to redress the gaps in the remaining time before they graduate (which is mostly 12 months in the future); and e) it provides an opportunity to test whether it is really the job-focus they want (many graduates are not aware of the specifics of what a job might entail until they are in the position).

Given students' yearning for practical and workplace learning, work integrated learning needs to be introduced into more courses offered by universities, with academics shown the empirical evidence of the benefits.

Discussion of results

This study found that prior to completing the component and the two related assessments, students in the topics generally had a lack of course-related industry experience and were unaware of what industry expects of graduates. For second year and international students this result is not unexpected. While most undergraduate students had gained confidence through the topic component, nonetheless the majority felt a low readiness to enter the workplace. Alexitch (1994, cited in Archer, 2004, p. 27) found that where students had a perception of low readiness to enter the workplace, they attributed it to a 'lack of practical or field related experience'. In this study most students felt that the placement was too short in duration to fully develop a range of new professional skills. This factor was taken into consideration and in 2010 the number of visits and the time spent in the industry was thus doubled.

The raised confidence levels are a positive outcome that can be attributed to the value placed in the link between the assessment and 'real life experience' as perceived by the students. These findings thus concur with those of Dunlap (2005, p. 29) who found that over the course of a semester in which students had to conduct themselves as software engineers (in line with their course) and 'think like the experts', students' confidence levels on their ability and preparedness to enter the profession improved. Key factors in achieving the increased confidence levels were that the assessment 'reflect[ed] the true nature and requirements of the workplace' (p. 29). The value of experiential learning in building student confidence is also highlighted by Archer (2007) who examined the perceptions of undergraduate students from a number of Faculties on their readiness to enter the workforce. With increased confidence students were not only more confident to repeat similar tasks but also to address future challenges (Dunlap, 2005; Arnold, Loan-Clarke, Harrington & Hart, 1999). Greater confidence levels among students led to enhanced learning, development of employability skills (Freudenberg et al., 2008), and greater performance and achievements (Nicol & Macfarlane-Dick, 2005; Zimmerman, 2002).

The lack of workplace readiness identified through this study may be partly due to students not being used to reflecting on their learning or a lack of ability to easily identify their skills and capabilities and the links with their tertiary assessment. This was evident when students listed specific aspects of knowledge as skills in their reflections assignment. According to Stein, Isaacs & Andrews (2004, p. 252) students need to 'make connections with their own understanding' by practicing reflecting on their learning, and to be effective, reflection needs to be ongoing (Zimmerman & Schunk, 2001). Although some students had difficulty distinguishing skills from knowledge, from a workplace readiness perspective the students perceived a greater readiness for the workplace as a result of their knowledge. Similarly, in the study by Archer (2007) some students who had stated they were not yet ready to enter the workplace due to a lack of practical experience, nonetheless felt better placed to do so because of their knowledge and technical skills. In this study some of the postgraduate students who were new to the discipline felt that their work readiness would be enhanced with greater discipline-specific knowledge. Those students, regardless of whether they were undergraduates or postgraduates, who had many years of industry experience expressed greater workplace readiness than those without. Bandura (1977) outlines a complex range of reasons on how students perceive their self-efficacy, these include: the context of the study, achievements within the context, vicarious experience and personal factors. While Archer (2007) did not find that students personal attributes or developmental phase as factors influencing their perceptions of readiness, Zimmerman and Schunk (2001) found that the closer the students are to their ultimate goal of graduating and obtaining a job in their field of study, the more likely they are to be motivated in their remaining studies.

The level of challenge or complexity in tasks is important. Successfully completing challenging tasks leads to enhanced perceptions of competence, whereas if tasks are perceived as too simple the successful completion of them does not necessarily enhance perceptions of self-efficacy (Bandura, 1977) or motivation. The ideal is to set challenging but attainable tasks (Zimmerman & Schunk, 2001).

In this study a number of students who had many years of work experience or prior completed tertiary studies found the component 'too basic' to develop any new skills, although they practiced existing skills in a new setting. Archer (2004) however cautions that students' perceptions are not always accurate. Schunk and Zimmerman (1998) and Zimmerman (2002) distinguish between naïve and skilful self-regulators. Skilful self-regulators have more realistic perceptions of their abilities; they evaluate themselves against their personal goals; they take into consideration the strategies and methods used in the learning process, the context of the learning environment, the complexity of the task and their abilities. Skilful self-regulators are able to take responsibility for their own academic achievement; they see their success or failure as under their own control. In short, they link their success to the effort they put in to completing the task (Zimmerman & Schunk, 2001).

Zimmerman and Schunk (2001) state that requiring students to reflect on their learning will motivate behavioural change, and influence subsequent learning efforts. Furthermore it allows students the opportunity to identify things they would do differently in future to avoid some of their mistakes and to identify the skills they need to enable them to perform more effectively in future (Bailey, Oliver & Townsend, 2007). In this study while many of the students had part-time employment, this was not related to their studies or perceived to be of direct benefit for future discipline-related employment. Table 4 indicates that students aimed to improve their work readiness by acquiring the necessary professional skills mostly through further tertiary studies, volunteer work and work experience. Although pertaining to business-course graduates, in a study by Bailey et al. (2007) students identified extra-curricular activities (such as part time employment and volunteer work experience) as factors that led to their employment and also better outcomes during their university course. Gaffner and Hazler (2002, cited in Archer, 2004) cite a lack of understanding of the career planning process as a factor in low workplace readiness. To counter this one of the preparatory lectures in the component in this study focussed on the importance of career planning and highlighted the availability of resources that could assist students in preparing a curriculum vitae and securing course-related extra-curricular work and volunteer experience. The results show that despite the brevity of the experience many students gained a clearer idea of the type of job they want (and do not want) once they graduate.

Concluding statement

Not only are students' expectations changing in terms of what they want from their university experience (Sander, Stevenson, King & Coates, 2000), but employers expect universities to provide work ready graduates (Lombardi, 2008; Patrick et al., 2008). For this reason many universities are increasingly seeing their role as a combination of educational and vocational preparation (Alexitch & Page, 2001, cited in Archer, 2004), although this is a source of debate. Following in a path that commenced a decade ago in the United Kingdom (Knight & Yorke 2003) and in response to Australian Government policies, Australian universities are now placing a stronger emphasis on making graduates work ready (Flinders University, 2005; Griffith University, 2009; Queensland University of Technology, 2009). In this study, despite a low workplace readiness many undergraduate and postgraduate students commented on increased confidence and having obtained a clearer idea of their ideal future career. Students enjoyed and valued the practical focus of the topic and the opportunity to experience the workplace as an environmental professional. A further positive outcome was that most students expressed an increase in motivation to gain higher grades and gain workplace-appropriate skills through extra curricula activities. Furthermore, because of the new strategic policies of tertiary institutions, the positive learning experience outlined in this paper is set to become more dominant in university courses across Australia.

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**Attitude towards Research and Research Productivity - A Study
among Teachers in Higher Education in South India**

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Attitude Towards Research and Research Productivity - A Study among Teachers in Higher Education in South India

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Introduction

The major responsibilities of academics in teaching institutions are teaching and research. Research and development is a significant component of quality higher education and is often the distinguishing factor between general and higher (specialised) education. Many academics believe doing research improves their teaching (Winkler 1992, Gamson 1995, Michael J. V. Woolcock 1997, Wenzel 2001). Universities and colleges often use evidence of research excellence to employ or promote staff on teaching contracts. The main claim of the teachers and administrators are that research activity can and does serve as an important mode of teaching and a valuable means of learning and thus research is a strong condition for teaching. But the critics (Boyer 1990, Hodges 1994, Hattie, J. & Marsh, H. W., 1996, Meyer 1998) claim that research and publication have become the primary means by which most professors achieve academic status, yet many academics are drawn to the profession precisely because of their love for teaching or for service. If lecturers recognise the ways in which their activities parallel those of students and take steps to involve students in research like activities, research can inform practice in facilitating learning' (Brew & Barnett 2000). However, accrediting agencies like ISO and NAAC give weightage to such research contributions associating it with quality teaching.

Higher Educational Institutions in India

The University Grants Commission (UGC), which was formally established in November 1956 through an Act of Parliament, is the statutory body of the Government of India for the coordination, determination and maintenance of standards of university education in India.

In India, there are different types of higher educational institutions: Research Institutes, Universities and Colleges.

Research Institutes are institutes of high standards with good infrastructure, run by funds from Government. There are also **Institutions of National Importance** that are university-level institutions established by Acts of Parliament and funded by the Central Government.

Most universities in India are '**affiliating universities**', which prescribe to the affiliated colleges the admission criteria and courses of study, hold examinations and award degrees. **University departments** impart postgraduate education and conduct and promote

research in a variety of disciplines. There are several kinds of Universities in India - Central, State, Deemed, Private and Open Universities. While **Central Universities** are funded directly by the Ministry of Human Resource Development, the **State Universities** are set up and funded by the state governments. **Deemed Universities** enjoy the same academic status and privileges of a university but have no affiliating colleges. **Private Universities** are self-financing in nature and approved by the Central Government. **Open Universities** offer distance learning programmes and have no boundaries such as that of campuses and territories.

One of the many ways in which Indian colleges are categorised is on the basis of funding. There are **Government Colleges** funded and managed entirely by the Government; **Aided Colleges** – funded by the Government and managed by a private body; **Self-financed Colleges** – funded and managed entirely by private agencies. All these colleges need to be affiliated to a regional university for purposes of recognition. The colleges affiliated to the regional universities give importance to general education of building a strong base in core and allied subjects thus preparing the students for employment or research.

The important ingredient of research in teaching activities in an institution of higher education boils down to ‘Research versus Teaching’ in the college environment. Juggling these two activities is a delicate balancing act for most college faculty. This leads to an interesting question: Do faculty in Indian colleges have the adequate time, resources, and support to conduct productive research if they have the aptitude for it? The objective of this paper is to find an answer to this question.

Data and Sampling

Primary data on the organisation climate in terms of contact hours, class strength, regular and occasional responsibilities shouldered by teachers, salary and service benefits along with the background information of the teacher (teaching experience, status of research and subjects taught) were collected from the college and university teachers of the southern districts of Tamil Nadu – namely, Madurai and Tirunelveli Districts.

Primary data on the selected variables were collected from 270 teachers by stratified random sampling, the strata being teachers of self financed colleges, aided colleges and Universities – 90 each. The questionnaire was administered in January 2006.

Methodology:

Attitude Towards Research Scale

To measure the attitude of the teachers towards research, Attitude Towards Research (ATR) scale was used. It consists of 30 items listed on a 7-point Likert scale. The score 1 represented the option “strongly disagree” while option 7 on the scale represented the category “strongly agree”. Some items were positively worded and some negatively worded. For the analysis of the data, all negatively worded items were reversed so that a higher numbered response on the Likert scale would represent positive attitudes.

Attitude Levels

The teacher respondents were classified into three categories - those having high, medium and low levels of attitude towards research. Arithmetic mean ($\bar{X} = 163.7$) and standard deviation ($\sigma = 18.8$) of the total attitude score of 270 respondents were computed. Scores above $\bar{X} + \sigma$ (182.5) were considered to be high level of attitude; scores below $\bar{X} - \sigma$ (144.9) were considered to be low level of attitude and scores in between $\bar{X} + \sigma$ and $\bar{X} - \sigma$ is treated as the medium level of attitude.

Research Productivity Index

A Composite Research Productivity Index was constructed by considering the number of conferences attended, paper presentations, publication of research papers and the minor and major projects completed by the teacher respondents. Weights were assigned at two levels. At first level, for each category, research activities were divided into four levels as international, national, state and regional and points 4, 3, 2 and 1 were given respectively. Then at the second level, considering the difficulty level of each research activity points 3, 2 and 1 were given to publications, paper presentations and conferences attended. For Projects points 2 and 1 were given for major and minor projects respectively. The sum of all these totals constituted Research Productivity Index. This sum was calculated for each individual respondent for further analysis.

Linear Multiple Regression was applied to find out the influence of select variables on the research productivity of the respondents. The present study aims to identify factors that influence the research productivity among college teachers.

The Research Productivity model used in the analysis is

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_{11} X_{11}$$

Where

Y = dependent variable (Research Productivity).

The explanatory variables (X_1 to X_{11}) included in the model are: Sex of the respondent (0-male; 1- female); Type of institution (0-Self Finance; 1-Regular college; 2-University); Teaching Experience (in years); Subject taught (1-Humanities; 2-Sciences); Teaching hours per week; Number of subjects taught per semester (Average number of subjects); Class strength (Average number of students per batch); Number of responsibilities (regular and occasional); Monthly Salary (Gross salary per month); Number of service benefits; Teachers' Attitude towards research (Attitude Scores obtained)

RESULTS AND DISCUSSION

1. Background of the Respondents

There is extreme contrast among teacher respondents in self financed colleges and universities in terms of doctoral research as evidenced in Table No. 1. While the University teachers are compulsorily those qualified with a Ph.D. degree, only 6.7% of the self-financed

teacher respondents are Ph.D. holders. It needs to be mentioned that this 6.7% doctoral degree holders had completed Ph.D at the time of employment itself. The percentage of respondents who have completed Ph.D is significantly higher among aided college teachers as compared to self financed college teacher respondents. This is mainly due to the Faculty Development Programme (F.D.P.) provided by the U.G.C under which a maximum of two years' paid leave is provided to the teaching faculty in aided colleges. Unfortunately, this programme covers only a small number of teachers. In the case of self financed teachers, such a support is not given.

Table No. 1: Qualification of the Respondents in terms of Research Degree

Type of Institution	Ph.D. Degree			Total
	Not Registered	Registered	Completed	
Self Financed College	83.3	10.0	6.7	100
Aided College	40.0	13.3	46.7	100
University	-	-	100.0	100
Total	41.1	7.8	51.1	100

The percentage of respondents who have not even registered is significantly high for both self-financed and aided college teachers as the organisation climate in these institutions are not conducive to research. (Table No. 2). But for the FDP (Faculty Development Programme), initiated by the U.G.C., the percentage of teachers who have completed their doctorates would have been low among aided college teachers also.

2. Organisation climate

The teachers working in the universities have less teaching/contact hours (six hours per week) to enable them to concentrate on research whereas for the college teachers it is higher (sixteen hours per week). In self-financed institutions, it is much higher as it is arbitrarily fixed according to the whims and fancies of the management. Apart from teaching, the college teachers are also involved in other college-related responsibilities such as administration and community service.

The organisation climate in terms of contact hours, class strength which reflects the extent of evaluative academic work and teacher-student ratio, regular and occasional responsibilities shouldered by teachers, salary and service benefits along with their teaching experience is presented in Table No. 1. It is clear from the tabulated evidence that there is no parity in any of the indices listed amongst teachers working in colleges and university and even within those working in the different types of colleges. Excepting for years of service and salary all other indices are low for university teachers reflecting a better organisational climate. The same pattern is seen between aided colleges and self-financed colleges. Other than salary which is closer to that of the university faculty, the difference in organisational climate between aided and self-financed is only marginal.

Table No. 2: Organisation climate in different institution types

Background	Self Financed College	Aided College	University
Average Teaching Experience (years)	7.67	18.80	23.43

Average Teaching hours per week	18.33	16.57	6.13
Average Number of subjects taught per week	4.00	3.37	1.97
Class strength (Average number of students per batch)	48.96	42.30	20.53
Average Number of responsibilities	7.00	4.00	3.00
Average Monthly Salary (Rs.)	5346.67	23760.40	26600.00

Faculty at colleges (both) have more than a full load of teaching. Teachers may have some support staff in laboratories but not for lectures and administrative responsibilities. Further, teachers are required to be committed to the college community. In an academic year, a faculty member serves on about 4-7 committees related to miscellaneous college and department responsibilities. This leaves them little time for research during the academic year. They use summers and holiday breaks to conduct their research in an intermittent manner leading to problems such as discontinuity in research ideas, loss of time in reorganising, loss of enthusiasm and sometimes a shift in the science community's interest in the research area.

Faculty also encounter other difficulties such as little institutional support, lack of research facilities, limited support for travel and lack of external funding. In the face of such difficulties a high rate of motivation is necessary to pursue research.

3. Attitude towards research

College teachers need to be involved in research and community service in addition to their teaching activities. A teacher with a positive attitude towards research is considered to have the key ingredient necessary for a successful career. This attitude helps in identifying and successfully tackling the blocks that may occur in specific work environments.

Table No. 3: Attitude Levels Among Teacher Respondents

Type of Institution	Attitude Level			Total
	Low	Medium	High	
Self-Financed College	23.3	48.9	27.8	100.0
Aided college	15	60	25	100.0
University	12	70.3	17.7	100.0
Total	16.8	59.7	23.5	100.0

The attitude levels computed using the ATR scale presented in Table No.2 are most peaked for the university teachers and less peaked for the self-financed college teachers due to their work environment. The University teachers handle only Post Graduate classes and engage in research related activities. Infrastructural facilities available in the Universities are much

superior to those in colleges. However, it is clear that all teachers have a predominantly positive attitude towards research.

4. Research Productivity

Involvement in research may also take the form of research activities such as participation in conferences, presentation and publication of papers and involvement in non-degree research projects. Non-degree projects are funded by the government. Research grants sanctioned are classified as minor and major projects on the basis of the scope, period of study and the amount of research grant.

Table No. 4: Involvement in Non-Degree Research Activity:

Research Productivity	Levels	Type of Institution			All
		Self Finance	Aided College	University	
Conferences attended	Regional	0.56	3.42	9.38	4.50
	State Level	0.28	3.74	8.05	4.06
	National	0.11	2.61	8.35	3.73
	International	0.22	0.42	2.22	0.97
Papers presented	Regional	0.36	2.47	8.61	3.86
	State Level	0.20	1.77	6.62	2.90
	National	0.11	2.15	6.50	2.95
	International	0.00	0.41	2.27	0.91
Papers Published	Regional	0.07	0.92	4.11	1.72
	State Level	0.07	1.50	2.25	1.28
	National	0.00	1.33	2.86	1.41
	International	0.00	0.58	0.76	0.45
Research Grants received	Minor Projects	0.23	0.38	2.25	0.97
	Major Projects	0.14	0.14	1.17	0.49

Table No. 4 reveals the variations in research productivity among the teacher respondents from the various categories of institutions studied which is highly skewed in favour of University teachers in all forms of non-degree research involvement. The low level of involvement among the college teachers (both self financed and aided) is due to the unfavourable organisational climate in terms of higher work load, teacher-student ratio, number of subjects taught and college responsibilities (Table No. 5).

Another major impediment to college teachers is the limited and lack of access to resources including funding to pursue research. While awareness of the conduct of international conferences is high, costs involved and bureaucratic procedures are most important barriers to successful participation.

5. Organisation Climate and Research Productivity

The negative correlation coefficients explain the existence of moderate inverse relationship between teaching hours, class strength, number of subjects taught, the number of college responsibilities and research productivity whereas teaching experience and average monthly salary have a positive relationship with research productivity. (Table No. 5) Thus, a suitable work load with reasonable income will create a conducive working climate paving the way for enhanced research productivity.

Table No. 5: Co-efficient of Pearson Correlation between organisational climate indicators and Research Productivity

S.No.	Variable	Correlation co-efficient
1	Teaching Experience	0.51
2	Teaching Hours	-0.42
3	Class Strength	-0.46
4	Number of subjects taught	-0.36
5	College Responsibilities	-0.16
6	Average Monthly Salary	0.39
7	Attitude towards Research	0.22

Note: All the correlations are significant at $p < 0.01$, using a two tailed test.

To attain further insights, multiple regression co-efficients (β) from an ordinary linear regression using the research productive scores as the dependent variable were calculated. Table No. 6 presents the regression estimates of the effect of the selected variables on research productivity among college and university teachers of Madurai and Tirunelveli districts of Southern Tamil Nadu.

Table No. 6: Regression estimates on selected variables on research productivity

Variables	β	Std. Error	t
(Constant)	-109.472	34.995	-3.128
Type of institution	95.032	7.411	12.823
Teaching experience	5.027	0.859	5.853
Teaching hours per week	-2.643	0.884	-2.988
Number of subjects taught per week	-1.447	0.582	-2.404
Class strength (Average number of students per batch)	-0.415	0.175	-2.369
Number of responsibilities	-3.063	1.150	-2.663
Average monthly salary	0.608	0.001	8.094
Teachers' attitude towards research	0.470	0.162	2.907

Note: Dependent Variable: research productivity; Significance level: $p < 0.05$

Estimated regression coefficients suggest that while teaching experience, average monthly salary and the attitude of teachers towards research increase the research productivity, teaching hours per week, number of subjects taught per semester, class strength and the additional responsibilities decrease the research productivity. Thus, it is evident that the unfavourable organization climate (higher work load in terms of the above variables) results in lower research productivity. Among all the variables considered for study, the most influencing factor is the type of institution. The change of institutional

climate from self financed to college and university results in an increase in research productivity by 95%. The lesser work load to the university teachers combined with the better infrastructure and funding facilities available to them are the main reasons.

6. Causal Factors Inhibiting Research

The heavy workload and additional responsibilities of college teachers evolve as the major reason for not presently pursuing research as per the information furnished in Table No. 5. Lack of motivation is a distant second in the overall ranking of cited reasons among college teachers. These corroborate the finding that an overall positive attitude towards research is prevalent.

Table No. 5: Reasons for not involving in research

Reason	Type of institution		
	Self Financed College	Aided college	University
Not interested	-	6	47
High fees	6	1	-
Lack of time	7	12	48
Lack of expertise	1	2	-
Lack of motivation	14	18	5
Too many commitments	72	61	-
Total	100	100	100

Lack of interest/motivation is significantly high at 52% among the university teachers as the organisational climate for research is conducive in universities and hence the major factor affecting college teachers namely high workload and additional responsibilities do not apply for them.

In the present context of Globalisation and Privatisation, the need to get accredited has created an urge among the higher educational institutions to involve teachers in research due to requirements put forth by accrediting bodies on the institution. The current climate of continuing change in higher education has resulted in increasing pressures to be productive in research and publish even under unfavourable circumstances leading to a constant conflict of competing demands for faculty time.

Conclusion

A conducive atmosphere in terms of the organisation climate (teaching work load, teacher-student ratio and other institutional responsibilities) initiate the teachers to engage in research activities as there exist an overall positive attitude towards research which will increase the research productivity of teachers and quality of teaching at large.

Research and teaching are two pivotal activities in any college. But unfortunately research is not given due importance in colleges. College teachers with research aptitude must be encouraged and provided with necessary facilities. There are teachers with enormous potentialities. They are eager to do research but they are overloaded and also lack

infrastructure facilities. Privatisation, driven with a zeal for profit increases the workload, reduces the salary and faculty are pressurised to involve in research in order to get accreditation. The need for a conducive work environment is ignored. Hence, the self-financed institutions should be streamlined, especially with regard to workload and monetary emoluments. In aided colleges too, in the face of global competition and the need to maintain parity with international standards, the workload should be altered so as to facilitate research. The Government and the UGC should bestow their attention for the development of research in colleges by providing the infrastructure and resources necessary to make productive research a reality.

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The logo for the International Association for Frontiers in Education (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs. The upper arc is a light blue color, and the lower arc is a light red color. The arcs are positioned such that they appear to frame the text, with the blue arc on top and the red arc on the bottom, creating a sense of depth and movement.

iafor

Evaluation of bilingual education in a nursery school in Taiwan

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Evaluation of bilingual education in a nursery school in Taiwan

Cher Lin

Introduction

For the purpose of entering the globalization era and reinforcing the international competitiveness of Taiwan, the Ministry of Education (M.O.E) has been lowering the starting age for children to learn English, but only down to the age of 10, which in Taiwan is equivalent to year 3 in normal Taiwanese primary schools. However, more and more children in Taiwan are being rushed into an English learning environment at a young age (2 ~ 5). They are either sent to the monolingual (whole-day-English only) or bilingual (half-day-English only) preschools or nursery schools. This is a rapidly increased phenomenon in Taiwan. At present, it is really hard to find any private preschools where do not incorporate English classes or use English as the main medium in the curriculum programme (Chen, 1996; Hsu, 2000; Liao *et al*, 1999).

The reason why I am only mentioning the private sectors of preschools is that the public institutions are more controlled by the government, and in fact the primary schools up to the universities are all within the national citizen's educational system that the government has set up, so the institutions have to follow the rules of curriculum which would make the institutions unable to really implement bilingual education in practice in whatever way. Moreover, in the first National Ministry of Education Conference in 2004, the M.O.E announced a new regulation, which clearly indicates that any preschool using English as the only medium of teaching for the whole duration of a class is illegal. But, this has not prevented the practice continuing.

The major purpose of this study is to evaluate the bilingual education in Taiwan through investigating the opinions of the children, the parents and the teachers and examining the effectiveness of bilingual education in one of the largest established preschools in Taiwan.

How do children look at bilingual education?

From many unstructured interviews (daily conversations) and semi-structured interviews with 15 children in my focused class, I found that 12 of them like learning English, as the children found English classes fun and interesting. English classes provided a really lively environment, and teachers always used different games, songs or cartoons to hold the children's attention and to encourage them to learn. Because of the cultural differences, English teachers are more open to use their body language and facial expressions, sometimes they even have to make fun of themselves to heat up the learning environment. This is rarely seen during classes taught by Chinese teachers.

When I asked the pupils why they learn English, most of them did not know and

seemed confused by the question, I would suggest that this is because no one had asked them this question before, so they had not have chance to think about it. After they had a little thinking time, they answered me something like “because daddy and mummy want me to!”, “I want to go to America when I am older”, “I want to speak English like daddy/mummy”. Surprisingly, there were three children who have a very clear mind on this, and told me that they learn English, because they like it, and they want to learn more English when they get older. Every child expressed their own preferences of the different English sessions, which were watching videos, singing songs, playing games, reading...etc. 14 of them said “reading” first without much thinking, because they said during reading class, they could read out loud, and everyone had a chance to read a sentence or paragraph on their own. They also stated that they always learnt something from their reading book.

Most of them actively participated in every English learning activity, even when they had library hours during which they were free to take any books from the library (all the books in the library are English language) and read it on their own in the library corners. I found that some of the girls would share a book between two or three and read and discuss the contents of the book together in English. This is a result of the presence of Teacher E. Sometimes Teacher E gave the children the opportunity to play in the playground or ball-pool. During these times the children would shout and speak to each other in English. Although their English was not always correct, they were not afraid to speak loudly. Based on these two pieces of situational evidence, I found it difficult to distinguish whether the children like speaking English or not. It is however certain that they accept speaking English in the environment of the school. They also saw English as their main medium of instruction during school time. The children did not seem to see English as an academic subject that they have to learn in school, they simply speak it in the same way that they speak their mother tongue, Chinese. 2 or 3 of the the children with a more elavatedlevel of English would even use more colloquial language to express their feelings, expressions such as: “Oh my god!”, “Oh! No!”, “Oh! Yeh!”, “Nice one!”...etc.

In addition, from the parents’ questionnaires, I also found out that despite the fact that only half of the parents help the children to revise English at home, almost all of the children naturally use English sentences, short conversations or vocabulary even when they are at home in a Chinese environment. This fact emphasises that the children use English in the same way that they speak their mother tongue. These children are all aware that they will have to learn English as an academic subject when they enter the primary school level, but only 5 of the children were really excited and looking forwards to learning more complex language. The remaining children were actually quite scared and worried, as they were already having difficulties with English language learning. Nevertheless the children still prefer to have all the other lessons such as Art class, P.E. and music to be taught in Mandarin Chinese rather than in English, because they think Chinese is easier to understand. They feel that English is too hard and are more comfortable with lessons being taught in Chinese. Through my observations, I found that most of the children normally speak Chinese after their classes or when the English teacher was not around.

How do parents look at bilingual education and effectiveness of it?

There is no doubt that all of the parents wanted their children to learn as much as they could whilst they were young, in the hope that they could go on to a reputable higher education institution and then get a good job. I can reasonably conclude that the questioned parents wanted to secure their children's future by sending them to the bilingual school to learn English whilst they are young. The parents all come from the upper social class and at least one of the parents in the family was an English-speaker. Half of the parents thought of English as a necessary skill and that the ability to speak English is an international trend. Even if the children did not start learning English in preschool, they would still start learning since Year 3 in primary school. So why not give the children the chance to start earlier, and let them have more time to get used to the new language? The questioned parents also believed that if the children started learning a foreign language from a very young age, they would be more likely to obtain the pronunciation of a native speaker. They also believed that it is easier for children to learn a new language at an early age. 6 of the questioned parents have already thought further about sending their children to study abroad; it is therefore appropriate for the children to learn English now in order to prepare them for study abroad.

From the parent's perspective, almost all of them think that the present bilingual education in the subject preschool is effective, as the children are now able to speak English to any native speaker. It appeared to me that the only thing the parents cared about is whether or not the children have learnt English and have the ability to speak English. They did not, however, seem to be aware of any other factors which might influence a child's learning progress, otherwise they would give suggestions to the school or teachers or even find other preschools which provide better standards. Half of the parents were not satisfied with their child's English levels, especially their conversation and reading abilities. On the other hand, the other half are satisfied with children's oral and listening abilities. 10 of the questioned parents help the children to strengthen their English language abilities by practicing and revising English with them and giving them English picture books or video/audio learning materials.

If the parents can speak English and do speak English with the children at home, then the children's English ability appears to be better than children whose parents do not speak English. I also found that if the children live with grandparents (who speak Chinese dialects as their first language), or if the children can actually speak the other dialects, then the children's English language learning is not as progressive as that of the other children. This is particularly true in the area of pronunciations and tones. If the parents really want the children to learn English well, they cannot just rely on the school and teachers. Although ten of the parents are satisfied with the proportions of English language lessons and Chinese language lessons, they still think that there are many things that should be improved, such as the contents of the curriculum, English language abilities of Chinese teachers. Eight of the parents also think that the quality of the English teachers should be upgraded.

From my research I found that no one has ever thought to ask what the children think about issues related to the bilingual education, that is also the reason why when I

asked them questions during the interviews, they were all seemed confused and took some time to arrive at an answer. Although these children are still young and do whatever their parents ask them to do, it is still necessary for the parents or teachers to understand what the children think about it before telling them to do something. Treating the child more like an adult will make them become more independent and lead them to think more for themselves. This is one of Montessori's ideas. Moreover, it will also become easier to motivate the children if the parents and teacher is aware of the child's thoughts. This is just another traditional way that Chinese parents educate their children, which unfortunately includes a lack of communication with children. It is apparent that the Chinese parents only tell the children to do whatever they think is good.

How do teachers look at bilingual education and effectiveness of it?

All of the Chinese teachers are qualified as preschool teachers and five of them had obtained the certificate to work as preschool headmistress. The native-speaking English teachers, all held a degree from foreign countries (America, Australia, New Zealand and Canada), but did not have any qualifications for teaching at pre-school level. Teacher. G (Chinese teacher) informed me that because it is illegal to employ unqualified pre-school teachers, when the inspectors from the Ministry of Education come, all of the native English-speaking English teachers have to go through a back-door exit to hide in order to prevent the school from getting into trouble. It is clear that the qualifications of the teachers is a really important issue in some circumstances, primarily because pre-school children are at a very important stage for their emotional and physical development and need to be looked after carefully. It is for this reason that preschool teachers all over the world need to pass several examinations or undertake training related to psychology, theories on teaching young children.

Children from the middle and upper class have their mathematics and natural science lessons taught by the English teachers. Although the level of knowledge is not too advanced, it is still necessary for these teachers to be trained in a specific subject. I observed a mathematics lesson with a large class. The subject of the lesson was adding and subtracting, some of the children were experiencing problems understanding. As the teacher insisted on using the same method of explanation, the children's problems remained unanswered at the end of the class. Had this teacher been trained as a mathematics teacher, she would have been able to use different teaching methods in order to assist the students. Nevertheless, there are still some teachers good at teaching subjects other than that for which they were trained. For example, Teacher. E. was teaching natural science with Spring class. The topic that day was "plants". Every time a child raised their hand to ask question, the teacher would try different ways to explain, using as much body language as she could to help the children understand the process of photosynthesis.

Most of the foreign teachers at the school never intend to be a preschool teacher, but as the salary is twice as much as the Chinese teachers' and their workload is far less than that of the Chinese teachers, they simply see the job as a way for them to earn money. I am doubtful that they are able to teach the children to the required standard. The English teachers did not have many comments to the questions that I asked.

They did not seem willing to be interviewed for something they did not sign for. However, all interviewed teachers agree that the bilingual education at this school seems to be effective, but there is still significant room for improvement. They also think that the children's English abilities are impressive, especially in the areas of listening and speaking. But 14 of them feel that things need to be changed and improved in order to make bilingual education really effective. 4 of them think that the proportions of English and Chinese lessons are not right and need to be revised; there are too many English lessons. 10 of the teachers think that the curriculum and the textbooks should be replanned and redesigned.

What are the apparent advantages of bilingual education?

When children start learning a second language from a young age, children's English abilities are easily seen. They usually had at least 35 minutes of reading session everyday. During this period Teacher. E. would use one of the reading books from the reading list. Whilst conducting my research there, I saw them working through a number of Level 3 books on their reading list such as "Looking for Fang", "Birthday Cakes", "Tadpoles and Frogs", "Plants", "Living and Non-living Things"...etc. Teacher E always started from the front cover of the book, and asked the children "who is the author?" and "who is the photographer?" Teacher E would pose the questions in several different ways such as "Who wrote this book?", "who is the cameraman?" or "who took the pictures in this book?" This gives the children chance to understand different way of making sentences, and using different words. Through these reading sessions, children have the opportunity to practice reading, recognise new vocabulary and even other knowledge in the field of biology, mathematics, science...etc

Most of the children are of the opinion that they are good at English. This is a positive phenomenon, because it is important that these children have self-confidence which will definitely help in their learning process. I did not expect them to understand so much vocabulary in a completely different language at such a young age. Although they do not always use the correct grammar or tense, they can still communicate with English speakers, the main purpose of a language is communication. They are not afraid to speak out which is a good start too, because language learners do need courage to speak out and should not be afraid to make mistakes. That is a necessary stage that they have to go through in order to learn a language well.

What are the apparent disadvantages of bilingual education?

All of the children can easily read English storybooks or their reading books on their own, but in my focused class, 'Cynthia' is the only child who is able to read a Chinese storybook on her own, because she has been taught Chinese characters by her parents. There is only one hour and half of Chinese language a week. In the curriculum designed by the school, children are taught some simple Chinese characters which are usually used in daily life. However, due to time limitations, the children do not have enough time to learn and memorize these words, the rate of progress in Chinese is therefore quite poor and the children do not recognize many Chinese words. Although the children have a good learning environment and have great abilities in English

language, they are going to enter public primary schools after all, which means that they will need a period of time to get used to massive changes in their learning environment for English language learning. A coherent curriculum is really important to achieve a good standard in learning.

In addition, the children at this school have to get used to American English, and can only recognize the American accent. In my opinion the teachers should alert the children to the fact that there are many different kinds of pronunciations for the English language, as it is used in different countries. Otherwise they might always think that if people's pronunciation is different, then the children may think that that person is wrong. For example, Lilian is one of the children with a more advanced standard of English. There were several times that a small group of children came to me with some questions, as I was trying to make easier sentences for them to understand, I used words like apple, box, oven and cup. Due to the difference in pronunciation between English speakers and American speakers, Lilian said : "you are wrong! It should be pronounced like...." And Jay even said to me "you don't know how to speak English, but we do!" Then I tried to explain to them why I pronounced these words differently, but they still thought that I was wrong and there was nothing I could say to convince them otherwise.

Now, I am going to present the problems that I saw in the bilingual class in 6 different aspects, "teachers' beliefs", "teaching materials", "teaching methods", "special tutorials", "communication with children" and "co-operation and communication between Chinese and English teachers".

Differences beliefs

Most of the English teachers want to create a natural, pressureless learning environment, so they do not ban children speaking Chinese in the classroom. Their activities in the lessons are more centred around singing, playing games. They are also unlikely to give the children homework. Some of them have their own ideas about teaching, and clearly planned their teaching methods and materials. There are still a number of English teachers who do not put much effort into their work, and may just think playing games and singing is enough for the children to learn English well.

On the other hand, some teachers have very different beliefs in teaching. They emphasise an English-only learning environment, and may be really strict about this. They do not wish the Chinese teachers to help translating, and if children do not speak English in the classroom, they might punish children by deducting award points.

If the teachers do not have similar beliefs in teaching, then it will become hard to co-operate with each other. I also found that there is a very big gap of children's English level in different classes. For example, children in my focused class have much greater English ability compared with the children of the other classes. This is because Teacher. E. was very strict with the children, and she even wrote "No Chinese, English only" on the regulation board to remind the children. Despite her rather strict approach, I have to admit that children learn a lot from her lessons. However, I still think that the school should have discussed this issue with individual

teachers, to avoid differences in achievement levels between children and classes. Such an approach would probably be more favourable to the parents too.

Appropriateness of teaching materials

The main textbooks and activity books are both designed and published from their related publisher company, plus a series of reading books in different levels which are imported from abroad. Generally speaking, the textbooks provide simple and clear pictures with several sentences, which seemed to fulfil the children's demand. But most of the teachers think that they are too easy. Taking this into account, they designed their own teaching materials to back up the existing textbooks. I think it is really difficult to say whether the contents of the textbooks are easy or not. If the children were learning English as a second language, and do not use it for communication at school, then I would say that the content seems appropriate for children of this age range. If the child is in a bilingual learning environment, and if English is the only language they are allowed to speak in the classroom, I would definitely say that the contents of the textbook are much too easy for them. If it were not too easy then they would not have been able to communicate and understand their lessons for the past two years. In terms of the reading books, I think that the contents let the children learn other knowledge at the same time, they are also good practice for the learning of new vocabulary. I also think that children seemed disinterested in topics that they are not too familiar with, such as talking about the beautiful places in Western countries, the history of Western festivals...etc. Every holiday such as Halloween, Christmas, Chinese New Year, Easter and Thanks Giving, the school organises shows. For these occasions the children need to memorize songs or lines in English. Despite the fact that they may not understand them, they have to practice over and over again for a month. This is simply a way to show the parents how the children have done well in their English lessons.

Whether the teaching methods are suitable

Activities in the English lessons include revising the old topics, presenting new topics, drills, games, singing, competitions and work time. Teacher. E. usually introduced two ~ three different topics a week. For every topic, she firstly presented and clearly explained some sentences with simple grammar and several new items of vocabulary, then she would do a drill (both choral drill and chain drill). Next, she used the reading book for the children to practice reading and pronunciation, which was a good opportunity for them to naturally memorize the new words too. Then she would ask the children to make their own sentences using the patterns which had just been taught and the new words which were written on the board. There were always children who actively participated and those who would simply be daydreaming. They would do this for two ~ three lessons, then Teacher. E. would play some games or competitions with them to revise everything that had been taught. Most of the time, she asked the children what they want to do, play games, watch videos, have a competition...etc, and if children could not agree thing, they would be asked to vote. It is always really critical to use competition when teaching children, because the purpose of competition is to motivate. I found that competitions would result in arguments which then become a problem.

Children who like competitions are those who are better in English and more popular children in the class, but those who did not do well in the competition are normally those who are shy and perform below average with oral work. This might become a serious problem for those weaker children in the class, because they will be more and more afraid of hearing others saying “it’s all your fault”, “what are you doing? It is easy”...etc to them, which can make the children become less interested in learning English as a result. Teachers should therefore pay some attention to this issue. Preschool teachers usually do not teach children grammar on purpose, because English education is emphasising understanding the meaning and trying to avoid the input of grammar. I believe that children should be allowed to become a good language user, and not a scholar of language structure. Teacher. E does not really allow children to make any mistakes; she corrected their tense, singular/ plural, prepositions and irregular words most of the time in the class.

No extra tutorials

Within one school day, teachers can use some time to talk to children who have difficulty with learning language (Spodek & Saracho, 1993). In every class, there are always some children who learn new things really quickly, and some who cannot. During these two months of observation in Spring class, I found that their curriculum was twice as much as other classes. However, strictly speaking there were only 5~6 children who were actually up to date with the lessons, and rest of the children still could not really absorb new sentences, vocabulary and use them without difficulty. Teacher. E. did not give individual tutorials to help the slow learners, she just asked them to drill more times during the class, and if they did not know how to make a sentence or did not know how to answer the questions, she would just ask them to concentrate and listen to others in the class. So as a result, children who gain more award points are always those better in English. That is also the reason why those children I interviewed do not like learning English, because they think English is too hard, they can not understand what the teachers were saying and they do not know how to speak English. Teachers must give extra care to those who need extra help, otherwise the children will learn nothing (Lin, 2004).

Communication breakdown

Teachers need to have interactive relationships with students in order to help the children to agree with the functions and values of a language, then they will be able to stimulate their motivations, and raise their learning interest (Chang, 1995).

Teacher. E. Did not speak to the children much after lessons, I think this maybe because the children always had snack time or lunch time straight after the classes, and children were taught to go to the bathroom before their meal. Teachers also do not like them to talk too much during the meal time, otherwise children would be late for nap time or their next class. English teachers do not have to eat their meals with the children, so sometimes they would go out and come back just before the next class began. So the children were always closer to the Chinese teachers rather than English teachers.

Co-operation and Communication between Chinese teacher and English teacher

In this preschool, most of Chinese teachers do not communicate with English teachers very much. This is firstly due to the fact that the Chinese teachers have a very heavy work load, they have to decorate the classroom, write in the parents books, fill the children's water bottles, set children ready for breakfast, lunch and snack, put children in bed for their nap...etc basically they have to everything. Some of the English teachers might help, but some do not. Secondly, most of the Chinese teachers do not speak English fluently and sometimes they have problems understanding English teachers too. I consider this to be a problem as the children might copy the mistakes of the Chinese teacher. Whereas if the Chinese teacher and the English teacher have no problems with communication, then when they are talking in the classroom, it provides a good chance for the children to hear different kinds of conversations from that which they are used to.

Final Thoughts

Finally, I hope the public and parents can understand what these young children really think and want, and not just think "I am doing the best thing for my children, they are still young, they will not be able to understand how much I have done for them". They should instead try to ask children things like "do you like this arrangement?" before making them to do so. Although they are young, they still have very clear preferences and dislikes like adults.

Nevertheless, I still have to say that I was really surprised and impressed by their English abilities. I did not expect the children to know so many words and phrases. Although I do not agree with English-only strategy in the class, it seemed to create an efficient learning environment, maybe not a happy learning environment though.

I also think that teachers should use different methods to teach and help children with different personality and characteristic, because there are always some children like English and some do not, how to lead English learning towards a good direction is all up to teachers, so I might say that the main factor to influence the effective learning is teacher.

Effective learning needs more than a good teacher. In the other words, effective bilingual education involves many factors like the school's objectives, teachers' beliefs, teaching methods, parents' attitudes, children's cognitive level, children's personalities, dependence on mother tongue, hardware facilities, teaching materials...etc. Also everyone views language teaching from different angles and different people have varying criteria as well. The teachers and parents are of the opinion that bilingual education is a good idea, clearly children's English listening and speaking abilities are improved by the bilingual system. In my opinion there are still many elements of the bilingual system which can and must be improved. The government and schools must implement measures to prevent slow development and weakness of bilingual education.

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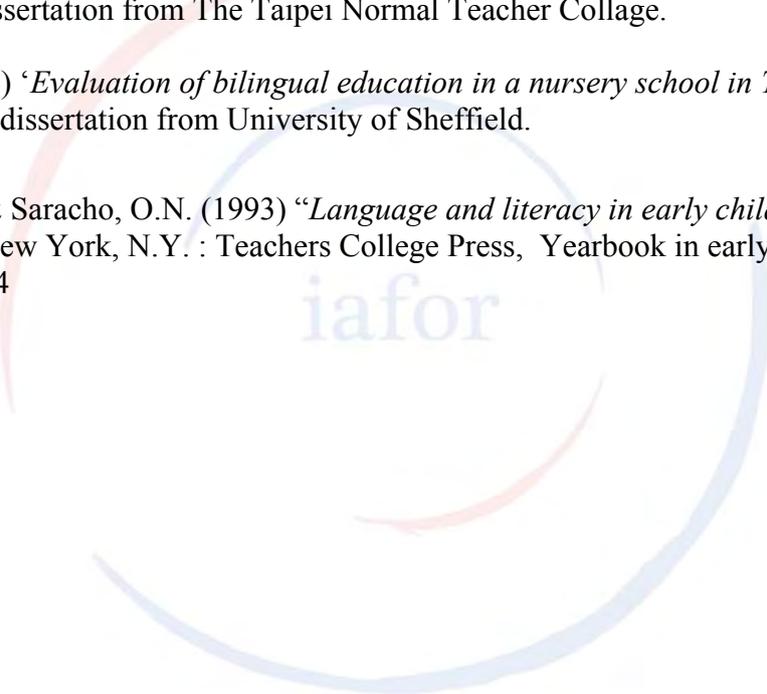
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The logo for the International Association for Educational Research (IAFOR) is centered on the page. It features the word "iafor" in a lowercase, sans-serif font. The text is overlaid on a circular graphic composed of two concentric, semi-transparent arcs in shades of blue and red, creating a stylized circular emblem.

Black and white knights: globalisation, internationalisation and higher education

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Abstract

This paper examines the concepts of globalisation and internationalisation and argues that whilst the former has redeeming features and outcomes, some global forces have the capacity to impact negatively on many cultures and nations around the world by foisting upon them a homogenising universalisation based on a neoliberal economic rationalist, consumer-driven 'world culture'. Promoting international, intercultural and global understandings in higher education through internationalisation, particularly when underpinned by the spirit of 'internationalism', is one way of ameliorating this. Viewed this way, internationalisation processes can be a rescuing and redeeming 'White Knight' which battle against the potentially destructive 'Black Knight' elements of globalisation to help shape functional and moral outcomes from global processes. This is an excellent representation of internationalisation as a process which plays an important role in 'globalisation from below' or 'grassroots globalisation' which acts in a 'bottom-up' fashion on many 'top-down' global forces. The paper purposefully draws on literature from around the turn of the millennium when writers were beginning to place considerable focus on the current period of globalisation and its implications for the planet and its inhabitants. This body of literature provides a rich environment for drawing out understandings around globalisation and internationalisation that remain relevant for researchers and observers in the area today.

Keywords

Globalisation, Internationalisation, Internationalism, Higher education

Introduction

There are two ways of thinking about globalisation and Currie and Newson (1998) suggest that it is important to distinguish between them (p. 1). One is to consider globalisation as a 'process' or a 'mechanism'. That is, a non-ideological interpretation of the essence of the phenomenon that describes, for example, the nature of global flows of technology, economy, knowledge, people, values and ideas (Knight 2003). The other way is to view globalisation as the forces that are driving and shaping the process or the mechanism itself. Giddens (2002) provides an insight into this when he suggests that globalisation "is led from the west (and) bears the strong imprint of American political and economic power" (p. 1). It is evident, then, that globalisation can be appreciated both as a process, that is, "exactly what is 'global' about globalization?" (Held, McGrew, Goldblatt & Perraton 1999, p. 15), and also in terms of the ideologies that are driving the process and give form to global flows. Perhaps this is what prompts Stiglitz to reflect that "the idea of globalization is very simple" (2003, p. 51), yet "the world is a complicated place" (2002, p. 217). This paper unpacks both perspectives and suggests that internationalisation based on the spirit of 'internationalism' is a 'White Knight'

that can be mobilised by the discontents of globalisation to moderate its potentially destructive ‘Black Knight’ aspects. Throughout the paper the relationship between globalisation and higher education will be made explicit. The aim, however, is to initially focus the argument in this paper on the biggest stage possible; that of appreciating the essence of globalisation as a phenomenon affecting the human condition both as a process and as an ideology. In this way, an understanding of the implications that global forces have for higher education can be better gleaned.

Globalisation as a process

An appreciation of globalisation as a process is valuable because an understanding of this concept will also help tease out its relationship with the process of internationalisation. The two terms are related but each has a distinct meaning. Not only do many struggle to understand the meanings of both but the nature of the relationship between them is also elusive. In a bid to clarify the argument around globalisation, Held et al. (1999) suggest that the present period of ‘global transformations’ is historically unprecedented. They usefully describe the essence of globalisation as:

... a transformation in the spatial organisation of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating trans-continental or interregional flows and networks of activity, interaction, and the exercise of power. (p.16)

Using the work of Held et al. (1999) as the backbone of this section of the paper is akin to taking Ockham’s razor to the plethora of literature that comprises many accounts of the multi-faceted nature of globalisation. In a parsimonious way, it simplifies the approach to understanding globalisation, without simplifying the concept itself. It avoids the confusion of trying to sort out what globalisation ‘is’ if one were to instead sift through the “hundreds of different views on globalisation; pro-, anti- and barmy” (Legrain 2003, p. 313). Held et al. (1999) suggest there are three different ways of looking at the phenomenon, that is, through the eyes of the ‘hyperglobalisers’ (or ‘hyperglobalists’), the ‘sceptics’, and the ‘transformationalists’. A summary of the main characteristics of the hyperglobalisers, sceptics, and transformationalists in relation to broad global flows is presented in Table 1.

The hyperglobalisers and sceptics occupy opposite positions to each other. The hyperglobalisers (called “radicals” by Giddens 2002, p. 8 and “deregulators” by Koenig-Archibugi 2003, p. 8 and “globalists” by Saul 2005) argue that contemporary global flows signify a ‘new world order’ where global mechanisms are superseding the function of the chief geo-political entity of the past two hundred years; the nation-state. Held et al. (1999) state that the hyperglobalist world generally reflects neoliberal economic perspectives and a belief that the free market will denationalise economies (p. 3). The nation-state would be obsolete (Callinicos 2001, p. 18). Nations would become fictions (Giddens 2002, p. 8). For hyperglobalisers, globalisation is the emergence of a truly global age “involving the triumph of global capitalism and the advent of distinctively new forms of global culture, governance and civil society” (Tickly 2001, p. 153).

In the case of higher education, the terms ‘global education’ and ‘borderless education’ spring to mind as expressions that suit the hyperglobalist position. Knight (2004) says that global education is worldwide in scope and does not rely on the concept of ‘nation’, that is, an entity defined by territorialised borders (p. 8). Advancements in Information Communication Technologies (ICTs), in particular, have leveraged significant opportunities for traditional and non-traditional education providers to see the world as their oyster and not be limited to particular countries for their student base. The hyperglobalist position would recognise the ways that the ‘global economy’ and ‘global governance’ are changing the face of higher education. That is, the commercialisation and commodification of education under neoliberalism and, by extension, the way that the World Trade Organisation (WTO) supports the opening up of educational markets to international competition through the General Agreement on Trade in Services (GATS) (Teekens 2000, p. 16). For Vitz (1998), such developments are the direct result of the decline of the modern state and are changing the face of higher education. Inayatullah and Gidley (2000) assert that “globalism is a driving force (...) the bureaucratic structure forces one into a position wherein the university and the self become corporatized” (p. 7). Another undesirable view of hyperglobalist education is expressed by Marginson (1999/2000):

The danger rather is *global convergence*: that the contents of the media and systems of ‘globalisation’, including the models of higher education we employ and the systems of international bench-marking that we follow, will push everyone, in every country, into common patterns of higher education, in which an (idealised) American university model becomes the only possible model. (p. 5, italics in original)

Table 1. Conceptualising globalisation: three tendencies

	Hyperglobalists	Sceptics	Transformationalists
What’s new?	A global age	Trading blocs, weaker geo-governance than earlier periods	Historically unprecedented levels of global interconnectedness
Dominant features	Global capitalism, global governance, global civil society	World less interdependent than in 1890s	‘Thick’ (intensive and extensive) globalization
Power of national governments	Declining or eroding	Reinforced or enhanced	Reconstituted, restructured
Driving forces of globalization	Capitalism and technology	States and markets	Combined forces of modernity
Pattern of stratification	Erosion of old hierarchies	Increased marginalisation of the ‘South’	New architecture of world order
Dominant motif	McDonalds, Madonna, etc.	National interest	Transformations of political community
Conceptualization of globalization	As a reordering of the framework of human action	As internationalization and regionalization	As the reordering of interregional relations and action at a distance
Historical trajectory	Global civilization	Regional blocs/clash of civilizations	Indeterminate: global integration and fragmentation
Summary argument	The end of the nation-state	Internationalization depends on state acquiescence and	Globalization transforming state power and world politics

support

Source: Held et al. 1999, p. 10.

In opposition to the hyperglobalists are the sceptics who believe that nothing has changed and that the 'old world order' continues through the pre-eminence and dominance of the nation-state. Hirst and Thompson (1996) called globalisation the "necessary myth" (see pp. 1-17). The heart of the argument of the sceptics is that "all the talk about globalisation is only that – just talk (...) the world carries on much the same as it has done for many years" (Giddens 2002, pp. 7-8). It is "old wine in new bottles" (Skelton & Allen 1999, p. 1). The sceptics believe that nation-states remain in control of their own interests and despite the emergence of global trade, economic interdependence is not historically unprecedented. Whilst global processes are introducing new supranational infrastructures which transform the way power is reproduced and contested, Held et al (1999) point out that, paradoxically, the nation-state remains the "near universal form of human political organization and political rule" (p. 425). Legrain (2003) states that "national borders are not about to disappear" (p. 9). Green (1997) qualifies this by observing that over 100 nation states have been established since the late 1960s, 18 of which have been officially recognised since 1991 (p. 157). Sceptics view talk of global governance as a Western project that seeks to maintain the hegemony of the world's rich and developed countries (Held et al. 1999, p. 6). They interpret globalisation as merely "the latest stage in the exploitation of the third world by the West" (Giddens 2002, p. xx). Sceptics take an emerging 'World Culture' to be an extension of Western culture. It could also be viewed more narrowly as "Americanization" (Prestowitz 2003, p. 6) although as Giddens (2002) points out, globalisation "affects the United States as it does other countries" (p. 4). Globalisation is a two-way street, despite the dominance of traffic in one lane. As suggested by Held et al. (1999), globalisation is "still highly asymmetrical (but) less Eurocentric or Atlantic-centric" than a century ago (p. 430).

The sceptics would acknowledge that although higher education around the world is changing, the fundamental geo-political unit of the nation-state still dominates the structure and function of individual countries' institutions of higher learning. National interests still drive national education systems. This, of course, does not discount the flows of scholars, students, technologies, and ideas around the world. It makes sense, however, to speak of them as processes aligned with the 'internationalisation' of higher education and 'transnational' education. Indeed, another term, 'cross-border' education actually emphasises the existence of national borders (Knight 2004). Inasmuch as nation-states are still the major determinants of much of human activity, it also has to be recognised that the world is largely dominated by the Western worldview. That is, there is a prevailing hegemonic order of nations, with those in the West (North) being key drivers of the new 'knowledge economy' or 'knowledge society' in which higher education plays a significant role. In relation to higher education Altbach (2002) notes that "the voices discussing internationalization are largely Western". Further, English, the most widely studied foreign language in the world and also the most widely used second language, is the dominant language of 'international' higher education (Altbach 2004). Of interest, Altbach (2004) says that even within the hegemonic West, there is an unequal balance of power, with the older and wealthier institutions restricting the ownership and distribution of 'commodified' knowledge.

The transformationalists occupy the remaining position and this is the thesis to which Held et al. (1999) and Giddens (2002) subscribe. Instead of signifying a totally new world order or reflecting more of the same as what has already passed, transformationalists believe that it is

a bit of both but with enough unique elements to distinguish itself from either. In the emerging environment, nation-states and national policies remain crucial, but nations are open to international trends and cross-border influences to an unprecedented extent (Considine, Marginson, Sheehan, & Kumnick 2001, p. 6). In the absence of true political global governance, nation-states are not passé, despite some changes to their ability to fully regulate and control, for example, information and financial flows. In Marginson's (2004) view, they have simply reorganised themselves to work with greater levels and layers of global interconnectedness. Rather than viewing globalisation as a singular condition or a linear process, transformationalists believe that it is a highly differentiated phenomenon across several domains of activity and interaction (Held et al. 1999, p. 23). It is historically contingent and has massive transformative power that is causing a 'shake-out' of societies, economies, institutions of governance and the world order. Further, it is replete with contradictions, uneven in its application, and its ultimate trajectory is not yet explicit (Held et al. 1999, pp. 6-7). This view is supported by Appadurai (1996) who suggested that "if a global system is emerging, it is filled with ironies and resistances" (p. 29).

A transformationalist view of higher education recognises elements of both the hyperglobalist and sceptic positions. Higher education is changing as a result of supranational *and* national forces. The trajectory of such changes, however, is not apparent at this moment. Indeed, for some, the future of the university is not even guaranteed. Vitz (1998), for example, notes that in the United States, many leading academics have already moved from universities into 'think tanks' or independent institutes. As such, the transformationalist account sees higher education as a contested area of human activity, with uneven and contradictory outcomes. Perhaps the most important element of the transformationalist view of higher education lies in its capacity to generate and usher in new ways of thinking to deal with societal and environmental challenges which are the result of activities along the local, national, regional, and global continuum. 'Transformative education', according to writers such as O'Sullivan (1999), Slade (2002), and Vitz (1998), is a necessity for the survival of humanity. A transformative curriculum would be informed by perspectives along the local-global continuum to equip students with the necessary knowledge, skills and outlooks to deal with the challenges they will encounter in life and work.

Discontents of the 'Black Knight' of globalisation

Whilst the previous section described globalisation as a process sans ideology, a value-rich appreciation of the phenomenon is useful because it addresses notions of power and influence associated with the "neoliberal project" (Held et al. 1999, p. 431) which has had a significant impact on global processes. Whilst this political ideology has broad implications for the human condition in general, it specifically affects higher education through a shift towards governance which is increasingly influenced by business values and market forces (Currie & Newson 1998, p. 2) pushed along by supranational entities like the World Bank, the International Monetary Fund (IMF), the World Trade Organisation (WTO). The aim of this section is to consider globalisation from the points of view of those who openly criticise what they perceive as negative, 'Black Knight' aspects of global processes. Bauman (1997), Sassen (1998), Stiglitz (2002) refer to these critics as the 'discontents' of post-modernity and globalisation and Held (2003) describes them as a "loose constellation of social movements (including the anti-globalization movement), trade unionists and (a few) politicians and intellectuals" (p. 166). Investigative journalists like Friedman (2000), Pilger (2002) and Monbiot (2004) should be added to this list. The discontents are a collection of

commentators, authors and organisations that, for a variety of reasons and from a multitude of backgrounds, essentially flesh out the observations of Held et al. (1999) that globalisation processes occupy an uneven and contested terrain, dominated by a neoliberal, market-based ideology and characterised by asymmetrical power relations. The discontents interrogate Gill's (1997) statement of "globalisation for whom and for what purposes?" (p. 205). Whilst not all discontents argue about the same things and from the same point of view, there is nevertheless a strong pattern to their arguments. They largely resonate with Dudley's (1998, p. 22) assessment of globalisation as a world system driven by an interconnected economy that is derived from the following independent developments:

- The aspiration of virtually all societies throughout the world toward Western materialist / consumer-based lifestyles;
- The penetration and near hegemony throughout the world of Western popular culture, particularly American expressions of this mass culture;
- The increasing dominance of Western, and particularly U.S., models of production and consumption;
- The increasing integration of world economies into a single global international market; and,
- Free trade and the new international division of labour.

Rather than riding the "high tides" (Mittelman 1997, p. 241) of neoliberal globalisation, the discontents advocate for a more democratic form. Ruggie (2003) suggests that the discontents form part of the "backlash" against globalisation, and argue against the highly uneven distribution of benefits, the growing imbalance in global rule making, and the increased vulnerability of people to forces that can result in economic instability and social dislocation (pp. 96-97). The discontents respond to the conflict that globalisation causes as it "pushes upwards (and) downwards (and) squeezes sideways" (Giddens 2002, p. 13). They take issue with global processes that pull and push societies in opposing directions (Held et al. 1999, p. 14), cause fragmentation, and create contingent and contradictory outcomes. Their ideologies generally approach ideas related to social justice, civil society, economics, the environment and the public good from different perspectives than the neoliberal view. The voices of the discontents are a sounding board for the 'fit' of global processes to the breadth of humanity's lived experience, and whilst their activities and views "may not resolve the great antinomies of power that characterize this world (...) it might help even the playing field" (Appdurai 2001, p. 20). As Friedman (2000) notes, they represent an important part of the process of 'globalisation from below':

The backlash against globalization is a broad phenomenon that is fed by many different specific emotions and anxieties. This backlash expresses itself in different forms, through different characters in different countries (...) they have come together to create a whirlwind that – for the moment – is only buffeting globalization systems but one day might become strong enough to destabilise it... (p. 329)

A few 'globophobes' would like to get rid of globalisation altogether. Koenig-Archibugi (2003) called these the "reversers" (p. 8). This paper, however, supports the position outlined by Giddens (2002) who says that "the problems of the world would not disappear with a retreat from globalization" (p. xxix). Legrain (2003) believes that stopping globalisation is not a solution (p. 64) and that the only one way forward is to "build a better globalization"

(p. 24). This echoes Biggs's (2002) sentiment when he says, "globalisation is upon us; it is less than helpful to command, Canute-like, the tide to retreat. Rather the wise thing would be to acknowledge what we cannot change, and focus on what we can change" (¶2). The solution is 'New Global' instead of 'No Global' (Koenig-Archibugi 2003, p. 9). As such, the view of 'destabilisation' adopted here is a reorientation of global processes to make them more effective and equitable. It is through the rumblings, ruminations, protestations and writings of this group of "peacefully protesting" (Giddens 2002, p. xxi) discontents that the argument is made that if the world is indeed going to be globalised, the opportunities presented by this era should be harnessed for the benefit of all of humanity and not just the privileged few in positions of political, cultural, economic, and military power. It is to this end that internationalisation processes as a 'White Knight' can be mobilised as a 'bottom-up' response to 'top-down' global 'Black Knight' forces.

Discontents in higher education: internationalisation as the 'White Knight'

Knight (1997) claims that globalisation has the potential to destroy many cultures in nations around the world by foisting upon them a homogenising universalisation (p. 6). Internationalisation, suggests Knight (1997), "is one of the ways a country responds to the impact of globalisation yet, at the same time respects the individuality of the nation" (p. 6). The critical statement by Knight (1997) that follows is that "globalisation can be thought of as a *catalyst* while internationalisation is the response, albeit a response in a proactive way" (p. 6, italics in original). This 'White Knight' view is generally supported by a number of other authors as outlined below and it is clearly based on the spirit of internationalism (described in the following section of the paper.) As put by Cambridge and Thompson (2004), 'international education' (used in the broad sense of 'internationalisation') has more recently "been used to denote an ideology of education oriented towards 'internationalism' and 'international-mindedness'" (p. 161).

Altbach (2004) says that whilst globalisation is about trends that have cross-border implications, internationalisation responds by being "the voluntary and perhaps creative way of coping with or exploiting globalisation" (p. 3). In the case of higher education, Altbach (2002) perceives internationalisation as specific policies and initiatives of countries and individual academic institutions to deal with global trends. Van der Wende (1996) sees internationalisation as "any systematic effort aimed at making higher education responsive to the requirements and challenges related to the globalization of societies, economy and labour markets" (p. 18). For Harman (2005), internationalisation is about structural adjustments institutions make in response to global flows, plus the opportunity to better understand other countries and cultures (pp. 120-121). Teekens (2003) adopts Knight's internationalisation approach and speaks of globalisation as a process of "increasing interdependence between economies in the various parts of the world". She says that whilst this creates many opportunities for "borderless learning", it also has the potential to create a global culture, "leaving little room for cultural diversity and self-determination" (p. 15). Teekens's (2003) view on the potential threat of globalisation foregrounds it as the 'Black Knight'. Back, Davis, and Olsen (1997) are more forthcoming in unclenching globalisation as the 'Black Knight', whilst alluding to internationalisation as the 'White Knight':

Internationalisation of higher education recognises nations and describes a process of interchange of higher education between nations. On the other hand, the term 'globalisation' lacks the spirit of cooperation of internationalisation and is seen as

something more threatening with overtones of imperialism or take-over. Thus globalisation of higher education suggests a supranationalism that straddles national boundaries, giving scant regard to the wishes of collaborating nations. (p. 42)

It is important to note that whilst internationalisation can represent the ‘White Knight’ response to global forces, it can also be interpreted as both a *reflection* and an *agent* of global forces. This view of internationalisation is evident in Rizvi’s (nd) statement that ‘international education’ (again, used in the broad sense of ‘internationalisation’) can best be viewed “as both an expression and a response to the general processes of globalisation”. Such a relationship is also inferred in the statement by the Australian Vice-Chancellors’ Committee (AV-CC) that “a concomitant of globalisation is internationalisation” (2001, p. 5) and in the assertion by Eckel, Green, and Affolter-Caine (2004) that internationalisation is a “sibling” of globalisation (p. 299). Some discontents of globalisation might see this as the ‘White Knight’s’ alter ego; a ‘Little Black Knight’! The interpretation of internationalisation as both a reflection and an agent of globalisation is based on the way that institutions, for example, have picked up on opportunities leveraged by broad globalisation processes. For instance, to satisfy the demand for learning English, many institutions in English-speaking countries (and in some non-English speaking ones as well) offer full fee English language programs for international students. Similarly, broad global forces can be said to have stimulated the significant flows of degree-seeking students from developing countries to more developed, English-speaking countries. Moreover, in many developed nations neoliberal economic rationalist measures have led to educational institutions having to seek sources of funding other than from the diminishing ‘public purse’. The resultant large international student programs in countries like Australia, United Kingdom, United States, and New Zealand are expressions of these broad global machinations. As well as institutions themselves being affected by global forces, they also respond to the needs produced by global forces. In doing so they act as agents who reinforce and extend the very forces that stimulated the response.

Internationalism – the essence of the ‘White Knight’

The section above portrays internationalisation as a mechanism that acts in a ‘bottom-up’ fashion against ‘top-down’ global forces. This section introduces ‘internationalism’ as a key concept inherent to discussions around ‘White Knights’ in the internationalisation of higher education. Whilst used less frequently than ‘internationalisation’, the words ‘internationalism’ and ‘internationalist’ are occasionally employed in the higher education literature. A definition of ‘internationalism’ is “the view that the nations of the world should co-operate politically, economically, culturally, etc and work towards greater mutual understanding” (Manser & Thomson 1995, p. 672). Quiggan (2003) provides a good sense of how internationalism relates to globalisation:

Internationalism is not a political movement like social democracy or neoliberalism, nor is it a central term in a body of argument, like globalisation. Rather, it is a general aspiration (...) As opposed to globalism, internationalism accepts the reality and legitimacy of national governments. This legitimacy arises in part from acceptance of the idea of the nation-state, that particular groups of people (nations) are bound together by ties of common history and language, and are natural units of governments. (¶ 1)

In a traditional sense, then, ‘internationalism’ contains a functional and even a moral imperative. This is evident in Knight’s (1997) assertion that internationalisation is concerned with “respecting and perhaps even strengthening local, regional and national priorities and culture” (p. 6). It is also evident in the work of Appadurai (1997) who uses ‘internationalism’ to describe the internationalisation of research in higher education. He promotes the “spirit of internationalism” and “critical internationalism” as ethical approaches to the “deparochialization of the research ethic” from a dominant Western view to a shared worldview (pp. 55-60). In the same manner, Hatakenaka (2004) suggests that “developed countries have traditionally supported internationalism principally to enhance mutual understanding among different cultures” (p. 4). Johnson (1996) speaks of academic communities worldwide as having “a certain internationalism” in the sense of being open to and accepting of other cultures (p. 84). For Jones (1998), too, ‘internationalism’ has a moral basis. He states that internationalism has an “intrinsically democratic foundation (and) looks to a world ordered by structures supportive of that functionalism which is embedded in accountability” (p. 143). Jones (1998) contrasts the ideal of internationalism against “unfettered capitalism” (p. 143) which he believes is driving globalisation processes. Such a view portrays internationalism as inherently good and globalisation as inherently bad. It should be noted, however, that the idea of globalisation itself is not necessarily a negative thing. It is the management of the processes and their outcomes that are contentious. In any case, internationalism, too, may be contorted by hegemonic forces, as evidenced by Scott’s (1998) view of “the old internationalism, still dysfunctionally dominated by the West” (Scott, 1998, in de Wit, 2002, p. 17).

A definition of ‘internationalist’ is “a person who favours internationalism” (Manser & Thomson 1995, p. 672). Singh (2002) speaks of the “new internationalist worker, citizen and learner” as someone who is supported by a university education based on innovative approaches to teaching and learning to meet the demands of the global economy (p. 1). For Cambridge and Thompson (2004), “internationalist international education” appeals to the standard definition of internationalism given above and is contrasted against “globalist international education” which is underwritten by free market values (p. 161).

Conclusion

This paper has sought to clarify the concepts of globalisation and internationalisation to leverage a better understanding of the phenomena themselves, the relationship between them, and also the ways in which they impact on, and are manifested in, higher education. The argument is deliberately drawn from literature evident around the turn of the millennium when there was an intense focus on trying to understand the essence of the current period of globalisation and its likely implications. It was in the decade starting from around the mid-1990s that people initially posed fundamental questions like ‘What is globalisation?’, ‘What is internationalisation?’, ‘What is the relationship between globalisation and internationalisation?’ and ‘What does this all mean for higher education?’ The paper demonstrated that globalisation can be viewed as a process from a non-ideological standpoint, and also as a vehicle that is driven by value-laden ideologies. The use of the work of Held et al. (1999) provided insights into both perspectives and suggested that whilst nation-states are not disappearing, their sovereignty has in ways been compromised by a range of supranational forces. Moreover, the trajectory of contemporary globalisation is not yet evident.

When viewed through an ideological lens, it has been shown that globalisation's discontents largely take issue with two matters. One is the 'neoliberal project' which essentially rules out any worldview other than that one in which outcomes are determined by business values and market forces. The other concern of the discontents is the emergence of a 'world culture' based on consumerist Americanisation; the 'Disneyfication', 'Coca-Colonisation, and 'McDonaldisation' of the world by 'America Inc'. For the discontents, these 'top-down' economic and cultural flows are 'Black Knight' global forces and need to be reined in for the sake of the planet and its peoples. One way to do this is through internationalisation as a 'White Knight' response which acts in a 'bottom-up' fashion that represents 'grassroots globalisation' and seeks to produce more equitable and moral outcomes from current flows of, for example, technology, economy, knowledge, people, values and ideas. In the case of higher education, institutions need to be responsive to the requirements and challenges related to life in a rapidly globalising world; one in which national borders and global flows which transcend them are both a reality. To this end, research, teaching and community engagement directed by the spirit of internationalism is likely to be found at the heart of many internationalisation responses. That is, a belief in co-operation, collaboration, respect and a desire for mutual understanding.

Given this paper focused on literature that engaged with emergent understandings about this epoch of globalisation, it is fitting to end it with some key observations of the time. Giddens (2002) remarks, "as we look round the globe at the end of the twentieth century, we can see cause for optimism and pessimism in about equal measure" (p. 81). Despite some remarkable advances in technology and economic development in the latter part of the twentieth century, the period was nevertheless marked by disillusionment and inequality (Delors 1996, p. 15). The uncertainty of milieu is well captured by Waters (1995) in the ambiguous claim that globalisation represented "the end of the world as we know it" (p. 159). If ever there was a time for education to come to the fore to help understand and meet the challenges of the future, this is likely to be it (O'Sullivan 1999, pp. 13-16). Internationalisation underpinned by the spirit of internationalism continues to have a big 'White Knight' role to play in all of this.



(Source: <http://historymedren.about.com/library/n2aknight.htm>)

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Title: Challenges of Teaching International Business Etiquette: A Case Study of an Undergraduate Class in Thailand

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**Challenges of Teaching International Business Etiquette:
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ABSTRACT

This paper focuses on a Business Etiquette class taught at the Faculty of Business Administration, Chiang Mai University, Thailand. The study herein aims to address some challenges of teaching international business etiquette to Thai undergraduate students who have not been exposed to the international, professional, and business world. The results of this study suggest ways to develop effective an international business etiquette pedagogy in terms of providing practical knowledge and cultivating tacit skills. This study was conducted through a participant observation method, with questionnaires used as a supporting research tool. The population of this research was 40 undergrad students studying in the Faculty of Business Administration and who participated in a Business Etiquette class during the 2009 summer semester. The study focuses primarily on pedagogies and learning assessment methods. Three main issues that are discussed in this paper are: students' general information, course development, and course outcomes.

Key words: Business etiquette, pedagogy, learning assessment, Faculty of Business Administration, Chiang Mai University

Introduction

Knowing and practicing proper business etiquette is not instinctual. The importance of knowing how to act and what is appropriate in a business setting can make a difference in business outcomes and business relationships. However, a number of studies have reported a significant decline in people's manners. In addition, many studies reported an increasing demand on executives to be sensitive to foreign cultures since international business is growing rapidly. The major factors that seem to have affected the diminishment of good manners are the decline in human interpersonal interaction in the high-tech workplace and the upbringing of children in households where proper manners were not encouraged (Mohn, 2002).

Academic institutes are well aware of this problem. They are actively finding ways to resolve such problems. Various business schools around the world have made etiquette training a part of the curriculum. The Faculty of the Business Administration at Chiang Mai University, Thailand is one of them. The faculty launched its Business Etiquette course as one of the elective subjects offered by Management Department in academic year 2005. The objectives of the course are to provide students knowledge and understanding of business etiquette in various dimensions and to cultivate such skills and attitudes in the students. The author is the one who proposed to open this course in 2005 and also currently the main instructor. In order to meet the objectives of this course, the author conducted this research using her class as a sample group.

The results of this study suggest ways to develop effective an international business etiquette pedagogy in terms of providing practical knowledge and cultivating tacit skills.

Teaching “business etiquette skills” is challenging, especially attempting to teach them to the students who have not been exposed to the international, professional business world. This research starts by analyzing the students’ general information (demographic and attitudinal), and then is followed by course development, and course outcomes.

Literature review

This section contains reviews of different teaching methods and learning assessment methods and examines their relative advantages and disadvantages. The author used these reviews to structure the questionnaires of this study.

Teaching methods

When choosing a teaching method, it is important to know the learners. For example, the instructors should know the students’ experiences, interests and goals. It is common that when asking the students what they wish to learn, they may not know enough about a subject to form an opinion. However, if they are involved in finding what they should learn and participate in selecting goals, they have a stronger sense of involvement. It is reported that youth learn best in an atmosphere of warmth and acceptance. In other words, to enhance students’ learning outcome, they should be actively involved in setting goals and planning their learning activities.

There are numerous ways that people learn. For example, a visual learner needs to see an item in writing to remember it. An auditory learns by having the information spoken to them or repeated by them. A kinesthetic learner may need to touch items to determine size, shape, texture, and weight in order to learn and remember. There is no one best way to learn. It is agreed by many educators that involving students in different teaching styles would reinforces the learning process, and as a result, strengthened their knowledge retention.

The followings are teaching methods that are widely implemented. This research uses these methods as a research structure (Hall, 2010; Helt & King, 1999; Newcomb, McCracken, & Warmbrod, 1993; Ohio 4-H Program, 1994; and Excellent Classroom Management Resources, 2010)

1. Lecture

Lecture is perhaps the most common form of education. It allows educators to deliver a large amount of information in a short amount of time. Factual material is presented in a direct, logical manner. Preparation is done by an individual and can be repeated on a routine basis for each new group of learners. Lecture is suitable to provide information to a large group of students. Auditory learners are the best receivers of lecture information. However, this method can cause learners to become bored and easily distracted. The educator who uses this technique should have proficient oral skills. The main drawbacks of this teaching technique are that it is a one-way communication, the audience is often passive; therefore learning is difficult to gauge. Effectiveness of this method is also highly related to time and scope of content.

2. Discussion

Discussion method is a two-way communication to exchange ideas through oral discussion. This method pools ideas and experiences from the student group. It is particularly effective after a presentation, film or experience that needs to be analyzed. It allows everyone to participate in an active process. Educator acts as a facilitator of the discussion by asking questions or makes comments, then waits for a response. Students are encouraged to contribute to this learning process by providing comments, answers, and also asking questions. Drawback of discussion method is that it is not practical with more than 20 students. Furthermore, if a few students dominate the discussion, while other students do not participate, the learning process would lose its effectiveness. In addition, this process is time consuming and if the instructor could not control the discussion, the discussion could get off track easily. Effective discussion session requires good question outline in advance.

3. Lecture with discussion

Lecture with discussion involves students, at least after the lecture. The instructor allows some time after the lecturing session for students to ask questions and also to challenge the knowledge they just learned. However, time constraints may affect discussion opportunities. Learning effectiveness is highly connected to to-the-point questions and discussion. Teacher should be prepared to allow questions during lecture, as appropriate. Teacher should also anticipate difficult questions and prepare appropriate answers in advance.

4. Demonstration

Demonstration method is when an educator both tells and shows what steps to take in an educational process. For example, educator teaches students how to cook by demonstration. By seeing a task performed, students are expected to be more aware of what materials are needed, remember steps in the process, and observe the final outcome of the task. This teaching method is proper for teaching students more on “how” to do things, not “what.”

4. Role playing

Role playing methods is when the educator places students into assigned roles where they act out ideas. This method provides opportunity for students to assume roles of others and thus appreciate another point of view. It also allows for exploration of solutions. In addition, by physically active involvement, learners of different types will retain more than if they merely sat and watched a skit or video performance. Each group of students differs in how the message is delivered and interpreted. It is important that if the educator is trying to make certain points in the exercise which are not obvious, then additional processing and discussion of the material are required to get the learning objective accomplished. The limitation of this method is that it is not appropriate for large groups.

5. Hands on (experiential)

One of the most dynamic ways to deliver information is to provide hands on activities. This opportunity may be highly directed or a free-form opportunity for learners to be creative and progress at their own pace. For example, a teacher may ask students to cook after they had learned the principles of cooking that dish. With this method, learners learn what they practice. It is noted that experiential learning may take much longer to accomplish but will be retained better by students. The number of

students and materials available may limit the amount of hands on experience an instructor can offer. The visual, auditory and kinesthetic learners all benefit from such technique.

6. Case studies

Instructors develop analytic and problem solving skills by giving students case studies. The case could either be a real case or a composed one. Case study allows for exploration of solutions for complex issues and also allows student to apply new knowledge and skills. The disadvantage of this method is that students may not see relevance to own situation. In addition, insufficient information can lead to inappropriate results. To use case study, students should have learned enough theories to apply to solve problems in the case. In other words, case study is not appropriate for elementary level.

7. Guest speakers

One way to spur students' interest is to bring in guest speaker. The instructor should select the guest speaker according to the focused topic. The guest speaker should not only be a specialist in that particular field but also be a good speaker who can summarize the main ideas and convey to the audience effectively. The successful guest speaker is the one who know enough to answer students' questions from his/her experience, not from the book.

8. Multimedia

Multimedia such as movies, video clips, and slides is an entertaining way of introducing content and raising issues. It is most effective when follows by discussion. It usually keeps the group's attention up and stimulates discussion. However, it can raise too many issues to have a focused discussion. This method would be effective only if the instructor prepares a well discussion outline after the multimedia presentation.

Learning assessment methods

An important part of learning occurs after information has been offered. The final step is taking time to review what has been learned. While high marks and good grades are desired in formal teaching, they do not always mean that the course has accomplished its learning objectives.

There is a variety of assessment methods used in academia to assess students' achievements. The instructor should choose those methods that most effectively assess the objectives of the unit of study. In addition, the choice of assessment methods should be aligned with the overall aims of the program. It may include the development of disciplinary skills such as critical evaluation or problem solving and support the development of vocational competencies such as particular communication or team skills. Therefore, when choosing assessment methods, the instructor should be concerned about both the immediate task of assessing student learning in a particular unit of study, and the broader aims of the program and the qualities of the students (Nightingale, Te Wiata, Toohey, Ryan, Hughes & Magin, 1996; and Brown, Rust & Gibbs, 1994).

Nightingale et al (1996) provide eight broad categories of learning outcome assessment which are listed below. Within each category some suitable methods are suggested.

1. Thinking critically and making judgments

One popular way of learning assessment is to focus on students' ability to think critically and to make proper judgments. These methods include developing arguments, reflecting, evaluating, assessing, and judging. Instructor may assign students to write an essay, report, journal, letter of advice to (about policy, public health matters), present a case for an interest group, prepare a committee briefing paper for a specific meeting, book review (or article) for a particular journal, and comment on an article's theoretical perspective. These methods are more suitable for graduate students than for undergraduate students.

2. Solving problems and developing plans

Instructors may give a problem to students and assign students to develop a plan to solve it. The process includes identifying problems, posing problems, defining problems, analyzing data, reviewing, designing experiments, planning, and applying information. The learning assessment methods are, for example, problem scenario, group work, work-based problem, prepare a committee of enquiry report, draft a research bid to a realistic brief, analyze a case, and conference paper.

3. Performing procedures and demonstrating techniques

Performing procedures and demonstrating techniques includes demonstration, role play, making a video, producing a poster, lab report, preparing an illustrated manual on using the equipment, for a particular audience, and observation of real or simulated professional practice.

4. Managing and developing oneself

Instructors can evaluate students' ability to manage and develop oneself in terms of working co-operatively, working independently, learning independently, being self-directed, managing time, and managing tasks. The methods include assigning students to document journal, portfolio, learning contract, and/or group work.

5. Accessing and managing information

The instructors can evaluate how students access and manage information such as when they do activities such as researching, investigating, interpreting, organizing information, reviewing and paraphrasing information, collecting data, searching and managing information sources, observing and interpreting. This evaluation method can be done through the methods of annotated bibliography, project, dissertation, applied task, and applied problem.

6. Demonstrating knowledge and understanding

Knowledge and understanding are the top priorities of learning evaluation in most academic institutions. To evaluate students' knowledge and understanding, instructors may apply methods such as written examination, oral examination, essay, report, short answer questions, true/false questions, and multiple choice questions (paper-based or computer-aided-assessment).

7. Designing, creating, performing

Instructors can also evaluate how well students design, create, and perform. These characteristics can be evaluated through methods such as portfolio development, presentation, and projects.

8. Communicating

One of the most important skills that students should be assessed is that of communication. Communication can be either one or two-way communication, and verbal or written and non-verbal communication. Methods to assess students' communication skills include written presentation (such as essay, report, reflective paper etc.), oral presentation, group work, discussion, debate, role play, and observation of real or simulated professional practice.

It is suggested that when choosing assessment methods, it is important to offer a variety of methods to students in the way they demonstrate their learning, and to help them to develop a well-rounded set of abilities by the time they graduate.

Materials and methods

This study was conducted through three research methods. The first method was review of related document including course syllabi. The second method was a participant observation. The author (as the course instructor) designed the course syllabus and lesson plan, and implemented the plan to the research sample group, who were the students taken the Business Etiquette course in the 2009 summer academic semester. Whilst performing as the instructor of the class, she observed responses of the students toward different teaching styles and learning assessment techniques. The last method is a survey by using questionnaires, pre- and post-study in class. The pre-study questionnaire asked about the students' general information and their expectations of this course, while the post-study asked about their learning outcome regarding content, pedagogies, and learning assessment techniques of the course. The author employed simple descriptive statistics including frequency and percentage to show results of this study. In addition, the author selected some students' feedback quotations to elucidate the meaning of the study results.

The population of this research was a group of undergraduate students who took a Business Etiquette class offered by the Faculty of Business Administration at Chiang Mai University. The selected samples of this particular research were (all) 40 undergraduate students of the Faculty of Business Administration participating in the Business Etiquette class during the 2009 summer semester.

Results

The results of this study are divided into three main issues: students' general information, course development, and course outcomes.

1. Students' general information

This research aims to find a recommendation on how to effectively teach international business etiquette to Thai students. Therefore, it is crucial to know and understand the nature of Thai students and their perception to different pedagogies. The information in this section was gathered by questionnaires distributed on the first day of class. The

information of all 40 students is presented as follows. (It is noted that some questions allowed more than one answer.)

1.1 Students' background

The participants in this study were 40 undergraduate students of the Faculty of Business Administration participating in the Business Etiquette class during the 2009 summer semester. The Faculty of Business Administration at Chiang Mai University offers four tracks of study: marketing, management, finance, and accounting. It was found that the majority of students (37.5%) were management majors and the rest were accounting (35%) majors, and marketing (27.5%) majors (see table 1). There were no finance majors in this class.

When classified by year of study, percentages of students in their freshman, sophomore, junior, and senior year were 15%, 32.5%, 32.5%, and 20%, respectively (see table 2). The students' ages ranged from 19 years old to 24 years old (see table 3). 65% of the students were female and 35% were male (see table 4).

Students indicated various reasons for taking this course: as an academic minor course (37.5%), as an academic major course (35.0%), for personal interest (25.0%), and because of friends' suggestions (12.5%) (see table 5).

When asked to evaluate on their own level of business etiquette, the majority of the students rated themselves medium (fair) (60.0%), and the rest rated themselves as good (35.0%), poor (2.5%), and very poor (2.5%). None of them rated themselves as excellent (see table 6).

Table 1: Students' academic majors

Major	Number of students	Percentage
Marketing	11	27.5
Management	15	37.5
Finance	0	0.0
Accounting	14	35.0

Table 2: Students' years of study

Year	Number of students	Percentage
1	6	15.0
2	13	32.5
3	13	32.5
4	8	20.0

Table 3: Students' ages

Age	Number of students	Percentage
19	2	5.0
20	16	40.0
21	12	30.0
22	8	20.0
23	0	0.0
24	2	5.0

Table 4: Students' genders

Gender	Number of students	Percentage
Male	14	35.0
Female	26	65.0

Table 5: Reasons for taking this course

Reasons	Number of students	Percentage
Major course	14	35.0
Minor course	15	37.5
Personal interest	10	25.0
Friend suggestion	5	12.5

Table 6: Students' own-evaluation on self-etiquette

Level	Number of students	Percentage
Excellence	0	0.0
Good	14	35.0
Medium (Fair)	24	60.0
Poor	1	2.5
Very poor	1	2.5

1.2 Students' experiences, opinions, and preferences on different pedagogies (Prior to studying this course)

When students were asked what teaching methods they had experienced (students can give more than one answer), lecture was indicated as the most common method (97.5%), followed by case study (87.5%), site visits (40.0%), project-based learning (32.5%), seminar (37.5%), in-class exercises (12.5%), and games (12.5%). None of the student had experienced self-learning before (See table 7 line 1). The majority of the courses they had taken used the lecture method (87.5%) (see table 7 line 2).

Considering those teaching methods the students think if as most effective, the answers varied as follows: case study (25.0%), site visit (22.5%), project-based learning (15%), lecture (12.5%), seminar (12.5%), in class exercise (7.5%), and games (5.0%) (see table 7 line 3). Correspondingly, the least effective teaching methods in the students' opinions were lecture (26.0%), seminar (15.0%), project-based learning (7.5%), site visit (5.0%), self-learning (5.0%), and case study (2.5%) (see table 7 line 4).

The most preferable teaching methods, according to the students, were site visit (30.0%), lecture (25.0%), case study (20.0%), seminar (12.5%), and project-based learning (5.0%) (see table 7 line 5). The least preferable teaching methods were lecture (45.0%), project-based learning (25.0%), case-study (2.5%), site visit (2.5%), and in class exercise (2.5%) (see table 7 line 6).

When asked the preferred teaching method for the Business Etiquette course, the students were different from the students' preference of teaching method in general. This may be because the students were concerned about the nature of the course and its content (which was to be much different from other courses they had taken). The results showed that the teaching methods the students wanted this course to use were lecture (35.0%), case study (32.5%), in class exercise (17.5%), site visit (12.5%), and games (2.5%) (see table 7 line 7).

Table 7: Students' experiences, opinions, and interests on different pedagogies

Unit: Number of students / percentage

Teaching methods	Lecture	Case study	Site visit	Project-based learning	Seminar	In class exercise	Games	Self-learning
Student had experience in *	39 97.5%	35 87.5%	16 40.0%	13 32.5%	15 37.5%	5 12.5%	5 12.5%	0 0.0%
Majority of the courses	35 87.5%	0 0.0%	0 0.0%	1 2.5%	4 10.0%	0 0.0%	0 0.0%	0 0.0%
Most effective (in students' opinions)	5 12.5%	10 25.0%	9 22.5%	6 15.0%	5 12.5%	3 7.5%	2 5.0%	0 0.0%
Least effective (in students' opinions)	26 65.0%	1 2.5%	2 5.0%	3 7.5%	6 15.0%	0 0.0%	0 0.0%	2 5.0%
Most preferable	10 25.0%	8 20.0%	12 30.0%	2 5.0%	5 12.5%	0 0.0%	0 0.0%	0 0.0%
Least preferable	18 45.0%	1 2.5%	1 2.5%	10 25.0%	5 12.5%	1 2.5%	0 0.0%	0 0.0%
The pedagogies students want this course to be	14 35.0%	13 32.5%	5 12.5%	0 0.0%	0 0.0%	7 17.5%	1 2.5%	0 0.0%

Note: * = More than one answer allowed

1.3 Students' experiences, opinions, and preferences on different learning assessment methods (prior to taking this course)

This part assesses students on their experiences, opinions, and preferences of different learning assessment methods.

When asked, students responded that the learning assessment methods they had experienced were (students can give more than one answer): multiple choice exam (97.5%), followed by class attendance (95.0%), true-false exam (90.5%), fill in the

blank exam (87.5%), long answer (essay) exam (87.5%), individual assignment (57.5%), and other methods (15.0%) (see table 8 line 1). The majority of the courses students had taken used multiple choices exam (57.5%), long answer (essay) exams (32.5%), and group assignments (5.0%) (see table 8 line 2).

The learning assessment method the students thought was the most effective was the long answer (essay) exam (72.5%). The rest of them answered group assignment (10.0%), fill in the blank exam (7.5%), multiple choices exam (2.5%), class attendance (2.5%), and other methods (2.5%) (see table 8 line 3). Correspondingly, the least effective learning assessment method in the students' opinions were class attendance (25.0%), group assignment (15.0%), multiple choices exam (12.5%), fill in the blank exam (2.5%), and long answer (essay) exam (2.5%) (see table 8 line 4).

The students' most preferred learning assessment methods were multiple choices exams (40.0%), long answer (essay) exams (32.5%), others (17.5%), group assignments (5.0%), fill in the blank exams (2.5%), true-false exams (2.5%), and individual assignments (2.5%) (see table 8 line 5). The least preferable learning assessment methods were long answer (essay) exams (32.5%), multiple choices exams (15.0%), fill in the blank exams (12.5%), class attendance (12.5%), true-false exams (7.5%), group assignments (7.5%), and individual assignments (7.5%) (see table 8 line 6).

Table 8: Students' experiences, opinions, and preferences on different learning assessment method

Unit: Number of students / percentage

Learning assessment methods	Multiple choices exam	Fill in the blank exam	True-false exam	Long answer (essay) exam	Group assignment	Individual assignment	Class attendance	Others
Student had experience in*	39 97.5%	35 87.5%	36 90.5%	35 87.5%	31 77.5%	23 57.5%	38 95.0%	6 15.0%
Majority of the courses	23 57.5%	0 0.0%	0 0.0%	13 32.5%	2 5.0%	0 0.0%	2 0.0%	0 0.0%
Most effective (in students' opinions)	1 2.5%	3 7.5%	0 0.0%	29 72.5%	4 10.0%	0 0.0%	1 2.5%	1 2.5%
Least effective (in students' opinions)	5 12.5%	1 2.5%	0 0.0%	1 2.5%	6 15.0%	0 0.0%	10 25.0%	0 0.0%
Most preferable	16 40.0%	1 2.5%	1 2.5%	13 32.5%	2 5.0%	1 2.5%	2 5.0%	7 17.5%
Least preferable	6 15.0%	5 12.5%	3 7.5%	13 32.5%	3 7.5%	3 7.5%	5 12.5%	0 0.0%

Note: * = More than one answer allowed

2. Course development

2.1 Course outline

This Business Etiquette course was developed in 2005. The course developer (the author) did extensive literature reviews on business etiquette topics from textbooks and related websites. As a result, she came up with 10 topics to be a component of this subject as follows:

- Chapter 1: Importance of business etiquette
- Chapter 2: Introduction and greeting
- Chapter 3: Formal meeting
- Chapter 4: Entertainment and social gathering
- Chapter 5: Conversation topic selection
- Chapter 6: Dining etiquette
- Chapter 7: Giving formal speech
- Chapter 8: Attire
- Chapter 9: Gift giving
- Chapter 10: Things to avoid in business etiquette

The course is a 3-credit hour course, in other words, the students had to be in class for a total of 45 hours during the semester. Each class lasted for 1 hour and 30 minutes, which means, for the entire course, the class met 30 times over a 6-week period (the class met everyday in summer semester).

The course schedule containing teaching plan, activities, and assignment due dates can be described as follow:

Table 9: Business Etiquette course schedule

Week #	Chapter	Activity	Assignment due
1	1 and 2	-Teach	
2	3 and 4	-Teach -Student presentation # 1 on Friday	Paper # 1
3	5 and 6	-Teach -Student presentation # 2 on Friday	Paper # 2
4	7 and 8	-Mid-term exam -Teach -Student presentation # 3 on Friday	Paper # 3
5	9 and 10	-Teach -Student presentation # 4 on Friday	Paper # 4
6	-	- Guest speaker on topic "Business etiquette in the real world" - Self and team assessment -Final exam	Self and team assessment results

Learning assessment

- In-class activity 10%
- Self and team assessment 10%
- Presentations and papers (team assignment) 20%
- Mid-term exam 10%
- Final exam 10%

Total

100%

2.2 Teaching methods

The author (as an instructor of this course) applied several teaching methods throughout this course as explained below:

- a. Lecture – The instructor used lecture as the main teaching method and used PowerPoint slides as visual aids.
- b. Case studies – Case studies were used as appropriate. For example, the instructor gave a case study of culture differences and asked the students to analyze for the rationale of an unfamiliar culture and find a way to react properly in such situations.
- c. In class exercises – In almost every class, along with lecturing, the instructor prepared exercises such as practice handshaking, greetings, etc.
- d. Photo analysis – Since the students did not have real-world experience, it was assumed that they might not have been able to imagine what real-world business etiquette is like. Therefore the instructor used photos such as photos of people greeting each other at the embassy. Instead of using photos derived from Internet or books, the instructor used photos her in various professional situations so that she could explain the environment and context to the class. As a result, the students could become aware that such situations could really occur in their future life.
- e. Video clips – Selected video clips were shown in class such as a video of a professional public speaker explaining how to be a good speaker. Most of the video clips are in English, therefore, the instructor verbally summarized the content in Thai for the students after showing those video to help them overcome any language barriers.
- f. Group presentations – In addition to the lessons provided by instructor, students were assigned research on selected topics aligned with the course outline. The purpose was to get the students more mentally involved in the subject and to give them the opportunity to share their interests and knowledge with each other.
- g. Questions to people overseas – To study international etiquette, instead of learning only from written materials, it was deemed to be useful to get direct information from people of other countries. Along with learning about the countries' cultural differences, the instructor asked students to write questions that they would like to know about different cultures' etiquette issues. Then the instructor grouped those questions by countries and sent them to people overseas and brought answers back to the students. The people selected to answer those questions were native to their home country who are in t professional careers, e.g., such as engineers and university professors.
- h. Guest speakers – In the last class, the instructor invited a local professional businessman to be a guest speaker on topic “Business etiquette in the real world.” The guest speaker talked about his experiences including what he had done wrongly in the past and also how he learned from his mistakes. In addition, he talked about how important business etiquette is in practice.

2.3 Learning assessment methods

Learning assessment methods of this course included in-class activity, presentations and papers (team assignment), self and team assessment, and exams.

For in-class activities, students were encouraged to attend the class and participate in class discussions. In addition, students were assigned to work in teams on two assignments. Students were formed into groups of 4-5 students. The odd numbered teams were assigned to work on presentations and papers # 1 and 3, and the even numbered teams were assigned to work on presentations and papers # 2 and 4. In brief, the first assignment was designed to have students research ways of greeting and introducing in different countries. The second one was to research on food and beverage topics such as how to order food from an international restaurant menu. The third assignment was to design a script and do a role-play of giving speech in a formal setting. The last assignment was to select one team member and dress her or him in formal business attire and in business casual attire and explain to the class about the rationale of the attire selection. All members of the same team would get the same score. However, at the end of the course, the students were asked to do self and peers assessment on how they work in teams and they will grade each member including themselves.

Students were also evaluated by exams: mid-term and final exams. The exams were a combination of multiple choices, true-false questions, and long answer (essay) exam or so called descriptive explanations. The proportion of learning assessment methods are shown in part 2.1.

3. Course outcome

After the course was over, the students were asked to evaluate the effectiveness of the different pedagogies applied in this course and to give suggestions. In addition, they were asked to also evaluate the effectiveness of the different learning assessment methods. The results are as follows.

The pedagogies that the majority of the students thought have the highest effectiveness level were photo analysis (37.5%) and questions to people overseas (45.0%). The other pedagogies applied in this course that were rated high on high effectiveness level were: lecture with PowerPoint slides (55.0%), case study (50.0%), in-class exercise (50.0%), group presentations (65%), and guest speakers (42.5%). It is notable that 2.5% of the students rated group presentation on the lowest effectiveness level. The student mentioned in the questionnaire that it was because her team members did not get along well and she was the one who did most of the work (see table 10).

The students' suggestions to improve teaching methods are as follows: site visits (30.0%), more photos and videos (17.5%), more practice in class (15.0%), more examples while lecturing (12.5%), more student involvement (12.5%), video clips should have Thai subtitle (12.5%), and role play (2.5%) (see table 11).

When considering different learning assessment methods, a majority rated participation in class (57.5%), long answer (essay) exam (45.0%), and group assignment (45.0%) on a high effectiveness level, while they rated multiple choices exam (37.5%) and true-false exam (45.0%) on a medium effectiveness level. It is

notable that some students rated multiple choices exam (7.5%) and true-false exam (5.0%) on the lowest effectiveness level (see table 12).

The students' suggestions to improve learning assessment methods are as follows: more long answer (essay) exams (30.0%), more multiple-choice exams (15.0%), a combination of various evaluation methods (15.0%), and more group work (10.0%) (see table 13). All of the students' suggestions were similar to the methods used in this class.

Table 10: Students' feedbacks on different pedagogies

Unit: Number of students / percentage

Effective-ness Level	Lecture with Power Point slides	Case study	In class exercise	Photos analysis	Video clips	Group presentations	Questions to people overseas	Guest speakers
Highest*	9 22.5%	7 17.5%	8 20.0%	15 37.5%	9 22.5%	8 20.0%	18 45.0%	13 32.5%
High*	22 55.0%	20 50.0%	20 50.0%	13 32.5%	20 50.0%	26 65.0%	18 45.0%	17 42.5%
Medium*	6 15.0%	10 25.0%	7 17.5%	7 17.5%	8 20.0%	3 7.5%	2 5.0%	5 12.5%
Low*	0 0.0%	0 0.0%	2 5.0%	0 0.0%	1 2.5%	0 0.0%	0 0.0%	0 0.0%
Lowest*	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 2.5%	0 0.0%	0 0.0%

Note: * = More than one answer allowed

Table 11: Students' suggestions to improve teaching methods

Suggested teaching methods	Number of students	Percentage
Site visits	12	30.0%
More photos and videos	7	17.5%
More practice in class	6	15.0%
More examples while lecturing	5	12.5%
More student involvement	5	12.5%
Video clips should have Thai subtitle	5	12.5%
Role play	1	2.5%

Table 12: Students' feedbacks on different learning assessment methods

Unit: Number of students / percentage

Effectiveness Level	Multiple choices exam	True-false exam	Long answer (essay) exam	Group assignment	Participation in class
Highest	4 10.0%	1 2.5%	9 22.5%	6 15.0%	7 17.5%
High	14 35.0%	12 30.0%	18 45.0%	18 45.0%	23 57.5%
Medium	15 37.5%	18 45.0%	8 20.0%	11 27.5%	8 20.0%
Low	0 0.0%	2 5.0%	1 2.5%	1 2.5%	0 0.0%
Lowest	3 7.5%	2 5.0%	0 0.0%	0 0.0%	0 0.0%

Note: * = More than one answer allowed

Table 13: Students' suggestions to improve learning evaluation methods

Suggested learning evaluation methods	Number of students	Percentage
More long answer (essay) exam	12	30.0
More multiple choices	6	15.0
A combination of various evaluation methods	6	15.0
More group work	4	10.0

Discussion and conclusion

This part discusses challenges of teaching international business etiquette and ways to overcome those challenges. The rationales of the arguments were derived from the results of this particular study.

Challenges

The main challenge to teach international business etiquette to this group of students was that the students were familiar with being passive learners. The results of the survey show that the most common teaching methods that students had experienced was lecture. Even though the majority of them agreed that lecturing is the least effective teaching method, they preferred this course to be lecture format. This result implies that the students prefer to be in their "comfort zone" of being passive learners and having the instructor feed them with information than learning through other teaching methods that they thought to be more effective. The author would call it in this study as "feed me syndrome." Below are some direct quotes of the students' answers from the questionnaires:

"I want to be in an easy class. The content should be easy. The teacher should be kind. The exams should be easy and all students should get A." (Student A)

"I like lecture style because the teacher will tell us everything we should know and we can also read the book afterwards." (Student B)

“Lecture is good. There is no pressure on me, I just attend the class and it’s the teacher’s job to teach us. I don’t feel comfortable when being asked in class.”
(Student C)

“I don’t like the class that the teacher put us on the spot by calling individual student to answer the questions. If the teacher wants to ask, I want her to ask the whole class, not just one particular person.” (Student D)

The other challenges were that students ranged in the age between of 19 – 24 years old and had never or very limited experiences in the real business world and could not imagine the real world situation. As a result, they hardly understand what was to be expected about business etiquette and may not have be aware of the importance of it. A majority of the students rated their etiquette level at medium and some even rated it at lowest level.

Regarding learning assessment methods, even though majority of students agreed that long answer (essay) exam was the most effective learning assessment method, they expressed that it was the least preferable type of assessment method. The survey showed that most students had experience in taking multiple choice exams and majority of the courses they had been taken use multiple choices exam, so they preferred this assessment method the most. It is another significant notable point that students preferred to be in their “comfort zone” than to learn effectively.

Overcoming Challenges

To break through the students’ “comfort zone” or to resolve the “feed me syndrome,” the major strategy was to get students involved on a “fun” basis. For example, the instructor applied in-class activities such as having students practicing hand shaking and bowing in class. From the author’s point of view, having students get up and do physical activities had a positive impact on students’ learning outcome. Simultaneously, the students developed a good attitude towards this subject. In addition, as the instructor assigned students to work in team on particular topics where they could choose the content according topic to present to the class significantly stimulated the students’ interest. The results showed that students agreed that they learned more by doing so.

In addition, students enjoyed answering questions about real life situations from photos that the instructors showed in class and asked students to analyze the situations and find ways to properly act in those situations. This method was implemented along with lecturing, so it is easy to be applied to teach in a big classroom to a large number of students.

The research also showed that the activity of asking questions to real people overseas regarding different cultures and their perceptions got good feedback from the students. The key to success of this strategy was that the person overseas who answered the students’ questions must be in professional careers so that they can answer students intellectually and accurately.

According to the students’ feedback after the course was over, students preferred having various types of pedagogies used. This implies that instead of using one particular pedagogy; it should be more effective to apply several pedagogies at the

same time. The suggested pedagogies includes photo analysis, questions to people overseas, lecture with PowerPoint slides, case studies, in-class exercise, video clips, and guest speaker. Another pedagogy that was not been implemented in this class but was suggested by the students was the site visit or to taking students out to see the real thing, for example, taking students to a restaurant to learn how to use utensils in a formal dinner setting.

Regarding learning assessment method, it was found that after applying “participation” style, students enjoyed the class more and accepted that participating in class, doing team assignments, and long answer (essay) exams are effective ways of learning. Therefore a combination of those methods should be used as the main learning assessment method of this class.

Concerns

This research was conducted in the summer semester in which the class was small (40 students). Besides summer semester, this course will be offered every first semester for 3 sections: two for the Faculty of Business Administration students who will take it as their elective course and another one for the Faculty of Humanities students majoring in Home and Community who will take it as their requirement course. There will be approximately 60 - 100 students in each class. As one lecturer will teach the course and the classes will be bigger than at the time this research was conducted. The planned pedagogies and learning assessment methods should be adjusted accordingly. For example, the weight of class participation should be decreased due to the larger number of students. Furthermore, long answer (essay) exam may not be suitable for one instructor to grade 200 – 300 students, therefore, multiple choices may be a better choice to evaluate a larger number of students in order to keep up the validity of the students’ grades. The author would like to suggest that there should be further research to analyze the proper teaching methods and assessment that suits larger classes.

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Beyond Centre-Periphery: Higher Education Development in South-East Asia

Introduction

Explaining and responding to marginalisation and inequalities in global educational systems has been one of the persistent concerns for educational administrators and researchers for years (Altbach & Gopinathan, 2005). Numerous articles and studies have grappled with this issue from a variety of mainly alternative perspectives, from the pro-development models to the counter-development ones. Among the more widely discussed explanations for the politics of education at the international level are various theoretical frameworks that draw upon different theories such as centre-periphery, dependency and neo-colonialism. These concepts have been both a source of inspiration and a centre of criticism for a variety of studies seeking to understand the inequitable structuring in international educational relationships, including higher education systems.

Though with different names and developed by different authors from various academic fields in dealing with the realities of inequalities in international settings, the ideas of “dependency”, “centre-periphery”, and “neo-colonialism” in education draw their source from imperialism and dependency theory developed by some sociologists and economists in the first half of the twentieth century (Altbach, 1998; McLean, 1983). Basing on Lenin’s notion of imperialism and some dependency theorists such as James Cockcroft and Andre Gunder Frank, Johan Galtung defined “centre-periphery” concept as part of a structural theory of imperialism (Altbach, 1998). This theory was first applied to explain the role of the intellectuals in the Third World by Edward Shils, who maintained that the centre-periphery relationship was a “natural” consequence of inequality. In contrast to Edward Shils’ proposition, Galtung and others, by introducing the concept of “neo-colonialism”, have blamed the Western industrialised nations for maintaining the peripheral status quo of the Third World. Neocolonialism, as further explained by Altbach (1998, p.23), is born out of “the wide-spread desire by industrial nations to maintain their dominant position” over the Third World even after the colonial era. According to him, the Third World countries are dependent on many of the products of education and modern technology from the wealthy industrialised nations, who possess wealth, technological innovations and well-established educational and research institutions. Closely related to such notions of “centre-periphery” and “neo-colonialism” is Wallerstein’s world system theory which proposes that the stratification of the world into countries of different development levels (the core, semi-periphery and periphery) is due to the evolution of the Western capitalist economy dated back to the 16th century. World system theorists argue that the cause of the poverty and backwardness of poor countries is their peripheral position in the international division of labour (Arnové, 1980; Caruso, 2009). In one word, the dependency paradigm share the same notion that the less developed countries (the “periphery”, the “satellite” or the “province”) are dependent upon the

more developed (the “centre”, the “core”, or the “metropolis”) because of the core’s domination and exploitation (Raggatt, 1983).

When translated into educational scholarship, the dependency thesis comes in various manifestations, which are either voluntarily and uncritically adopted by the Third World countries through education transfer or their continued use of the language of instruction from the former colonizers or which are deliberately planned by the industrial nations by means of educational programs and foreign aids to perpetuate the educational and political structures that “will ensure stability and a generally pro-Western orientation” (Altbach, 1998, p.23). Although such manifestations of centre-periphery framework have been analysed in various levels of education systems, probably a major part of studies following this tradition is found in higher education.

Centre-periphery framework was widely used in various studies seeking to explore the dependency of the Third World universities during the Cold War period. However, the end of the Cold War has changed the world system significantly with the collapse of the Soviet Union, the dominance of the US and the emergence of several Asian countries like Japan, Taiwan, South Korea, China, India, and Singapore in the global knowledge production system and the international economic power structure. Against this context, changes in South East Asian university systems reflect clearly the evolving discourses of centre-periphery (Postiglione, 2005). Ample evidence has shown how local educational policy-makers in the area have articulated with the convergent global discourse of knowledge economy with their own agendas. For example, while Malaysia embraces the vision of world-class universities, Thailand looks for universities of local wisdom (Postiglione, 2005). Besides, the robust cooperation in higher education among country members in this area as a desire to change their peripheral position also challenges the centre-periphery framework.

This paper, therefore, is set out to argue that in their attempts to uncover the inequitable structuring of the international higher education relationships, some scholars have focused almost exclusively on actions of metropolitan enterprises and adhered narrowly to Western/non-Western discourse, thus giving little attention to the agency of the local actors. This approach ultimately hides more than it reveals; it plays down not only the local agency in response to external forces but also risks exaggerating the ‘Western’ hegemony in the post-Cold War period.

The argument is laid out in three parts. The first part of the paper provides some critical account of dependency analyses of higher education in the Third World. The second part explores different reform agendas taken by policy-makers of some south-east Asian countries. After examining the development of ASEAN University Network as a challenge to the Western/non A Western narrow focus of centre-periphery framework, the paper concludes with a comment on centre-periphery theorising.

Centre-Periphery Framework in Higher Education

Being one of the pioneers of the centre-periphery concept in education, Phillip Altbach has used this framework in a wide-ranging books and articles to analyse the relationship between universities in industrialised countries and those in the Third World as well as universities within nations. He argues that universities in the international knowledge equation are stratified into the “centre” and the “periphery”, in which the centre, mostly located in developed Western

countries, plays the dominant role in giving directions and providing research. At the same time the peripheral Third World universities only “copy developments from abroad, produce little that is original, and are generally not at the frontiers of knowledge” (Altbach, 1998, p.20). He also notes that due to historical colonial tradition and the contemporary inequalities in economic power and resources, there is little likelihood that universities in non-Western countries can break away from the domination of the core.

Other provocative studies that link Third World universities to the workings of centre-periphery thesis are those of Mazrui (1975), Woodhouse (1987), Arnove (1980), and Berman (1983). These studies examine the relationship between the flow of cultural goods, the role of foreign donor agencies and the changing roles of universities in different periods.

Ali Mazrui (1975) describes the roles of universities in Africa as the most sophisticated instruments of foreign cultural penetration by employing concepts of cultural capital and cultural dependency. According to Mazrui, cultural dependency is the result of the historical and contemporary involvement of Western multinational companies in African education, which has shaped universities as “cultural corporations” dedicated to importing and spreading Western cultural goods, including course content, language of instruction, and evaluation system. By remaking African values in a pro-Western way, the universities function as a tool to “de-Africanize” their students to the point that these students emerge “cultural captives of the West.” (Mazrui, 1975, p.198). In the same line, Woodhouse (1987), in studying how a Nigerian school enroll students, points out that Western educational institutions, particularly universities, play an important role in elite formation and consolidation and hence of promoting dependency in Nigeria. He identifies two also identifies two distinct roles of Nigerian universities: to reinforce inequalities of the social class structure by privileging students from higher class while restricting opportunities to gain social mobility on those of lower class. Basing on Mazrui’s proposal for an autonomous African university, he calls for an alternative university model and a collective African determination, tenacity and innovation to bring about a cultural independence from Western metropolises (Woodhouse, 1987).

Robert Arnove (1980) and Edward Berman (1983) analyse the manipulative agendas of some US donor agencies on university graduates of Third World countries. Arnove (1980) points out that the Ford Foundation has recently revised its strategy for assisting higher education and related research organizations in developing countries. Rather than sending American intellectuals to conduct research in such countries, the Ford Foundation now prefers to attract their best intellectuals to the US graduate schools by means of grants and research fellowships, train them in the appropriate methodological tools of analysis and send them home to conduct research that would be too politically sensitive for Western scholars to engage in. Similarly, Berman (1983) explores how the US philanthropic organisations such as Carnegie, Ford, and Rockefeller foundation programming “enculturate” or “socialize” a generation of university graduates from developing countries in the ally recruitment race during the Cold War. On the basis of interviews with foundation personnel and archival research, he argues convincingly that the ultimate purpose of these programs is to mystify the indigenous elites, who would internalize the external hegemonic ideology (Berman, 1983).

As the above very brief and limited review has shown, the foregoing studies, convincing as they may seem, are bound to be limiting in certain respects, especially when they focus narrowly on the metropolitan educational intervention. All of the authors share the same idea that the

imported educational practices produce undesirable outcomes for the recipient countries, such as the intensification of social division and cultural alienation (i.e., the local students develop pro-Western attitudes and behaviours). They base on the assumption that peripheral actors unconsciously and uncritically “accept attendant ideologies that subsequently facilitate their own and their nation's subordination in the world system” (Clayton, 1998, p.488). Altbach, for example, argues that universities in the periphery only “copy developments from abroad” (Altbach, 1998, p.20) and function only as “consumers” or “distributors” of knowledge produced from First World countries. Similarly, Woodhouse notes that under the influence of educational technical assistance, indigenous students “willingly accommodate themselves to the cultural and economic needs of the metropole”(Woodhouse, 1987, p.122). For Arnove (1980), Third World academics are merely “conduits for the transmission of knowledge”, while for Mazrui and Berman, periphery actors “acculturate” or “internalize” Western ideologies through educational transfer. In one word, most of these accounts place as much emphasis on the hegemonic power of the metropolitan countries as on the passivity of the local actors.

Strong criticism levelled by writers such as McLean (1983), Noah and Eckstein (1992, 1998), Raggat (1983) and Clayton (1998) has generated perspectives that problematize this narrow focus on the power relationship depicted in centre-periphery analyses. McLean (1983) notes that the dependency thesis fails to give “sufficient weight to local reactions, and so overlooks “the degree and nature of dependency varies from country to country and that governments of peripheral countries have a positive and active role in modifying external influences” (McLean, 1983, p.39). Similarly, Noah and Eckstein (1998) point out that Altbach and Berman’s work is a misconception on the unidirectional nature of power. They argue that the dynamics, options and outcomes of the forms of dependence may not be the same in different stages, and to ignore the changes taken place in the power relationships in history is “anachronistic”.

The depiction of agency in centre-periphery analyses has also been severely attacked. Raggat (1980), basing his evidence on Soulez (1982)’s analysis of Tunisian government’s responses to two international organisations, dismisses the assumption that “the receiver at the periphery is essentially passive” as a “serious flaw” because it leaves “no space in the paradigm to explore how imported ideas and models, as they pass through different levels in the system, interact with deep seated cultural commitments and notions of cultural identity; and how they may be changed or rejected in the process” (Raggatt, 1983, p.3). In a similar vein, Noah and Eckstein write that such an assumption is “an exercise in oversimplification to picture the people of the periphery as mere objects of successful manipulation by the center” because “[t]he resilience and vigor of nationalism, local and national languages, and national cultures and historical traditions continue to mock all forecasts about the growth of a global culture” (Noah & Eckstein, 1992, p.175). Clayton (1998) also complicates this simplistic view of centre-periphery by drawing on a number of authors delineating different forms of resistance from the indigenous actors. The conclusion that, he argues, peripheral actors only unconsciously absorb hegemonic ideology and passively accept the exploitation is untenable (Clayton, 1998).

Eurocentricism in centre-periphery framework is another area of attack by authors embracing a recent post-colonial perspective. Postcolonial analyses in education, of which origin is based on literary or cultural works developed by poststructuralists such as Edward Said (1978) and Gayatri Spivak (1985), point out that the inherent deficiencies of centre-periphery framework lie in its economic origin derived from dependency theory as well as its exclusive binary opposition

between the European and the non-European (Tikly, 1999; Crossley & Tikly, 2004). Seeking to overcome such weaknesses, post-colonial theorists offer an alternative approach which drifts away from economic concerns to focus on race, culture and identity in education systems in explaining the reality of globalisation and education in post-colonial states (Tikly, 1999). In doing so, they emphasize less on the imposition of European culture on to non-Europeans and suggest a “more holistic and less Eurocentric understanding of the relationship between globalisation and education” (Tikly, 1999, p.610). Even so, however, this approach has led to contradictory understandings, either as a complicity of global capitalism on the one hand (Dirlik, 1994, cited in Tikly, 1999) or a risk of ‘a more far-reaching critique of European world-centrality and dominance than discourse theory ever managed’ on the other (Washbrook, 1999, p.610).

Although critics of centre-periphery framework in educational scholarship have convincingly pointed out several limitations of this thesis, their attitudes to its validity are not the same. Noah & Eckstein, on the one hand, dismiss the explanatory values of the framework as simplistic. They argue that the centre-periphery concept merely “substitutes new terms for old without adding significant explanatory power”, and thus is “a weak tool for comparative study” (Noah & Eckstein, 1992, p.174). On the other hand, scholars such as McLean (1983), Clayton (1998), and Raggatt (1983) and post-colonial theorists, while exposing the flaws of the approach and calling for either an alternative model (McLean, 1983; Raggatt, 1983; Tikly, 2001) or a “re-connection” (Clayton, 1998), all agree that the ideology that centre-periphery framework offers is still important, stimulating and necessary in unfolding the unequal relationships in international educational systems.

However, while problematizing the centre-periphery framework that implies Western/non-Western relations, most of these scholars do not depart from this axis; instead, they either argue or show that the relationship is bi-directional rather than uni-directional. They have not, in other words, gone one step further in exploring the more horizontal links in knowledge transfer between developing countries as well as the diverse local agendas in educational reforms that emerged during and after the colonial era.

In sum, the evolving discourse of the centre-periphery in the contemporary era needs further discussion. The next section explores in greater depth how policy makers of some Third World countries in South-East Asia articulate with the global discourse by taking different decisions in reforming their higher education systems. Particularly, an examination into the regional higher education cooperation through ASEAN Network University also serves as a challenge to centre-periphery framework.

Higher Education Development in South-East Asia in the Global Era

South-East Asia (SEA) is a cluster of 12 countries with vast development diversity, varying in geographical size, economic wealth, political ideologies and educational traditions (Lee & Healy, 2006). On the pathway to development and modernization, all the countries in the area, except for Thailand, carry with them the colonial past, which profoundly impact their contemporary higher education systems.

From a Common “Twisted Root”...

Altbach & Selvaratnam(1989) use the phrase ‘twisted root’ to refer to the common origin of contemporary higher education systems in Asia in general and in SEA in particular. According to them, the contemporary higher education systems in Asia are a replication of non-Asian models that were either imposed by the colonial powers or adopted voluntarily by the non-colonized state like Thailand. However, even the university system in Thailand also stemmed from ‘Western’ model. According to Altbach (1998), Thailand adopted ‘Western’ higher education model to develop their national university system in the second half of the 19th century as part of the self-strengthening strategy. Altbach also argues that such an implantation of ‘Western’ academic models has had a profound impact on higher education system in these countries, as evidenced by their continued use of the colonial language (English in Singapore, for example) or the current strong ties with the colonial powers (such as Singapore and Malaysia). Other traces of ‘Western’ imported models can be found in part of Indonesia (under Dutch colonial rule), the Philippines (colonized by both Spain the US) and Vietnam, Laos, and Cambodia (influenced by French colony).

Even after independence, no universities in the area chose to break away from the original models (Altbach, 1998). Instead, embarking upon a program of rapid socio-economic development based on the modernization theory model, governments have looked to industrialized countries through technical assistance or donor programs for reforming their universities, which have been considered “an engine of growth” that that would unlock the door of economic development and growth (Selvaratnam, 1988). It is also worth noting that although developed from a common platform of ‘Western’ model, universities in SEA find themselves at a disadvantage in acquiring a place in the frontiers of international academic and research network, largely due to their relative and varying lack of wealth, power and resources as compared to the industrialized countries (Altbach, 1998).

In the last decade, a wind of change has been blowing in higher education sectors in SEA. The collapse of the Cold War followed by the changed landscape in the world system and an intensified economic globalisation has placed higher education development in a new discourse. An unprecedented expansion of higher education is being observed in the area (Postiglione, 2005). Furthermore, like elsewhere the world, the implementation of university reform in SEA has been significantly affected by the promotion of neoliberal and other challenges of globalisation. Despite diversity in the region, universities in SEA face similar problems, including increasing student enrolments, financial constraints and the stress of the knowledge economy. Besides, the growing influence of international organisations such as the World Bank, Asian Development Bank have pushed universities to be more responsive to the market and emphasised such notion as accountability, cost-effectiveness, institutional autonomy and quality assurance in higher education reform (Lee, 2002).

From the above observation, it could be said that much of what has been happening in Southeast Asian higher education appears to be a dependent pattern of adaptations driven by ‘Western’ developed economies and ‘Western’ neoliberal discourse. However, the contemporary shifting of knowledge development in SEA, as in elsewhere increasingly challenges the relevance of centre-periphery framework in explaining the inequality of universities among the First “Northern” world and the Third “Southern” world.

...to Diverse Local Agendas in Contemporary Higher Education Reforms...

Spring (2009) rightly argues that hardly any country imports exactly and passively the policy agendas of transnational organisations and networks. It is the local conditions and actors that determine the actual influence of such an adoption. Higher education reforms in SEA promise ample evidence to prove this point.

One of the first attempts to look closely at the dynamics between global and local forces in reforming South East Asian universities could be attributed to Postiglione (2005) in the article titled "Questioning Centre-periphery Platforms". As an attempt to address Altbach's question "Can universities in the periphery hope to become world-class universities that are able to produce and disseminate new knowledge and attract students and faculty from the core?", his analysis of Southeast Asian universities shows a shift in the centre-periphery equation. He argues that even in the past this paradigm was not sufficiently relevant to the orientation of Thai universities and the extensive privatisation and massification of higher education in the Philippines prior to colonialism. He also notes that the emergence of Singapore in the international knowledge system, and the stratification of higher education development among the countries (in relation to his classification of the region's economic development into high-end economies like Singapore, emergent economies including Thailand and Malaysia, developing economies including Indonesia and the Philippines, and transition economies such as Vietnam, Laos, and Cambodia) reveals "a significant resistance to status quo centre-periphery relations and a vast competitive potential to alter these relations" (Postiglione, 2005, p.220). This is a strong point as it attacks the common assumption of many centre-periphery authors who tend to label peripheral countries (or the South, the East, the non-Western, or developing countries) as homogeneously poor and externally dependent.

While his article contributes significantly to the understanding of the issue, his conclusion drawn from only an overview of each country seems to be inadequate. It would be more convincing if he could go further into a close examination of distinctive higher education reform decisions of some, or better, of each of the countries in responding to external pressures. This, in turn, could support the conclusion about the relevance of centre-periphery framework. One example to illustrate this point is the case of Malaysia, one of the 'developing economies' in Postiglione's classification, with its vision for a World Class university.

Malaysian universities followed the models of British universities in its early stage of development. Over the years, the trend has been toward adopting many aspects of American Higher education (Lee, 2004). Following global trends, many Malaysian universities have adopted a whole range of 'corporate culture' to improve accountability, efficiency and productivity (Currie, 1998, cited in Lee, 2004). Recently, in an effort to be the hub of higher education excellence in Southeast Asia, it has embarked on a national higher education plan from 2007-2020 to achieve world-class status among its universities. In 2007 the Ministry of Higher Education, Malaysia published a blueprint entitled the National Higher Education Action Plan 2007-2010 to spearhead the transformation of higher education in the immediate future. It also laid out strategies to achieve world-class universities in Malaysia through the APEX experiment, where a university will be selected to carry out the Accelerated Programme for Excellence (APEX). "Apex Universities" is a conceptual construct that represent the nation's centre of academic distinction, and will be given greater latitude in order to work towards achieving their world-class status (Muda, 2008). However, a world-class university means a share of greater

autonomy, but in Malaysia's case, the power of the state override the university constitution or by-laws (Lee, 2004). Clearly, the adoption of an external educational idea has been adapted to the local agenda.

It is clear that some analyses of higher education development in South East Asia have pointed out several missing points in centre-periphery framework. First, while giving recognition to the role of power and wealth in shaping the knowledge transfer map, several authors merely adhere to the domination or exploitation of the West as the cause of educational inequality while deemphasizing the role of local actors. The fact is, educators in one country might borrow an idea a Western country or an international organisation, but local conditions often do not allow it to be copied intact resulting in some forms of adaptation. Besides, the adoption of educational ideas is due to multiple reasons, not necessarily due to an imposition from outside. Of course in some cases, such as loans from the World Bank, governments are pressured to adopt their education agendas. Whether lent or through pressure there is no guarantee that a particular educational model will be exactly copied at the local level (Spring, 2009). According to Steiner-Khamsi (2004), one reason that an educational policy leader borrows a policy is to certify or decertify (i.e., to validate or criticize) a school policy by referring to an imaginary global community such as 'international standards' or to the concrete policies of another nation or global organization. In other words, they use external authorities to justify local actions. Externalization is particularly applicable during periods of political upheaval when politicians search for outside validation of their actions. But validation does not mean an exact copy of the policies of the outside authority.

...And ASEAN University Network...

Another aspect that seems to be a missing in most studies of centre-periphery framework when examining higher education development in Third World countries in general and in South East Asia in particular is its regional dynamics. Knowledge transfer could now be realized or legitimised by cooperation among the countries in this area through various activities, including knowledge exchange through ASEAN university network.

According to Berkens (2004), the ASEAN University Network was founded as another initiative to promote cooperation and solidarity among scientists and scholars in the region and to develop academic and professional human resources as well as to produce and disseminate scientific knowledge and information among the universities in the region. Predecessor of the ASEAN University Network can probably best be traced back to the founding of the Association of Southeast Asian Institutions of Higher Learning in 1956 as a non-governmental organization. This cooperation among Third World countries at that time was a manifestation of their resistance to "a largely Western-oriented knowledge and research system" (Selvaratnam, 1988, p.59). Further collaboration in education was the establishment of the Southeast Asian Ministers of Education Organization (SEAMEO) in 1965 with the purpose of promoting cooperation in education, science and culture in the Southeast Asian region. Among its various cooperation initiatives, Regional Institute of Higher Education and Development was dedicated to higher education and development.

An arrangement of 17 universities in the ten ASEAN countries, the ASEAN University Network emerged from a highly ambitious idea of the ASEAN leaders and the ASEAN Subcommittee on Education (ASCOE) to establish an ASEAN University. The ASEAN Studies Programme has

been one of the instruments to realise a regional awareness and identity through many activities such as student and faculty exchange program. The network attempts to better exploit the complementarity of the different universities by giving more room for initiatives of individual universities (Berkens, 2004).

So what does this imply about the centre-periphery framework? The movements among Third World countries towards regional groupings or a creation of organizations to facilitate knowledge transfer like ASEAN University Network is probably not uncommon in the world today, but what is noteworthy is that studies on this kind of 'horizontal' education tie are few and far between (Abdenur, 2002). Although several centre-periphery theorists as well as post-colonial theorists have recognized the role of South-South intellectual transfer, its scope and politics as well as the complex issues surrounding the legitimacy of this particular transfer, particularly in higher education, remain rather under-researched or uncritically examined (Abdenur, 2002). For example, some post-colonial theorists (e.g., Hikling-Hudson, 2004) tend to conclude that the forging of South-South collaboration would bring about an "independent traditional direction and financing with strings from the wealthy countries of the 'North'" (Hikling-Hudson, 2004, p.308) or a solution for the "deepest problem of colonial aftermath" (Ibid, p.309). In doing so, they still bind themselves to the North-South axis while blindly believing in the altruism in South-South cooperation and thus ignoring the asymmetrical geometry of powers among these nations. In fact, the most recent findings (e.g., Caruso, 2009; de Sá e Silva, 2009; Abdenur, 2009) have revealed how motivations, reasons and outcomes in South-South transfer and cooperation have changed over time, as well as how the politics and modalities of the process are influenced by the inequalities and differences within the North and the South alike (Chisholm, 2009).

Conclusion

In their attempt to understand the power relation underlying the educational transfer, some scholars tend to choose a specific framework as their lenses of observation. While this framework may be true for a number of instances, confusion happens when scholars use the same framework in other instances or at other points in time. This is because of their assumption that if a theory is true for a number of cases then it is true for all cases (Spring, 2009).

Centre-periphery theorists could risk making such a mistake if the lenses are not cautiously used. In fact, although this discourse was widely applicable in the past, its explanatory values have been massively assaulted due to a misconception of power relationship, an underestimation of local agency, and an overtly Eurocentric focus. Specially, the discourse is increasingly contested in the light of globalisation and new educational developments among peripheral countries. In this respect, higher education development and cooperation in Southeast Asian also serves as a 'case of deviance' to the centre-periphery framework for several reasons. First, the countries in this area are investing in higher education in ways that help them alter their position in the global area, both economically and politically. Second, the stratification of development diversity of countries in this region as well as the emergence of Singapore as a knowledge centre in the world also disturbs the centre-periphery paradigm. Finally, by adhering to the Western/non-Western discourse, centre-periphery theorists also blind them to the importance of knowledge cooperation among Third World countries, like the case of ASEAN University Network.

Might post-colonial theory be a promising framework that offers relevant explanations for the complex dynamics in of education cooperation and development, at least in the case of South-East Asia, given its rich colonial history? Arguably, this approach may be less Eurocentric as it claims, by recognizing the active role of local actors and becoming a more open-ended 'dialogue' through negotiation of cultural messages among different geometries of powers (Tikly, 1999; Washbrook, 1999). However, as pointed out earlier, besides its contradictory interpretations, the uncritical use of this framework may lead to a homogenisation of colonial experiences and the myopia of the complex dynamics in international educational development. The contribution of post-colonial theory to the understanding of the politics of international educational development is perhaps, at this point in time, still limited and controversial.

Clearly, centre-periphery approaches, either of dependency or post-colonialism traditions, will need to be altered to account for the complex international education relationships under globalisation.

(Word count: 4,995)

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Title:

The Influence of Contexts on Acquisition of "How Many" and Its Implication for English Education: the Case of Japanese Child Learners

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The Influence of Contexts on Acquisition of "How Many" and Its Implication for English Education: the Case of Japanese Child Learners¹

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1. Introduction

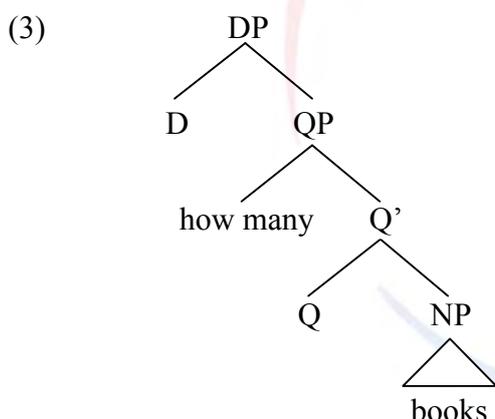
Following up on Yamada and Miyamoto's (2009) preliminary results, this paper reports experimental data on the acquisition of WH-questions such as (1) and directs implications for classroom instruction:

(1) How many books did John buy?

Syntactically, in one important respect, WH-questions of the type (1) are different from ones like (2):

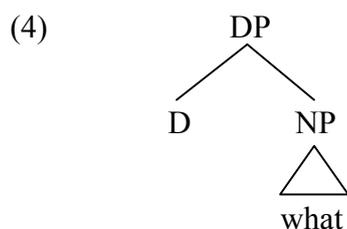
(2) What did John buy?

The WH-phrase *how many books* consists of two parts: *how many* and *books*. This WH-phrase has the structure roughly shown as in (3):



In (3), the Determiner Phrase (DP) is a “placeholder” for definite and indefinite articles, and the Quantifier Phrase (QP) is for quantifiers. Accordingly *how many*, being a quantifier, is in QP whereas *books* is in the Noun Phrase (NP) in (3). In (2), on the other hand, only the WH-phrase *what* is in NP, as shown in (4):

¹ We would like to thank Atsushi Uetoko, Business Manager/Language Counselor at Osaka YMCA Language Center Tennoji for his help with the child data collection, and the children at the center for participating in our study. The research reported here is supported by the Hakuho Foundation #09-B-026 (Principal Investigator: Kazumi Yamada).



Given the structural difference between (3) and (4), one important question, with respect to the acquisition of these two types of WH-questions, arises; namely, which constituent in (3) do learners think should be placed sentence-initially, either *how many* or *how many books*? This question does not arise in (4) since we only have one word, *what*, in this example. If learners know that a WH-phrase must be placed sentence-initially in English WH-questions, there is no choice, but the DP *what* must be raised to the sentence-initial position, as shown in (2).

The current paper deals with this very question for “complex” WH-questions of the type in (1), and the organization of the paper is as follows. Following the introduction here in Section 1, Section 2 introduces the theoretical assumptions relating to *how many* + N. Section 3 briefly reviews Yamane’s (2001, 2003) work on acquisition of WH-questions with *how many* by Japanese adult EFL learners. Section 4 introduces our experiment with Japanese child EFL learners; in which we provide experimental data showing that Japanese child EFL learners also rule in ill-formed WH-questions with *how many*, in a well-defined context. Section 5 discusses one implication for our experimental results when teaching English as a foreign language in classroom setting. Section 6 concludes the current paper.

2. Theoretical Background

Here we lay out our theoretical assumptions necessary for Section 3. We limit our discussion to a basic, but sufficient level. In passing, we provide some references for those who are interested in more fine-grained discussion on the points to be introduced.

Fiengo and Higginbotham (1981) observe that there is a contrast between (5a) and (5b):

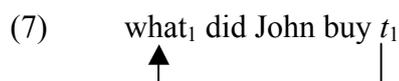
- (5) a. Who₁ did John buy [a book of *t*₁]?
 b. *Who₁ did John buy [every book of *t*₁]?

The only difference between these two examples is that in (5a), the object DP is headed by an indefinite article *a* whereas the universal quantifier, *every*, is the head of the object DP in (5b). This very difference leads to different interpretation of the object DPs in these examples. In (5a), the object DP is non-specific in the sense that no particular book is under discussion. Conversely, in (5b) the universal quantifier *every* forces the specific interpretation of the object DP; namely, a particular set of books must be under consideration in this example. In short, the contrast between (5a) and (5b) is the one between specific and non-specific DPs.

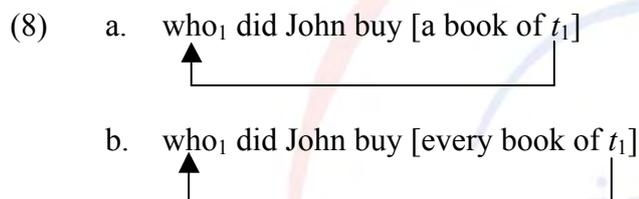
To account for the contrast between (5a) and (5b), let us start with basic syntax of English WH-questions. At the observational level, in English WH-questions, a WH-phrase must be placed sentence-initially, as exemplified in the contrast between (2), repeated here as (6a), and (6b):

- (6) a. What did John buy?
- b. *John bought what?

In normal circumstances, (6b) is possible only as an echo-questions. Under the framework of generative grammar, we capture this displacement property of WH-phrases with a notion of movement. For example, (6a) involves the movement of the WH-phrase *what* from the object position to the sentence-initial position as illustrated in (7):

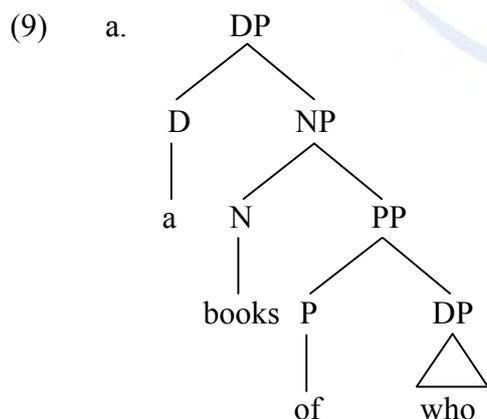


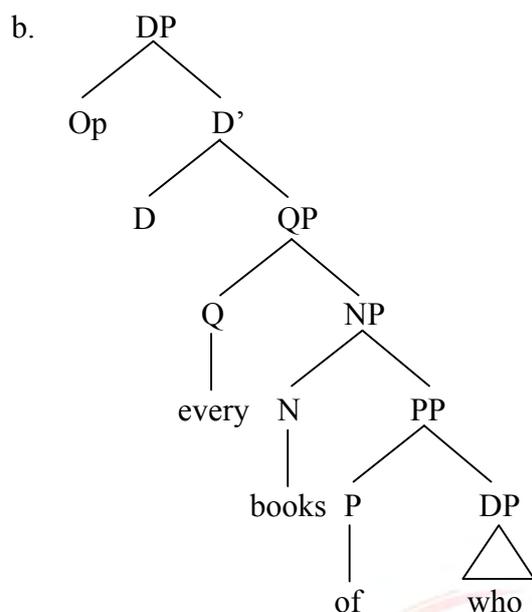
Likewise, in (5a, b), *who* should be placed sentence-initially via the movement of the WH-phrase in point as shown in (8a, b):



We can now rephrase the question to query what goes wrong with the movement of *who* in (8b).

We first assume that the specificity operator (Op), which substantiates specific interpretation, occupies the DP SPEC of a specific nominal. Accordingly, the object DPs of (5a, b) have the structures given in (9a, b):





Based on these nominal structures, we can account for the contrast between (5a) and (5b) by merely saying that the existence of the specificity Op, residing in the DP SPEC blocks the movement of *who* to the sentence-initial position. Although we do not elaborate the proposal under the recent generative framework, (9b) yields a minimality violation under Rizzi's (1991) framework. In contrast, no Op is present in (9a), and thus, nothing blocks the movement of *who*. As a result, no minimality violation occurs in this example.

Given this analysis of specific and non-specific nominals, let us return to the *how many* question in (1), repeated here as (10):

(10) How many books did John buy?

Enç (1991) shows that numerals allow specific and non-specific interpretation. This contrast appears overt in Turkish. Consider the difference in case-marking between (11a) and (11b).²

- (11) a. Iki kız-i taniyordum.
 two girl-acc I-knew
 "I knew two girls."
 b. Iki kız taniyordum.
 two girl I-knew
 "I knew two girls."

(Enç 1991: 6)

In (11a), the numeral is interpreted specifically, that is, this example introduces two girls from a previously given set. In this case, the DP in point is marked with an accusative case. In contrast, when numerals are interpreted non-specifically; no previously given set exists, they appear with no case, as shown in (11b). Accordingly, only (11a) can follow (12), which introduces a particular group of

² Abbreviations are as follows: acc (accusative marker), dat (dative marker), and Q (question marker).

children into the discourse:

- (12) Odam-a birkaç çocuk girdi.
 My-room-dat several child entered
 “Several children entered my room.”

(Enç 1991: 6)

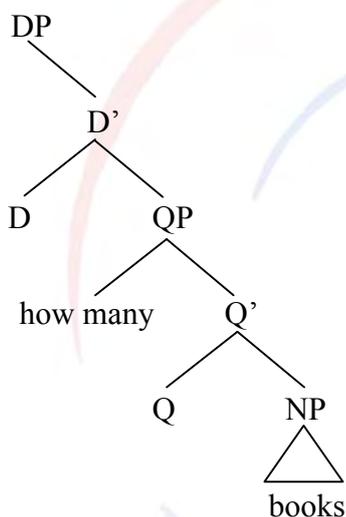
Although we do not observe any morphological difference, in the same way the English example in (13) is also ambiguous between specific and non-specific interpretation:

- (13) I saw two boys at the movies.

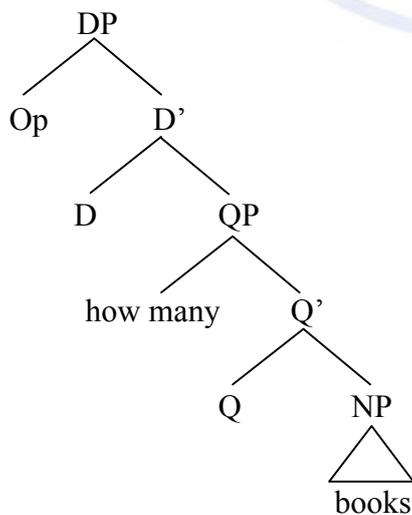
(Enç 1991: 8)

Hence, given that numerals in English permit specific and non-specific interpretation, *how many books* should have different structures according to its interpretation, as shown in (14a, b):

- (14) a. Non-specific interpretation



- b. Specific interpretation



It is worth emphasizing that regardless of whether the WH-phrase *how many books* is interpreted as

specifically or non-specifically, (15) is ungrammatical in English:

(15) *How many did John buy books?

Accordingly, EFL learners must know that the entire DP, *how many* + N is always raised to the sentence-initial position, independent of the structural difference between its specific and non-specific interpretation. If they have not yet acquired this particular property of *how many* + N, we predict that learners incorrectly have an option of moving *how many* alone to the sentence-initial position. Under the theoretical assumptions presented in this section, the raising of *how many* alone is blocked by the specificity Op when the WH-phrase in point is interpreted specifically. Accordingly, we predict that EFL learners who have not acquired the syntax of *how many* + N incorrectly accept WH-questions of the type exemplified in (15) only in non-specific context.

3. Previous Research on the Acquisition of How Many in Adult EFL Learners: Yamane (2001, 2003)

Yamane (2001, 2003) investigated whether or not the role of L1, namely Japanese, is involved in the L2 English grammar. A grammaticality judgment task was used in her experiment. Her 54 informants (Japanese university students) were asked to judge whether various WH-questions including the ones exemplified in (16) are grammatical:

- (16) a. How many friends do you have?
b. *How many did you buy pens?

The results show that her participants correctly ruled out WH-questions in which only *how many* is extracted (60.2% of the time); she therefore concludes that the role of L1 was not observed in the acquisition of *how many*.

Of particular interest is the fact that, in Yamane's study, the test sentences were given to the subjects without any context. This might have allowed her subjects to imagine any context under which each test sentence was used, and the subjects might have come up with "specific" context for *how many* + N. Given the theoretical assumptions of specific nominals discussed in section 2, the fact that Yamane's participants correctly excluded the raising of *how many* alone to the sentence-initial position might be considered instances of minimality violations. In order, therefore, to confirm whether learners have truly acquired the basic syntax of the DP *how many* + N, we need to control the context under which each test sentence is given, and examine both specific and non-specific contexts. We attempt this in our experiment reported below.

4. Experiment

In the first three sub-sections, we describe the methodology, and the final sub-section introduces the results of our control group and the child EFL learners.

4.1 Participants

Five Japanese children, who do not use English on a daily basis, participated in our study. The children took an English lesson once a week at Osaka YMCA Tennoji. All of the children were Japanese native speakers with exposure to English before age six. Their background information is given in Table 1.

Table 1: Background information of children

	Age	Sex	Exposure to English (age)
J1	9	F	4
J2	9	M	2
J3	10	F	1
J4	10	F	3
J5	9	F	5

As a control, five English native speakers were also included.

4.2 Material

The task used in Yamada and Miyamoto (2009) actually consists of 30 items including 10 types of a sentence with WH-phrase (e.g. *how many*, *whose*, *who*). Here, only the items involving *how many*, which are of our concern, are given in (17). In order to force a bias toward specific or non-specific interpretation, we incorporate test sentences into dialogues. An illustrative example is given in (18):

(17) Target sentences

(i) *how many* questions in specific/non-specific contexts

e.g. How many did he lose pencils?

(ii) *how many* + N questions in specific/non-specific contexts

e.g. How many DVDs do you have?

(18) Dialogue (e.g. *how many* question in specific context)

Charlie: Mary bought 5 pencils yesterday but she's already lost some of them.

Pikachu: How many pencils did she lose?

Charlie: 3 pencils, she said.

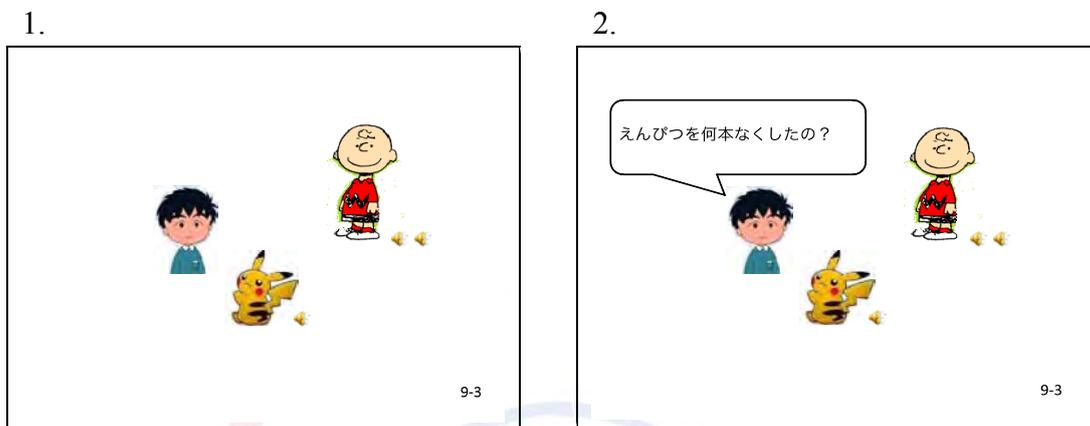
In the dialogues above, the underlined words '5 pencils' introduces a specific set into the discourse. Accordingly, *how many pencils* must be interpreted as a specific DP.

4.3 Procedure

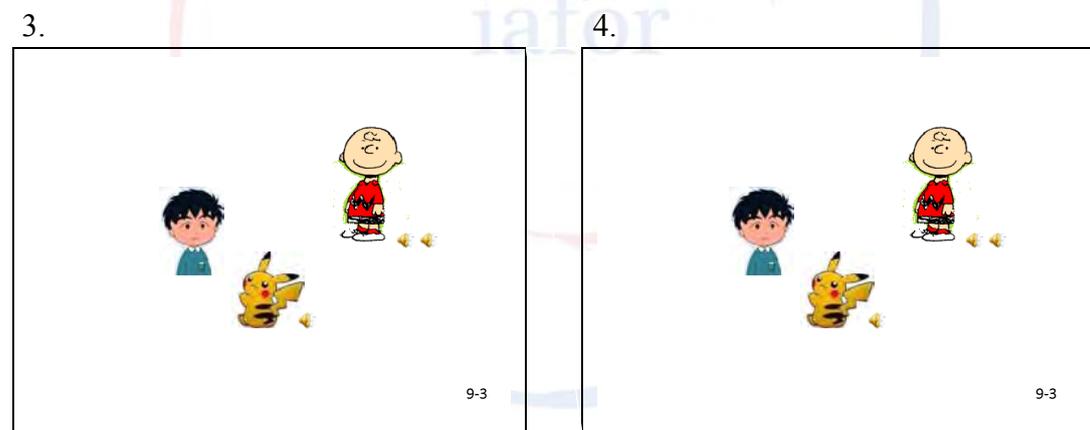
The participants were examined individually at the YMCA. The experiment was preceded by a series of instructions and by four practice items. The participants were told that they would be listening to a

series of dialogues consisting of 3 cartoon characters (Charlie, Kento, and Pikachu) together with their pictures (see (19) below). The children were also told that in the dialogues, Kento cannot speak English, so Pikachu would help him. However, since Pikachu might make errors, the children were required to listen carefully to Pikachu. The participants' task was to judge whether the sentences uttered by Pikachu in English (see (19-3)) were acceptable or not.

(19) Examples



Charlie: “Mary bought 5 pencils yesterday but she’s already lost some of them.” (Kento: Enpitsu-o nanbon nakushita no?)
 pencil-acc how many lost Q
How many pencils did she lose?



Pikachu: “**How many pencils did she lose?**” Charlie: “3 pencils, she said.”

4.4 Results

4.4.1 The Native English control

The five English native speakers categorically ruled out ungrammatical sentences where only *how many* was extracted (Table 2). On the other hand, they categorically ruled in grammatical sentences in which *how many* + N was extracted.

Table 2: English speakers’ results of the grammaticality judgment tasks (*=ungrammatical)

moved element	specific	moved element	non-specific
a. how many*	0/15 (0%)	c. how many	1/15 (6.7%)

b. how many + N	10/10 (100%)	d. how many + N	15/15 (100%)
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4.4.2 The Child EFL learners

As Table 3 shows, there is a clear contrast between specific and non-specific contexts with respect to extraction of *how many*. In specific contexts, the child EFL learners ruled in sentences with *how many* extraction 46.7% of the time. On the other hand, they categorically ruled in such sentences in non-specific context (100% of the time)³.

Table 3: Children's results of the grammaticality judgment tasks

moved element	specific	moved element	non-specific
a. how many*	7/15 (46.7%)	c. how many	15/15 (100%)
b. how many + N	8/10 (80.0%)	d. how many + N	12/15 (80.0%)

To summarize, we discovered that Japanese child elementary EFL learners incorrectly accepted this type of sentence only when the WH-phrase in point was to be interpreted non-specifically. In contrast, when the specific interpretation of the WH-phrase was forced, the subjects only permitted the type of sentence illustrated in (1), repeated here as (20):

(20) How many books₁ did John buy t₁?

5. Educational Implications

The asymmetry between specific and non-specific contexts, observed with *how many*, suggests that unless we examine specific and non-specific contexts, we cannot conclude that learners have acquired syntax of English WH-questions of the type (1). The obvious conclusion from the experimental results suggests that learners have not realized that the entire DP *how many + N* must be raised to the sentence-initial position. We therefore believe it also important to incorporate specific and non-specific contexts in providing instructions for this type of WH-question in classrooms.⁴

When we observe *how many* questions in English textbooks, the context provided tends to be specific, incorporating information of the objects involved. In one of the English textbooks for the first graders in a junior high school, we have a dialogue of the following kind. Notice that in the picture, we already see six ducks, which makes the context specific.

(21)

³ In contrast, there is no obvious contrast between specific and non-specific contexts with respect to extraction of *whose*. This may not be too surprising given the possibility that *whose* is base-generated in the CP SPEC and the resumptive *pro* occupies the position within the object DP. For example, (ia) may have the structure in (ib):

(i) a. *Whose did you see mother?
b. Whose₁ did you see [(Specificity Op) pro₁ mother]

If the structure in (ib) is available in the grammar of the subjects, it is natural that no minimality violation occurs in (ib) since no movement is involved. See Yamane, Chen and Snyder (1999) for relevant discussion.

⁴ Since foreign language instruction is to start in 2011, our results from Japanese child EFL learners are particularly important.

② Ken : Do you see any birds ?
 Emma : Yes, I do.
 Ken : How many birds do you see ?
 Emma : Just a minute. I see six birds.



Ken : I see some plastic bags too.
 Emma : Oh, dear.

(NEW CROWN 1:37)

The fact that the context is specific in (21) then suggests the specific interpretation of ‘*how many birds*’ in the question, ‘*How many birds do you see?*’. Consequently, due to the existence of the specificity Op, even if the students have not acquired the fact that *how many* alone can never be raised to the sentence-initial position, the raising of the whole DP is forced for independent reasons. Learners therefore appear to reject correctly WH-questions like (22) in this case.

(22) How many₁ do you see [t₁ birds]?

We therefore ought to seek how to incorporate the distinction in point in teaching *how many* questions in class.

One of the contexts which favor non-specific interpretation is to use a verb of creation with *how many* + N (Diesing 1992). By their lexical nature, verbs of creation do not create specific context because any particular set of entities involved does not exist yet. In order to create exercises for questions with *how many* + N, we can therefore incorporate questions of the type exemplified in (23):

(23) How many stories₁ do you want to write t₁?

Another way is to create exercises in which those who ask *how many* questions cannot imagine any specific set of entities involved. In this respect, the exercise below is of the right kind:

(24)

Your Turn 表に、あなたがもっている品物の名前とその数を書き入れ、友達とたずね合って、それぞれの数を書きましょう。

	[例]	①	②
品物	CD		
名前			
あなた	15		
友達	10		

[例] A: I have fifteen CDs.
How many CDs do you have?
B: I have ten.

Tool Box 品物

1. CD シーディー
2. comic book マンガ本
3. MD エムディー
4. video game テレビゲーム

巻末 TB

(NEW HORIZON 1:45)

(Instruction for this exercise) Decide two items of your choice and jot down how many of them you have. Then, make a pair and ask your friend how many he/she has.

In this exercise, students are supposed to ask their friends *how many* questions. In this context setting, there is no way to imagine any specific set before the questions are asked. Accordingly, *how many* + Ns must be interpreted as non-specific DPs. If EFL learners never use *how many* questions exemplified in (22) in this type of exercises, we can confirm that learners have already acquired the basic syntax of questions with the DP *how many* + N.

6. Concluding Remarks

This paper examined the behavior of *how many* questions and showed that at the elementary level, Japanese child EFL learners raise only *how many* to the sentence-initial position. However, we also discovered that this type of mistake only occurs in non-specific contexts. This suggests that at the elementary level, Japanese child EFL learners have not acquired the basic syntax of *how many*. The fact that they did not raise *how many* alone is due to specificity effects, which may be considered as minimality violations (Rizzi 1990). Based on these findings, we suggest that in teaching the WH-questions under consideration, we need to control the context where these questions are given and incorporate non-specific context. We also suggest that one of the ways to force non-specific context is to use a verb of creation as the main verb. Of course, on the practical side, we still need to consider how to provide students with WH-questions of the relevant kind in the classroom setting, but we hope that this paper provides one instructional insight from the theoretical linguistic and second language acquisition research.

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The Effect of Changing Presenting Style of Dynamic Display in Chinese for Learning Disability Students

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Abstract The purpose of the present study was to find out the best conditions for reading comprehension by comparing the presenting speed (slow, medium and fast) and direction (vertical and horizontal) of dynamic display in Chinese. The participants consisted of 48 (27 males) fourth-grade learning disabled students. The materials for the present study are three essays, and the test-retest reliability, validity, style, and question numbers of these three essays were similar. The results indicated that there is no interaction between the speed factor and the direction factor. In regard to the speed factor, the learning disabled students performed significantly better at a medium speed (260wpm) than at a fast speed (350wpm). This was followed by the slow speed (171wpm). Regarding the direction of the text, reading comprehension with the horizontal script was significantly higher than with the vertical. The present study is backed up by previous studies. The findings are proof that a dynamic display in a suitable environment can assist learning disabled students.

Keywords learning disability, Chinese, dynamic display, presenting style

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1. Introduction

“Reading” is an essential learning tool and a major source of attaining knowledge in one’s daily life (Ko & Zhan, 2006). In general, knowledge in school is often learned by means of reading. In fact, the complexity of the reading process is very difficult to explain in simple terms. When learners encounter reading material, they must use their reading ability to identify words and combine this with their background knowledge to comprehend the deeper meanings of the content.

Because of the complexity of reading, when people run into reading difficulties, they usually do not know what to do with it. In a regular classroom, there will always be some students with low reading achievement, which is mainly because the teaching materials are often presented in the form of words. If the students have low reading comprehension, learning will be difficult for them. In General, various instructional methods are often used to improve students’ reading comprehension, such as reading comprehension strategies, and peer-assisted learning. (Reutzel, Smith & Fawson, 2005; Spörer & Brunstein, 2009; Spöre, Brunstein & Kieschke, 2009). However, from teachers’ perspectives, it is not easy to prepare instructional methods while also attending to students’ other needs.

Therefore, this study focuses on comparing the effects of a changing textual presentation for students with learning disabilities (LD), in the hope of finding the most effective and appropriate model for the school setting.

2. The changing of textual presentation

Readability basically means how easy it is to read a text. Comprehension increases when a reader meets a text with better readability (Chien, Chen & Wei, 2008). Furthermore, research has indicated that the speed and direction are both important conditions in dynamic textual representation (Chien & Chen, 2005).

2.1 Speed of Presentation

The rapid serial visual presentation (RSVP) is a method of dynamic textual

presentation. The difference between dynamic and static presentation is that dynamic textual presentation moves, so “speed” is one of the important factors for studying the dynamic textual presentation (Chien, Chen & Wei, 2008). In general, speed means the numbers of words per minute (wpm). Bernard, Chaparro and Russell (2001) studied the relationship between RSVP and reading speed at three levels (250, 450 and 650wpm). They found there was a significant difference between the three speeds, and the best reading comprehension occurred at a reading speed of 250 wpm (Bernard, Chaparro & Russell, 2001). The result of a recent study (Chien & Chen, 2005) also found the best reading comprehension existed at 260 wpm when they compared dynamic text at 171, 260, and 350wpm with static text.

Some researchers (Sun, Morita & Stark, 1985) compared the eye fixation time of reading in Chinese and English text, and they found the average fixated time per word was 0.26 second in vertical Chinese, and 0.27 second in horizontal English. In addition, a study into dynamic textual presentation in Chinese indicted that the participants could get a higher reading comprehension with the RSVP at 140wpm in a single line screen of 20 words.

According to several studies about different speeds, two studies (Bernard, Chaparro & Russell, 2001; Chien & Chen, 2005) showed that around 250wpm would result in the best reading comprehension, but another study (Sun, Morita & Stark, 1985) indicted better reading comprehension occurred at 140wpm. Therefore, the present study would examine the different reading comprehension speeds.

2.2 Direction of Presentation

The researcher found that reading comprehension increased in horizontal text compared with vertical text (Chien, Chen & Wei, 2008) The researcher found the best reading condition is 25 words in vertical text, and 20 words in horizontal text (Tsau, 2001).

Sz (1999) indicated that even though prior studies showed horizontal text increased comprehension for Chinese script, this may be due to reading habits rather than reading direction. As the eyes are located on the left and right of the face, overall, readability in horizontal text is better than vertical text so moving from right to left is physiologically easier. It requires more muscular energy for the eyes to move from top to down, so it quickly tires a reader (Tsao & Lin, 1998). However, reading habits also influences reading behavior.

2.3 Learning Disability Students' Reading

For the learning disability (LD) students, word-by-word RSVP could improve reading comprehension, and RSVP may attract LD students' visual attention (Wang,

2010). But even for normal student, there are still some arguments about the best RSVP speed, and there are no related studies about the adaptive RSVP speed for LD students.

In other words, because of the direction and sequence of visual attention, the readability of horizontal texts is higher than for vertical text (Tsau, 2001). This could be very valuable for LD students because LD students' visual attention is significantly delayed compared with non-disabled students' (Hoop, Swartz, Wakely & Kruif, 2002; Golden & Golden, 2002).

The present study focuses on text speed and direction in order to find a more effective method in which to present text speed and direction and improve reading comprehension for LD students.

3. Method

3.1 Structure

The independent variables in this present study are the three speeds (171, 260 and 350wpm) and the direction (vertical and horizontal). There are six factors in total, and the dependent variable is the LD students' reading comprehension scores.

The disturbed variables are the error between different methods, so the author controlled the following areas: the size and the font of the characters, the color of characters, and the background. According to prior studies, results indicated that reading comprehension is no different between 12pt, 20pt and 28pt on a personal computer (Chien, Chen & Wei, 2008; Russell & Chaparro, 2001), so the word size setting of the present study is 20pt. In the word font, no difference between sizes was found between Kaiu and Mingliu (Wang & Kan, 2004), so the word font setting of the present study is Kaiu. The result of prior studies indicated that the setting of black words on a white background could reduce glare (Wang & Kan, 2004), so the color of the characters and the background setting of the present study follows this setting.

3.2 Procedure

Participants would be told "This test was designed to measure your Chinese scores, so you should write down the answer." Every participant was presented with three texts in total. The reading materials were presented on a computer screen, and the participants would write the answer on paper after the material was presented. When the materials were presented, the words were shown word-by-word (the vertical text see Figure 1 and 2; the horizontal text see Figure 3 and 4). When the time for the first word was up, it would remain on the screen when the second word appeared. The full text of the article disappeared when the last word was shown and the time was up.



Figure 1 The beginning of the vertical text



Figure 2 The process of the vertical text

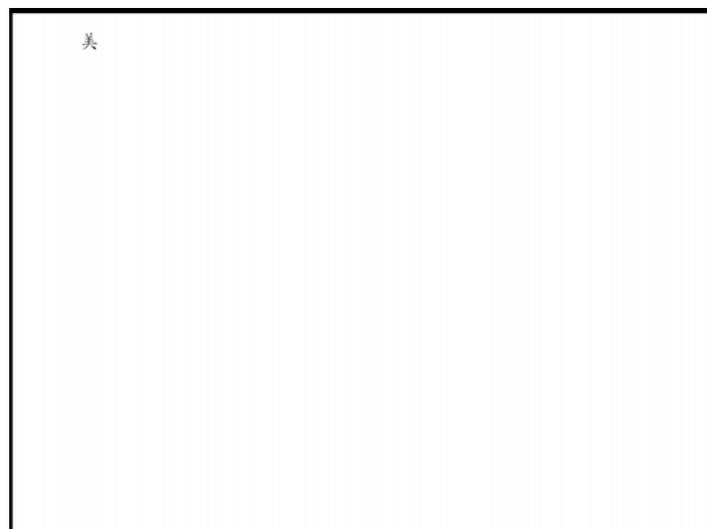


Figure 3 The beginning of the horizontal text

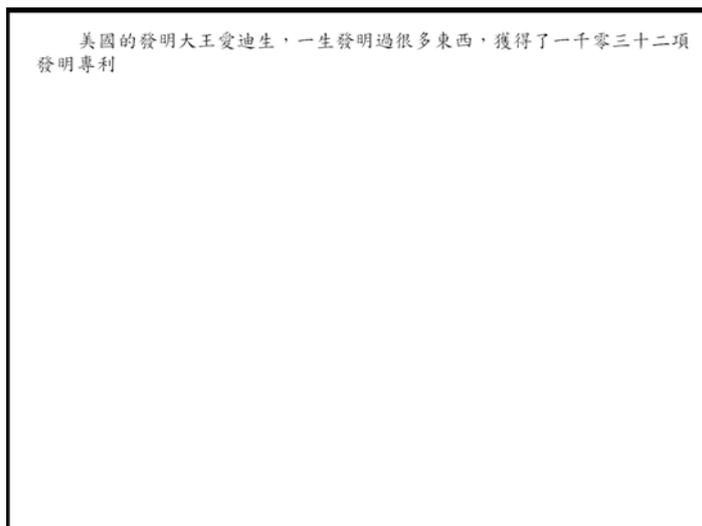


Figure 4 The process of the horizontal text

3.3 Participants

The participants of present study are 48 (27 males) 4th grade elementary school students, and identified by the county education bureau, as sharing a similar socio-economical status. Also the participants were from the same school as sampling from the same school would reduce the possible effects of the students’ large background discrepancies. All the participants were distributed into six groups (see Table 1). The participants that read in a vertical arrangement and at a slow speed (171wpm) are called SV group; the participants that read in a vertical arrangement and at a medium speed (260wpm) are called MV group; the participants that read in vertical arrangement and at a fast speed (350wpm) are called FV group. Furthermore, the participants read in a horizontal arrangement and at a slow speed (171wpm) are called SH group; the participants that read in a horizontal arrangement and at a medium speed (260wpm) are called MH group; the participants that read in a horizontal arrangement and at a fast speed (350wpm) are called the FH group

Table1 integration of six kinds of textual presented method^o

^o	Slow (171wpm) ^o	Medium (260wpm) ^o	Fast (350wpm) ^o
Vertical arrangement ^o	SV ^o	MV ^o	FV ^o
Horizontal arrangement ^o	SH ^o	MH ^o	FH ^o

The participants in the VS group saw the materials word-by-word vertically, and the frequency was 171wpm (about 21.05 seconds per word). The participants in the MV group, saw the materials word-by-word vertically, and the frequency was 260wpm (about 13.85 seconds per word). The participants in FV group saw the materials

word-by-word vertically, and the frequency was 350wpm (about 10.28 seconds per word). In addition, the participants in the SH group, MH group and the FH group, all saw the materials word-by-word vertically, and the speed were separated to 171wpm (about 21.05 seconds per word), 260wpm (about 13.85 seconds per word) and 350wpm (about 10.28 seconds per word).

3.4 Materials

The materials were selected from the Ho and Lee's study. They created "reading comprehension tests" for the LD students in a 4th grade elementary school. The selective criterions are literacy, number of questions, difficulty level and re-test reliability. The three items were narration (story), 9 questions for test 1 and 2, 8 questions for test 3 (1 text has 8 questions), a difficulty level of around 0.8 (0.776-0.806) and re-test reliability of 0.7 (0.687-0.743). In total there are 26 reading comprehension questions (Ho & Lee, 2003) (see Table 2).

Table 2 Title, Number of question, Difficulty level and Re-test reliability of Reading Comprehension Tests^a

^a	Title ^a	Number of question ^a	Difficulty level ^a	Re-test reliability ^a
Test 1 ^a	Edison ^a	9 ^a	0.806 ^a	0.692 ^a
Test 2 ^a	The Salt God ^a	9 ^a	0.773 ^a	0.687 ^a
Test 3 ^a	An Old Teapot ^a	8 ^a	0.776 ^a	0.743 ^a

3.5 data analysis

The present study used a two-way ANOVA to analyze the data to discover if reading comprehension scores differed between the three presented speeds (two presented direction), and examine if there is an interaction between presented speed and direction.

4. Examine presented speed and direction

The LD students' reading comprehension scores for the three presented speeds (171, 260 and 350wpm) and the two presented directions (vertical and horizontal) for dynamic display (see Table 3).

Table 3 Two-way ANOVA of LD LD students' reading comprehension scores

	df	MS	F
presneted speed	1	200.00	62.411**
presented direction	2	244.50	76.298**
Speed x direction	2	0.50	0.156

* $p < .05$, ** $p < .01$

According to Table 3, the LD students' reading comprehension scores for the presented speed and the presented direction didn't have an interaction (see Figure 5).

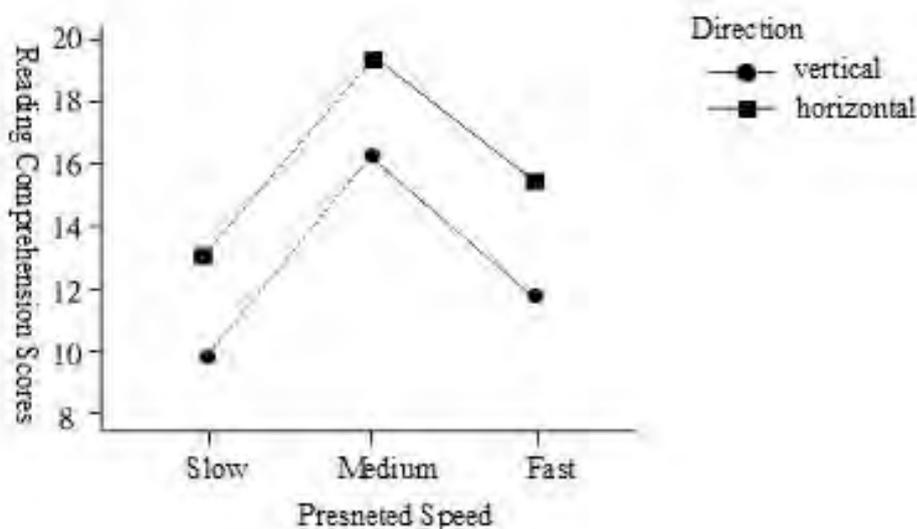


Figure 5 Profile of LD students' reading comprehension scores of presented speed and direction

As the two factors didn't show an interaction, we could examine the effects of individual factors (presented speed and presented direction) on reading comprehension scores.

Examining the direction factor, according to Table 3 we could know the two models (vertical and horizontal) had a significance of $p < .01$. LD students have a higher reading comprehension score for the horizontal text.

According to Table 3, the three models (slow, medium and fast) have a significant difference $p < .01$, so we carried out a Post-hoc (Tukey) (see Table 4).

Table 4 Posthoc of LD students' reading comprehension scores in three presented speed (Tukey)^a

	Slow-Medium ^a	Medium-Fast ^a	Fast-Slow ^a
Scores ^a	-6.250** ^a	4.250** ^a	2.000* ^a

* $p < .05$, ** $p < .01$ ^a

According to Table 4, LD students' reading comprehension scores at the medium speed were significantly better than the slow and fast speeds, and the reading comprehension scores for the fast speed was significantly better than the slow. Therefore, the best reading comprehension scores for LD students are found at a medium speed (260wpm).

5. Discussion and Conclusion

According to above, there is no interaction between speed and direction. Therefore, when the presented speed changed, the presented direction had no effect to the effectiveness of speed, and vice versa.

In the separate discussion on presented speed and presented direction, the results support the studies of Bernard *et al.* (2001) and Chien and Chen (2005). They found that LD students read in a similar way to non-learning disabled students, and had a better reading comprehension at around 260wpm. However, this result is different from the results of a study by Sun *et al.* (1985). This different may be due to the "single line screen. A single line screen is more difficult to read so a reader needs more time to comprehend the text; hence, the effectiveness of the slower speed. As the presented words of reading materials existed in single line screen, comparing to faster speed (250wpm and 350wpm) , readers could remember textual content more clearly at the slower speed (140wpm) easily.

The results also support previous studies that show horizontal text results in better comprehension when compared with vertical text(Bernard, Chaparro & Russell, 2001; Sz, 1999; Tsao & Lin, 1998).

According to the result of the present study, LD are similar to normal students, have a better reading comprehension scores at a medium speed (260wpm) on a dynamic display. Furthermore, LD students are similar to non-learning disabled students and get better reading comprehension scores in a horizontal presented rather than a vertical presented dynamic display. However, the present study doesn't focus on paper texts, so we can't claim LD student would get a better reading comprehension on a horizontal display presented on paper. If we want to examine this, we need to establish more empirical tests.

Some teachers like to use Computer Assistant Instruction (CAI) to support instruction in recent years. Therefore, the dynamic display is a very important issue, especially as LD students' visual attention is significantly delayed compared with non-learning disabled (Hoop, Swartz, Wakely & Kruif, 2002; Golden & Golden, 2002), so they may be affected by a bad dynamic display. Thus, researchers should focus on this issue in the future.

Furthermore, regardless of how interesting the instructional materials are, a better effect is only found in an adaptive setting.

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Title: Interdisciplinary and cross-cultural value principles for legal English teaching

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Abstract

This integration of law, linguistics, and pedagogy emanates from (1) a general paucity in research on English for Academic Legal Purposes (EALP), and (2) an acute awareness of the decline of communication skills of L1 and L2 legal English learners. The research paucity could be attributed to the level of specialty that EALP requires of instructors and learners. Additionally, it is a subject that is inherently interdisciplinary, which complicates research procedures. The decline of communication skills of learners could be explained by the internationalization of the classroom, which leaves students ill-informed of and unprepared for law school expectations.

The purpose of this project is to merge the interdisciplinary foundations of legal English that could explain and improve EALP education. These foundations include legal, linguistic, and pedagogical perspectives. Legal perspectives comprise of the natural law approach and constructive interpretation, which are respectively drawn from jurisprudence and hermeneutics. Systemic functional linguistics is the linguistic perspective that explains how language functions. The pedagogical approach relies on a genre-based pedagogy that includes English for Specific Purposes and the New Rhetoric that underscores the cross-cultural dimension.

The process of identifying interdisciplinary and cross-cultural value principles consists of two parts. Firstly, the theoretical foundations are critically reviewed to explain the dynamics of legal English pedagogy. Secondly, theoretical principles are then identified from the various perspectives and synthesized to create a set of value principles that could advance EALP teaching.

Introduction

English Language Teaching (ELT) serves as a hypernym that refers to a prolific field of research about English instruction. In an attempt to taxonomize ELT one could subdivide the field into the teaching of English as L1 and L2 language. Both L1 and L2 teaching include English for Specific Purposes (ESP). Johns and Price-Machado (2001:44) describe ESP based on four invariable and two variable elements. The invariable elements refer to language teaching that is:

- tailored to the needs of the learner;
- connected to content, specific subjects, professions, and actions;
- focused on proper language for these activities; and
- different from generally used English.

The variable elements refer to language teaching that is:

- limited to the language skills to be learned; and
- teaching does not happen according to any predetermined pedagogy.

This definition leads to ESP being an umbrella-term for a larger taxonomy. Figure 1 shows a hierarchal diagram depicting the classification of ESP categories (Johns & Price-Machado 2001:44). The dark lines indicate the association between ESP and English for Academic Legal Purposes (EALP). The dark dialogue boxes position EALP and English for Legal Purposes (ELP) at different ends of the ESP spectrum.

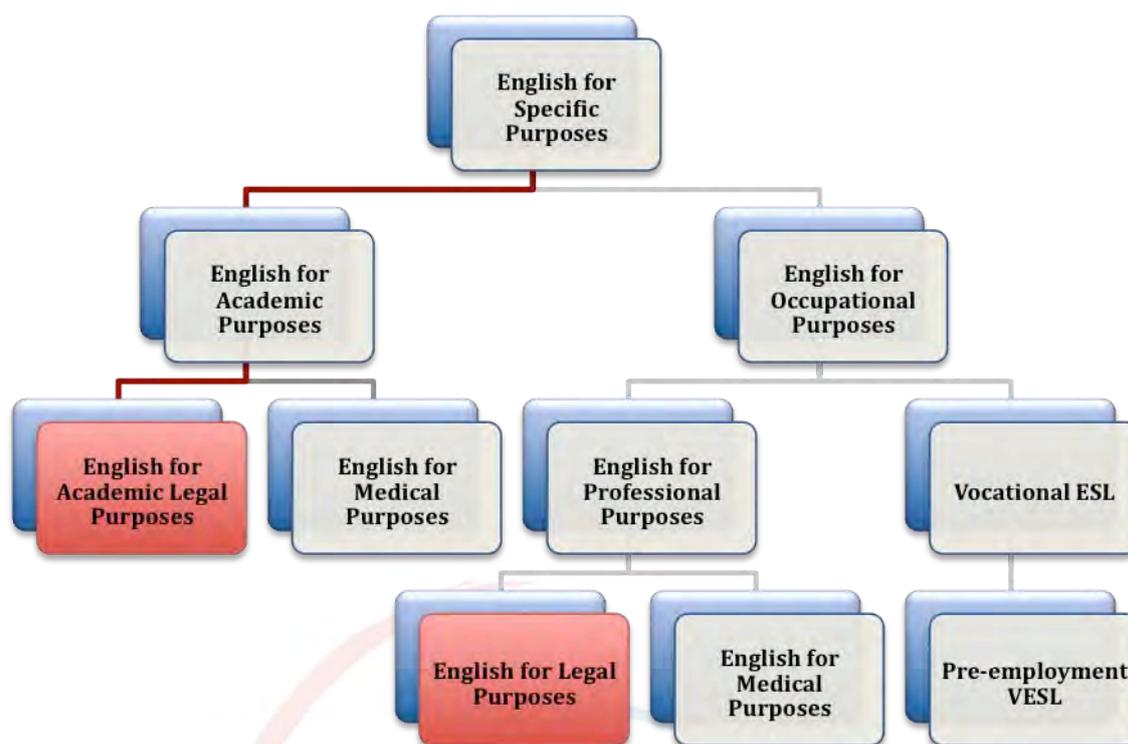


Figure 1: Taxonomy of ESP categories

Taxonomies enable us to distinguish the proverbial trees from the forest; they also allow us to notice how the forest functions as an interconnected system. Similarly, the various branches (no pun intended) of language teaching and learning are connected by virtue of belonging to the same language (forest) and/or discipline (tree). Yet, a taxonomy also illuminates incongruity.

The latest trend in legal English textbook design contradicts the assumption that EALP is different from English for Occupational Purposes (EOP) based on a distinction of purpose, focus, and skills (Hyland & Hump-Lyons 2002:2; Jordan 1997:4). For example, in both *International Legal English: A Course for Classroom or Self-Study Use* (Krois-Lindner, 2006) and *Legal English* (Haigh, 2009) the focus is on a comprehensive spectrum of skills that include academic and professional communication skills and literacy. In contrast with older EALP textbooks (Candlin, Bhatia, & Jensen 2002), recent publications seem to indicate an integrated pedagogical approach to the teaching of legal English skills in the L1/L2 international classroom. These contemporary examples seem to merge the purposes and outcomes of EAP and EOP, rendering the distinction between EALP and ELP somewhat redundant.

Paucity in EALP research

English for Specific Purposes is abounding with research; however, the subfield EALP is less explored. A number of **reasons** explain the **research paucity**.

- The lack of research could be attributed to the **level of specialty** that EALP requires in its teaching and learning. EALP is usually taught by EAP instructors who have not necessarily received formal legal training (Kurzon 1997:136). Conversely, legal

educators do not necessarily have the required language teaching expertise (Van der Walt & Nienaber 1997:v). As a result, legal educators and “EAP teachers will be seen as overreaching themselves and pretending to an expertise that they can only feign or simulate” (Bruce 2002:324).

- In conjunction with expertise required in both substantive law and language pedagogy, EALP is also an **interdisciplinary field** that hinges on anthropology, linguistics, philosophy, psychology, and sociology (Conley & O’Barr 1998:1). The interdisciplinarity of the field could deter researchers. Ties to certain academic institution or disciplines often encourage disciplinary specialization, which discourages entry into the interdisciplinarity of EALP (Golbe & Gallagher 1999:282).
- In accordance with the interdisciplinary nature of EALP, Candlin, et al. (2002) identify the isolation in which **professional genres** have been researched without consideration of **professional practice**. This argument supports the claim above that the distinction between EAP and EOP is artificial. An isolated view of genre, for example, undermines the interdiscursivity between professional genres and their practices (Bhatia 2004:391; 2008a; 2008b; 2010).
- **Legal language** is notorious for its impenetrability because of its prolixity, nominalization, and fixed verbal chunks (Venturi 2010:22, Wydick 1998:3-4). These qualities of legal language deter outsiders from entering EALP. The ‘resistance’ that the legal profession displays against language and genre transformation maintains the veracity of the profession (Van der Walt & Nienaber 1997:v), but could also hamper the development of EALP.

Decline of communication skills

Together with the research deficit the **inadequate communication and academic literacy skills** of EAP students motivate improving EALP pedagogy. The frail reading and writing skills of undergraduate EAP students is an international phenomenon (Alaka 2010; Larcombe & Malkin 2008). Pretorius (2002) refers to it within the South African context as “crisis”. Although the calamity manifests across disciplines and cultures, additional language groups are particularly affected (Carstens 2008; Johns 1995; Read 2008). However, the occurrence of frail reading and writing skills is not isolated to EAP. In fact, it necessarily implies a skills shortage in the more specialized fields such as EALP.

It is for this reason that Deutch (2003:125) conducted an empirical needs analysis to determine the priorities of EALP curricula in Israel. Because law is such a linguistically demanding course, Larcombe and Malkin (2008:319) argue for additional language support for international and domestic Australian law students. In a similar vein Edelman (2010:112) argues for a foundational legal writing course not only for American law students, but also for law students around the world. Such acute international appeal for the development of an EALP program confirms that law students are in need of language support.

Motivation for interdisciplinary approach

How could the research paucity and frail communication skills of students be addressed? Perhaps the more important dilemma is where does one begin? Studies that attempt to

investigate the research paucity in the EALP field suggest that possible solutions, to the causes and effects of tenuous communication skills of law students, could be found in an **interdisciplinary approach** that triangulates the acquisition of legal language skills with applied linguistics and pedagogy.

Such triangulation is seen in the research of Bhatia, arguably the leading proponent in the EALP field. Initially Bhatia focused primarily on legal and business genres (Bhatia 1983, 1993). More recently Candlin, et al. (2002) straddle disciplines and propose a genre-based perspective to advance the development of legal English writing material, thereby infusing traditional legal studies with applied linguistic pedagogy. Bhatia (2008b:162; 2010) also proposes that academia and professional practice could compliment each other by considering the text-external factors of the production and distribution of knowledge. Bhatia acknowledges the foundational connection that exists between theory and practice, academic legal genres and their practical application that exists through a process called **interdiscursivity** (compare Hafner & Candlin 2007).

Similarly, in his Ph.D. thesis, Hafner (2008:42) recognizes the necessity to cross disciplines to address the problems of legal language education. Because of the domain-specificity of legal communication and the absence of legal education theory, the study is based on genre and literacy theory. Through a qualitative interpretive research method, Hafner investigates the design, implementation, and evaluation of online recourses for professional legal communication. Hafner triangulates qualitative data with genre and literacy theory (compare Deutch 2003 and Larcombe & Malkin 2008) thereby employing a **mixed methodology**.

In the context of EAP, Carstens (2008) describes the use of a **multidirectional model** for tertiary-level disciplinary writing. A **top-down** directionality refers to the curriculum designer that uses a set of design principles that are based on practice and observed verification. The **bottom-up** perspective provides the teacher and learner with the critical autonomy to employ the design principles as needed. “A **sideways** orientation promotes authenticity, increases student motivation and stimulates inter-departmental collaboration” (Carstens 2008:95). The multiple perspectives advocated by a multidirectional model inevitably require course designers and instructors to be vigilantly aware of the multidimensionality of the educational context. A multidirectional model is therefore implicitly interdisciplinary.

Bhatia, Hafner, and Carstens respectively show that, in order to address legal language and disciplinary writing, research should take into account theories that could explicate the pedagogical foundations of legal education and linguistics (compare Bruce 2002, Candlin, et al. 2002). Like Hafner and Candlin (2007) Bhatia and Carstens also endorse the continuum of theory and practice that should not be severed, but maintained through interdiscursivity and/or pedagogical multidirectionality.

In an attempt to address the causes of EALP shortcomings, it is my contention that (as a first step) more efficient EALP curricula should be designed with the aid of interdisciplinary and cross-cultural **value principles**. Supporting this conceptual and methodological aim requires an **emic and etic theoretical foundation** that includes legal perspectives, linguistic theory, and pedagogical approaches. No single theory explains all these disciplinary influences and a combination of theories seems most plausible.

Interdisciplinary foundations

The analysis of theory is based on a considered eclectic approach, which is similar to contemporary mixed method research that does not replace any theory; rather it draws on the strengths of the theories and methods that are needed (Johnson & Onwuegbuzie 2004:14-15). Considered eclecticism entails borrowing elements from various paradigms, approaches, and sources that construct a coherent integrated theory or model. An **emic legal perspective** is rendered by the natural law approach and constructive interpretation, which are respectively drawn from jurisprudence and hermeneutics. An **etic approach** stems from linguistic and pedagogical theories. Systemic functional linguistics is the linguistic perspective that explains how language functions. The pedagogical approach relies on a genre-based pedagogy that includes English for Specific Purposes and the New Rhetoric that underscores the cross-cultural dimension.

Although aware of the various debates within the different disciplines, it is not my intention to engage them at this stage. The purpose is to identify concepts that cross the interdisciplinary divide and nurture a cross-cultural approach to EALP.

Legal perspectives

Natural law and constructive interpretation

The **natural law** approach is often seen as the opposite of legal positivism, which considers law as it is rather than, as it ought to be. Natural law proclaims that written laws should be informed by morality and principles of justice to render it fair. Any rule that is not fair is therefore not law (<http://legal-dictionary.thefreedictionary.com>). Ronald Dworkin remains one of the most prominent natural law thinkers. Dworkin views **law as a social practice**, which should be improved through its **moral interpretation**.

Law as integrity asks judges to assume, so far as this is possible, that the law is structured by a coherent set of principles about justice and fairness and procedural due process, and it asks them to enforce these in fresh cases that come before them, so that each person's situation is fair and just according to the same standards (1986:229).

Criticism against Dworkin's theory is that it does not promote legal coherence. Society is constructed of various social groups with different agendas. It would be impossible to create a coherent moral legal system when the morality of all the different groups of a society is taken into consideration. But does this argument justify cultural, legal, or metanarrative hegemony?

Dworkin proposes **constructive interpretation** that could transcend metanarrative hegemony. Constructive interpretation relies on the chain novel and Judge Hercules metaphors. The **chain novel metaphor** is used to explain the litigation of a court case. Dworkin describes it as follows:

In this enterprise a group of novelists write a novel *seriatim*; each novelist in the chain interprets the chapters [s]he has been given in order to write a new chapter, which is then added to what the next novelist receives, and so on. Each has the job of writing [her] his chapter so as to make the novel being constructed the best it can be, and the complexity of this task models the complexity of deciding a hard case under law as integrity (1986: 229).

Similarly, judges adjudicate cases (or local narratives) by drawing on previous case law (or metanarratives) to “justly and appropriately” interpret present situations (Dworkin 1986:239).

The chain novel metaphor characterizes Dworkin's theory of interpretation as a **social historical endeavor** because successive interpretations are reliant on those created by our contextual society. Because of the sequence of time, one interpretation leads to the meaning attributed to the next.

The fictitious **Judge Hercules** is a metaphorical and metaphysical judge that has the ability to consider the entire corpus of law when he or she adjudicates a case. The impossibility of such a task implies that "the correct" interpretation would always elude us. Van Blerk (1996:100) criticizes the Hercules metaphor because, regardless of his/her vast legal database, s/he could still impose a politically motivated interpretation. "Hercules has been described as little more than Dworkin's '*judicial alter ego*', and a cross between the utterly rational Mr. Spock of Star Trek and ventriloquist Edgar Bergen's ingratiating dummy, Charlie MaCarthy" (Van Blerk 1996:100).

Perhaps the most insightful critique against and contribution to Dworkin's theory comes from legal scholar and literary critic **Stanly Fish**. Fish rightly argues that the field of legal interpretation is divided in two: "[...] between those who believe that interpretation is grounded in objectivity and those who believe that interpreters are, for all intents and purposes, free" (1983:271). Interpretation already occurs when principles for interpretation are formulated.

Fish describes interpretation as an enterprise that determines the intent of an author. Regardless of whether the text is literary or legal in nature we interpret to establish what the author desires to communicate. According to Fish, the author is **not a privileged interpreter**; the reader's interpretation is equally important (1999:509).

In terms of a theory of language, Fish postulates that words do not explicate their own meaning. Words only become meaningful in relation to interpretation and intention. "The assignment of intention can be, and often is, the occasion for dispute, and for a dispute that cannot be settled by pointing to the words since the words will only say what they will say in the light of an intention, and will say different things in the light of different intentions" (Fish 1999:510). Texts become visible through interpretation; however, literary and legal texts become indistinguishable from their interpretation. Or as Marmor suggests, instead of being the subject matter of interpretation, linguistic and textual facts are the products of interpretation (1992:74).

Similar to Dworkin's chain novel metaphor that situates interpretation socially, Fish is of the opinion that texts and readers are not isolated because they are connected through the social milieu of interpretation strategies. The mere existence of an interpretation community eliminates the possibility that judges objectively interpret cases (Fish 1983:355). As situated agents we interpret by virtue of our interaction with the world. We organize texts not after we create perceptions but during the act.

Linguistic theory

Within applied linguistics various theories explain how language functions, such as: genre-based theories (Halliday 1987, 2005; Hyon 1996; Paltridge 2007), sociolinguistics (Cook 2010), and postmodern perspectives including social constructionism (Gergen 1985; Burr 1995).

As a genre-based perspective SFL should be understood in terms of **three characteristics and three functions**: language as system of choices, language as text, and functions of language.

First, SFL considers language as a **system of linguistic choices**. Each choice produces variations in meaning. Or in an adapted Hallidayan (2005:134) metaphor, language could be viewed as a city plan (system) where traffic (meaning) could reach similar or different destinations through the similar routes (lexical and syntactic choices). Because of its dependence on various contexts, which necessarily imply various systems, language is seen as polysystemic.

Second, according to SFL language should also be recognized as **text** with social purpose. Christie (1999:760) describes the close relationship between text and context as follows: “text is known only because of the context that gives it life; conversely, context is known only because of the text that realizes it”. Language has to be understood within its broad **cultural and situational contexts**. The **cultural contexts** refer to the purposes, values, and shared experiences of culturally situated language users. The context of culture would therefore determine the nature (genre) of the text. **Contexts of situation** (the particularities of the city: streets and inhabitants) refer to extralinguistic variables such as vocabulary and grammatical models that decide the linguistic organization of the text (Carstens 2009: 33-34). Moving from cultural context to situational context implies a move toward specificity. The level of specificity is realized through the three contextual variables: field, tenor, and mode.

Finally, SFL relates to genre based on the **functions of language**. Language is functional because its structure shows the multiple purposes for which it was initially created. The function of language is theorized as three **metafunctions** accompanied by the three contextual variables (Carstens 2009:34-35; Christie 1999:760; Halliday 1978:143; Matthiessen 2005).

- The **ideational** (conceptualization) function explains the representation and construction of language experiences. The conceptualization of ideas is related to the contextual variable **field** (such as the legal discipline), which impacts choice of vocabulary, for example.
- The **interpersonal** function clarifies the character of relationships constructed by language use and is related to the contextual variable **tenor** (sense or meaning). Tenor affects expressions of attitude, necessity, obligation, and probability.
- The **textual** function of language recalls the structuring of language to produce coherent meaning, conveyed in the patterns of written or spoken texts. The textual function of language is related to the contextual variable **mode** that determines the style of genres. Text and context are therefore inseparable. Thus, within the various linguistic systems, language users organize language according to linguistic choices that convey ideas between communicators.

Systemic functional linguistics provides a valuable contribution to understand how meaning is created through language, and could explain the textual functions of legal language. Through the functions of language one could ascertain how complex legal vocabulary is conceptualized in the EALP curriculum. The interpersonal function of language could clarify the various languaged relationships of the legal discourse community; this community exists by virtue of the contextual variables field, tenor, and mode. The textual function could explain problematic legal language patterns that require additional explanation in the EALP

curriculum.

Pedagogical perspectives

Various pedagogical perspectives explain language education. These perspectives range from traditional method (Bell 2003) and skills pedagogy (Savignon 2001) to Kumaravadivelu's (1994) postmodern postmethod pedagogy. Genre-based pedagogy contributes to this article through the ESP and the New Rhetoric movements' applicability to EALP.

Genre-based pedagogy

Genre-based scholarship of the 1970s and 1980s mainly focus on psycholinguistic and cognitive linguistic theories and the process approach. However, since then the learner-centered classroom made way for the contextual situation in which learning occurs (Johns 2002:3). If one is convinced that the discovery-oriented process-based pedagogy of the 70s and 80s is unsatisfactory then the development of the genre-based pedagogy in the 90s serves as apt supplementary (Johns 1995:181).

A genre-based pedagogy provides an explicit and systematic explanation of how language functions in social contexts. It is therefore a socially grounded theory with its roots in texts and contexts. Writing is contextually situated and purposive. Through genre one learns why texts make certain linguistic and rhetorical choices in their communicative purposes.

Following active scholarship in the field since the early 1980s, Hyon distinguished: the ESP approach based on the Swalesian tradition, the North American New Rhetoric, and SFL of the Sydney School (which is discussed as linguistic theory) (compare Flowerdew 2005; Johns 2002; Paltridge 2007).

English for Specific Purposes

The ESP approach is based essentially on Swales' (1986; 1990) research on discourse structure and linguistic features of scientific research articles (Paltridge 2007:931-932). Swales emphasizes the **social purpose and structure** of spoken and written language (Flowerdew 2005:322).

Following Swales' definition of genre, in terms of communicative events and purposes, many scholars added variations on the term, but with more acute attention on the role of **social context**. Johns (2002:3), for example, describes genre as a **collection** of oral or written **responses** that meet certain social contextual requirements. Hyland (2003:21) defines genre as the **act** of using language in socially acknowledged ways. The characteristics of genres rely on the context of their creation and use. These texts relate different contexts to other comparable contexts thereby elaborating the contextual use of genre.

More recently Swales (2004) adapted the importance of **communicative purpose** as an essential attribute of genre. Instead, genre could be regarded as a 'metaphorical endeavor'. The following metaphors provide multifaceted views of genre (Swales 2004:61):

- Genres are **frames for action**: guiding principles for achieving purposes using language.
- Genres are **language standards**: expected conventions of layout and language.

- Genres are **prototypes**: instances of a genre are more or less similar to ‘core’ exemplars or templates.
- Genres are **speech acts**: the conventional actions a genre is intended to perform.

Bhatia uses Swalesian EAP as platform to increase the notion of genre as it manifests in legislative writing (1989). The application of genre is then extended when Bhatia argues that “[g]enre analysis requires input from a variety of disciplines to interpret, describe and explain the rationale underlying various professional and academic genres” (1993:13). Bhatia shows that different texts could belong to the same genre when they share the same communicative purpose.

Hyon (1996:695) indicates that ESP scholarship focuses particularly on the **formal characteristics of genres** while less attention is paid to the functions and social contexts of genres (compare Flowerdew 2005; Paltridge 2007). However, Bhatia’s earlier work anticipates his future conceptualization of genre as he continues to explore the interdisciplinary integration of legal and business genres (1997b), and eventually the critical genre analysis of the **interdiscursivity of genres** between ESP and professional practice. Interdisciplinary integration and the interdiscursivity of genres, is by implication a consideration of sociocultural contexts.

Genre analysis, from an ESP perspective, is generally recognized as the study of linguistic behavior in different settings, such as institutionalized academic and professional settings. Instead of describing language use, genre analysis attempts to explain: ‘*Why do members of specific professional communities use the language the way they do?*’ (Bhatia 1997a:313). To answer this question one would have to research, not only linguistics, but among others also: “sociolinguistics and ethnographic studies, psycholinguistics and cognitive psychology, communication research, studies of disciplinary culture, and insights from members of such specialist communities [...]” (Bhatia 1997a:313).

New Rhetoric

In contrast with the linguistic emphasis of ESP and SFL, rhetoric underscores “context, audience, demands of the occasion, and writing as a social activity” (Paltridge 2007:933). This shift in focus comes from North American composition classrooms that focus on product and form of writing. New rhetoric studies regard the **relationship between text and context** as important and argue that certain situations require genres to perform certain actions. New Rhetoric encourages research and analysis of the social contextual functions of genres instead of the formal textual features of genres (Hyon 1996:696, 703).

Genre is a reply to social circumstances that are elements of a socially constructed reality (compare Gergen 1985:266-275). “Genres, in this view, both respond [...] and contribute to the constitution of social contexts, as well as contribute to the socialization of individuals” (Paltridge 2007:934). Understanding genre, therefore, gives individuals access to community participation. Miller considers the use of genre as a “practical art” that allows us to achieve certain social goals (Miller 1984).

Genre theory’s relation and contribution to the present study emanates from its emphasis on communicative events and purposes and in acknowledging the cardinal role that social context plays in communication and the construction of meaning. In addition to identifying

the potential value of genre theory, a valuable connection is made through Bhatia's (2002:5) description of the goals of genre. Genre theory attempts:

- to represent and **account** for the seemingly **chaotic realities** of the world,
- to understand and account for the **private intentions of the author**, in addition to socially recognized communicative purposes,
- to understand **how language is used** in and shaped by the socio-critical environment, and
- to offer effective **solutions to pedagogical and other applied linguistic problems.**

Since communicative purpose is the primary characteristic of genre, the **analysis** of genre seeks to unravel obscurities about the text (artifact) (Bhatia 1997a:313). The methodological purpose of genre analysis is therefore similar to that of legal hermeneutics: “[t]he art or process of determining the intended meaning of a written document, such as a constitution [...]” (<http://legal-dictionary.thefreedictionary.com>). As applied by Swales (1990) and Bhatia (1993), genre analysis has integrated some of the contextual fundamentals necessary for a proper understanding of genre, though in a rather static way (Toledo 2005:1063). Swales, for example, composed the CARS (Create A Research Space) model for the analysis of genre. Through ‘moves’ and ‘steps’ a reader would begin the research process by identifying a text’s communicative purpose. Each move or step includes specific information needed to achieve this purpose (Toledo 2005:1063).

Synthesis of value principles

As a result of global migration **student bodies** are becoming increasingly **divers** (Read 2008:180). The diversity extends beyond nationality and disciplines; it includes diversity in linguistic, educational, and academic backgrounds (Bok 2006:18-19). For example, 15% of Melbourne Law School students come from: China, Singapore, and Malaysia (Larcombe & Malkin 2008:321). International students are not only attempting to comprehend course content, but they also have to come to terms with the “cultural and educational requirements of the dominant cultural literacy” (MacKinnon & Manathanga 2003:133).

The following tables summarize and explain the translation of interdisciplinary value principles to the EALP context. Cumulatively these principles attempt to show how the curriculum could resonate sensitivity toward its cross-cultural context.

Table 1: Legal value principles

Interdisciplinary foundation	Value principle	Translation of legal value principles to EALP
Natural law approach & constructive interpretation	Law as social practice	Similar to law, the curriculum is a social practice that should be improved through reinterpretation. The aim is not the curriculum as it is, but at it ought to be.
	Interpret a text not as it is but as it ought to be	
	Chain novel metaphor	Curriculum development should not stagnate, but develop <i>seriatim</i> . Similarly, pedagogical scaffolding could be used to impart structured knowledge and motivate gradual independent participation in the discourse community.
	Judge Hercules metaphor	Pedagogues and instructors should attempt holistic views of the curriculum, since the curriculum is part

		of a larger social discourse.
	Interpretation is not privileged	The curriculum is not the privileged domain of pedagogues and instructors, but should rely on the input of everyone involved in its pedagogical cycle.

Table 2: Linguistic value principles

Interdisciplinary foundation	Value principle	Translation of linguistic value principles to EALP
Systemic Functional Linguistics	Language is a system of linguistic choices	Similar to language the curriculum could be seen as a system of pedagogical choices with social purpose.
	Language is text with social purpose	
	Ideational function of language	Similar to language, the curriculum's ideational function enables it to conceptualize. The EALP curriculum should conceptualize its constituting parts through pedagogical choice-making.
	Interpersonal function of language	As language constructs interpersonal relationships, the EALP curriculum should bind the cross-cultural legal discourse community.
	Textual function of language	EALP teaching could produce coherent meaning through certain textual patterns, such as legal genres.

Table 3: Pedagogical value principles

Interdisciplinary foundation	Value principle	Translation of pedagogical value principles to EALP
English for Specific Purposes	Formal characteristics of genre	As ESP accentuates the formal characteristics of genre, the EALP curriculum should exhibit a level of formalism that reifies its goals and expectations, without being too flexible to appear <i>laissez faire</i> or too rigid to appear dictatorial.
	Communicative purpose and interdiscursivity of genres	Through its communicative purpose the curriculum should establish interdiscursivity between theory and practice.
New Rhetoric	Relationship between text and context	The EALP curriculum should establish an interdiscursive relationship between itself as text and the diverse contexts within which it functions.
	Genre is socially constructed	Similarly, the curriculum is socially constructed and should therefore reflect the cross-cultural dimensions of the international classroom.

Conclusion

In the light of postmodern pedagogy certain dilemmas seem unavoidable. Postmodern pedagogy could challenge genre theory as being incredulous metanarratives that favor certain genres above others. Similarly, EALP courses seem to favor the content of the American and British legal systems, which marginalizes legal content from the host country where the EALP course is presented. Consequently, existing metanarratives are proliferated. How is this situation reconcilable with Kilgore's (2004) postmodern supposition that existing social positions are challenged and that knowledge is constructed collectively, when it seems that certain knowledge (or EALP curricula) is (are) favored? Or, are some pedagogical

perspectives, in an Orwell metaphor, more “pedagogical” than others?

The curriculum is situated in a position of perpetual flux characterized by concepts such as: social historical endeavor, multidirectionality, interdiscursivity, constructive interpretation, and contextualization. In this regard Dworkin’s chain novel metaphor provides valuable direction. The chain novel is constructed through a series of socially and historically situated interpretations. Similarly, EALP curriculum development could be seen as a pedagogical chain novel constructed into being through socially situated cross-cultural interactions.

The translation of interdisciplinary value principles to the cross-cultural EALP setting attempts to find the illusive and delicate balance between a dynamic evolving curriculum and the stability that existing metanarratives provide; it attempts to find the balance between academic requirements and professional needs, and between collective social contexts and individual circumstances.

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Thailand: A Case Study of Phetchaburi Rajabhat University
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The Integration of Project-Based Learning and Japanese for Tourism in Thailand: A Case Study of Phetchaburi Rajabhat University

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Abstract

Japanese tourism ranks at the top of the list of income for the tourist industry in Thailand. Communication competence in the language of tourists is needed to service this group of people. Educational institutions and government organizations relating to the tourism industry should attempt to develop a human resource that can service this specific group of tourists completely.

This paper explores the opportunities for developing a curriculum of “Japanese for Tourism” for Tourism-majored students of Phetchaburi Rajabhat University, one famous tourist destination among others located in Phetchaburi. Major theoretical frameworks for the study include language for specific purpose and project-based learning. Findings illustrate the benefits and challenges of learners’ experiences in conducting projects regarding tourist attractions and services recommended for Japanese tourists obtained from the Tourism Authority of Thailand’s website. Also suggested are Proposals for curriculum development based on the findings and framework.

Keywords: Communicative competence, Japanese for Tourism, Language for specific purpose, Project-based learning

Introduction

Project-based learning (PBL) is an approach used to foster the student-centered learning principle and was initially introduced into English as a second language (ESL) education (Hedge, 1993). PBL is one of the means for promoting language and content learning in a foreign language. It requires a fundamental shift in the roles of teachers and students from traditional education. Research has shown that PBL is effective in motivation enhancement and supporting students to gain deeper understandings of content knowledge (Barron, 1998; Stites, 1998). These features of PBL reflect in the approach of teaching language for specific purpose (LSP) as well. LSP also emphasizes language and content learning in specific discipline. It aims to respond to students’ learning needs and their interest in specific areas.

Research in LSP and PBL has indicated positive outcome for language and context learning. However, most of the existing studies in second/foreign language education have been conducted in the ESL/EFL context. Furthermore, studies that integrate project work in language for specific purpose course are still very limited. The purpose of this study is to explore opportunities to develop the curriculum of Japanese for specific purpose, especially how to integrate PBL in the course. To accomplish this, the paper begins with an overview of the principles of language for specific purpose and project-based learning. These sections are followed by a discussion of the research result on the benefits and challenges of integrating project work in Japanese for tourism. The paper concludes with a proposal for the curriculum development.

Theoretical framework and previous studies of Language for specific purpose

Language for Specific Purpose (LSP) has focused on the teaching of languages for specific purposes (Dudley-Evans & St John, 1998). As English has become the international language of technology and commerce, the teaching of English for Specific Purpose (ESP) is dominant compared to that of other languages such as French, German, and Japanese. Hutchinson & Waters (1987) pointed out the new aspect of linguistic studies which shifted the rules of language usage to language use in real communication also significantly influences ESP. An important finding of the study shows that language varies greatly from one context to another, for example, spoken language and written language, and the language of commerce and language of sciences. This gave rise to the view that the language needed by a particular group of language learners could be identified by analyzing the linguistic characteristics of their specialist area (Hutchinson & Waters, 1987).

In addition to the important role of English as an international language and the revolution in linguistics study, developments in educational psychology focusing on the learners' attitude to learning also justifies the wide spread of ESP. It has been widely accepted that learners' needs and interests influence motivation to learn and the effectiveness of their learning. Developing courses relevant to learners' needs and interests are believed to improve learners' motivation, which contributes to learning process and outcome. The development can be achieved by taking texts from learners' specialist area such as texts about business for Business students, texts about tourism for Tourism students etc.

There are several definitions of ESP. Though there are some similarities and differences in the view of ESP, most studies agree on the aspect of specific needs of learners. Hutchinson & Waters (1987) saw ESP as an approach rather than a product. Analyzing linguistic characteristic and describing what people do with language do not necessary enable someone to learn a language. They proposed a learning-centered approach emphasizing an understanding of the process of language learning as a valid approach to ESP. Also, they maintained that ESP is not a particular kind of language, teaching material or methodology. They believed that the foundation of all ESP is the simple question: Why does this learner need to learn a foreign language? They suggested that to answer the question, three factors need to be taken into consideration; which are the learners, the language required, and the learning context.

Stevens (1988) made a distinction between four characteristics and two variable characteristics for the definition of ESP.

The absolute characteristics of ESP are:

1. Designed to meet specified needs of learners
2. Related in content to particular disciplines, occupations, and activities
3. Centered on language appropriate to those activities in syntax, lexis, discourse, semantics and analysis of the discourse
4. In contrast with 'General English' the variable characteristics of ESP:
 - 1) may be restricted to certain learning skills to be learned (for example reading only)
 - 2) may not be taught according to pre-ordained methodology

Dudley-Evans & St John's (1998) definition of ESP is different from Hutchinson & Waters' definition regarding ESP methodology. Dudley-Evans & St John argued that ESP teaching, specifically linked to a particular profession or discipline adopts a methodology different from the one used in General English.

By methodology, Dudley-Evans & St John emphasized the nature of interaction between the ESP teacher and the learners. They have made a distinction between the interactions as 'teacher' in General English class and the interaction as 'language consultant' in ESP class.

In contrast to Strevens' definition regarding the second characteristic of ESP, Dudley-Evans & St John believe that ESP teaching does not have to be related to subject content but should always reflect the underlying concepts and activities of the broad discipline. In conclusion, Dudley-Evans & St John provide the following absolute and variable characteristics of ESP definition.

1. Absolute characteristics

- 1) ESP is designed to meet the specific needs of learners.
- 2) ESP makes use of its underlying methodology and the activities of the disciplines it serves.
- 3) ESP is centered on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities.

2. Variable characteristics:

- 1) ESP may be related to or designed for specific disciplines.
- 2) ESP may use, in specific teaching situations, a different methodology from that of general English.
- 3) ESP is designed for adult learners, either at a tertiary level institution or in a professional work situation.
- 4) ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, but can be used with beginners.

Each definition has validity but Dudley-Evans & St John's definition seems to be the most comprehensive. To meet specific needs of language learners, it is necessary to understand the process of language learning. Therefore, this study has adopted Dudley-Evans & St John's definition and Hutchinson & Waters' learning-centered approach for exploring Japanese for a specific purpose.

The most characteristic feature of ESP is needs analysis, which contributes to the course design. The pioneer and widely known work on needs analysis is John Munby's *Communicative Syllabus Design* (1978). Munby created a detailed set of procedures for identifying target situation needs (what the learner needs to do in the target situation) which is called Communication Needs Processor (CNP).

Hutchinson & Waters made distinction between target needs (what the learner needs to do in the target situation) and learning needs (what the learner needs to do in order to learn). They argued that Munby's target situation needs analysis is language-centered approach emphasizing a list of the linguistic features of the target situation but does not involve several aspects of language learning such as knowledge, skills, strategies, motivation, and the conditions of the learning situation.

Dudley-Evans & St John agreed with Hutchinson & Waters that Munby's CPN lacks an affective factor of language learning. They provided the following current concept of needs analysis;

- 1) target situation analysis and objective analysis: the tasks and activities learners will be using language for.
- 2) subjective needs: previous learning experience, cultural information, reason for attending the course and their expectations of it, attitude to the language learning.
- 3) present situation analysis: information about the learners' current skills and language use.
- 4) the learners usage needs: the gap between (3) and (1)
- 5) learning needs: effective ways of learning the skills and language.
- 6) linguistic analysis, discourse analysis, genre analysis: knowledge of how language and skills are used in the target situation.
- 7) what is expected from the course.
- 8) means analysis: information about the environment in which the course will be utilized.

Developing course design is a dynamic process (Hutchinson & Waters, 1987). As shown above, many factors and a variety of situations are involved in course design. However, as Swales (1989) put it, course design should be about *what* and *why*. Dudley-Evans & St John suggested that course design should not have to start from scratch. As with needs analysis, it could be learned from what has already been done. According to the authors developing a course outline includes two major stages:

- 1) beginning with target events and rhetorical awareness.
- 2) breaking target events and rhetorical awareness into skill areas.

Making decisions on target events and rhetorical awareness needs criteria to order. One criteria is when the target events are needed by the learners. Another criteria of language learning or using of skills is dependent on others, which needs linguistic building blocks for the support. Despite the need, there are not enough linguistic findings about language learning to help order all features of language according to its simplicity or difficulty. Dudley-Evans & St John also mention that any language course is not just about linguistic realizations and skills. It also concerns materials, content topics, learning processes and classroom interactions.

Project-based learning (PBL)

Beckett (2006) gave an extensive overview of project-based learning (PBL) in second and foreign language education by citing Hedge's (1993) work that PBL was introduced into the field of second language education about 17 years ago. This introduction aims at emphasizing the principles of student-centered teaching, PBL is not new. Many PBL researchers agree that its original concept concerning experiential learning, collaborative learning or problem solving originates from Dewey's work.

According to Beckett, PBL in second language and foreign language refer to 2 levels of language learning. The first level (a general level) is a language education approach that reflects student-centered learning within the framework of experiential learning. The second level (a specific level) has been described as an approach that support

comprehensible input, comprehensible output, and an approach with emphasis on teaching language and content.

Stoller (2006) noted that PBL conjures up other images as well. PBL can be referred to in-class group work, out-of-class activities cooperative learning or task-based instruction. For some researchers, PBL is confined to a single lesson, but most projects are done in week, semester, or even a full academic year. Most projects are content-driven. Some projects focus on real-world issues, while others emphasize an understanding of the target language culture.

The way PBL has been translated into practice varies depending on the diversities of different instructional settings such as student populations, instructional objectives, institutional constraints, and available resources. Because of the versatility of PBL, it is difficult to describe one single definition. Thus, Stoller offered conditions for effective PBL including:

- 1) having both a process and product orientation.
- 2) encouraging student ownership in the project.
- 3) extending over a period of time.
- 4) promoting the natural integration of skills.
- 5) emphasizing language and content learning.
- 6) requiring students to work in both groups and on their own.
- 7) obliging students to gather, process, and report information from target language resources.
- 8) requiring teachers and students to take new roles and responsibilities.
- 9) leading to a final tangible product.
- 10) ending with student reflections on both the process and the product.

The lack of empirical research on project-based second and foreign language education has been recognized by several researchers (Beckett, 2005; Guo, 2006) Most of the studies focus on EFL/ESL teaching and learning (Guo, 2006) Moreover, the available literature represents an anecdotal report (Guo, 2006; Stoller, 2006) PBL in different types of EFL/ESL programs have been used at different academic levels; elementary to university level (Doherty & Eyring, 2006)

Accepting that a few empirical studies have been conducted to evaluate the effects of project work on language learning, Stoller pointed out that numerous studies provide support for positive outcomes of project work. The positive outcomes include motivation and learner autonomy, motivation and self-confidence, motivation and interest, motivation and cooperative learning, development of expertise, meaningful input and output, and learner centeredness.

Because of paucity of empirical studies on project work, it is uncertain if motivation and associated outcomes arise from engaging in project work, or if motivation leads to active participation in project work. However, Stoller believed that the combination of the two aspects is likely to be influential in project-based learning.

Project-based learning reflects the conditions necessary for learner autonomy such as real choices, leadership role, and sense of control over one's own learning. In addition, project work allowing learner autonomy in negotiating theme, tangible outcomes, process, and individual roles are believed to increase sense of success which leads to

motivation enhancement. Also, self-confidence emerges when individuals perform tasks competently and accomplish their established goals.

Considerable research shows that motivated students who develop interest in curriculum goals and activities are willing to work hard on challenging materials. Project-based learning is perceived as good conditions for improved motivation and interest. Cooperative learning which is one of the most prominent features of project work leads to higher motivation and a more positive attitude toward learning.

The nature of project work that assists a student in applying, developing, and extending subject knowledge results in a growing expertise. Meaningful language input and output from learning a language in context and purposeful use of a language while engaging in project works is believed by many language professionals as important support for language development. The potential of project-based learning diminishes the gap between traditional classrooms and learner-centered that one might contribute to the reported success of project work.

Previous studies

Beckett (2006) pointed out that recent literature in second language studies has started to include goals other than the second language acquisition. The goals are such as promoting learner autonomy and independence, encouraging collaborative learning, creativity, and responsibility, nurturing critical thinking skills, academic discourse socialization, and content-based language teaching. Beckett explored teachers' goals for project-based instruction for immigrant ESL students in a secondary school in Canada. By taking the language socialization approach, the study found that there are several goals. They are fostering lifelong learning by the language socialization of ESL students into Canadian school and social cultures, challenging students' creativity, promoting independence, teaching decision-making, critical thinking, and cooperative learning skills, and teaching how to learn.

Guo (2006) examined project-based learning of EFL in China. According to Guo, several studies that include project works in English class have reported positive outcome such as enhanced motivation and more autonomy in learning of Chinese EFL students. Guo explored Chinese professors' perspectives on PBL of EFL learning. He found that despite the professors' recognition of benefits of PBL in EFL class, they raised some concerns as well. The concerns are that PBL challenges the traditional view of learning based on Chinese culture, the nationwide mandatory examination system, professional development, limited resource and big class size.

Project-based learning in less commonly taught languages is very rare. Sidman-Taveau, Rebekah, Milner-Bolotin, and Marina (2001) initiated PBL in Spanish at a large southwestern U.S. university. The research team used web-based Spanish language lessons to engage students in virtual cultural experiences and require them to take a virtual vacation on the World Wide Web. The project emphasized the exposure to authentic linguistic and cultural material, learning processes, and the students' linguistic output. The study illustrated that the PBL in Spanish lessons result in the students' creative work, application of linguistic knowledge into practice, positive attitudes towards the target culture, appreciation of the challenge to produce complex sentences which was beyond what was taught in the textbook. However, facilitator role and formative assessment are found to be issues.

Agreeing with Sidman-Taveau and Milner-Bolotin (2004)'s claim that a highly meaningful context is necessary for project-based foreign language learning, Mills (2009) integrated a virtual travel through francophone Europe in French curriculum. The project required French learners to play the roles of investigators traveling to different destinations and to report on their experiences in a travel diary, which finally resulted in a contribution to a French travel guidebook. The influence of the project was evaluated for how it affected the students' self-efficacy in the five goal areas of the Standards for Foreign Language Learning. The study indicated that there was significant improvement in students' self-efficacy in the areas of communication, cultures, connections, comparisons, and communities after learning experience with the project.

Project-based learning in Japanese for Tourism

Method

Research context

Phetchaburi Rajabhat University located in the western part of Thailand, Phetchaburi province. The university is among 43 Rajabhat universities around the country that provide a bachelors degree in tourism. All local 43 Rajabhat universities provide a tourism degree in order to respond to national strategies in promoting the tourism industry in every corner of the country, especially the province with international tourist attractions.

As the tourism industry flourishes in Phetchaburi, the local university provides a bachelor degree in tourism in order to develop personnel for the tourism industry. According to the tourism curriculum, tourism-majored students are required to take 6 courses in a second foreign language, either Chinese or Japanese. For most students, learning the second foreign language is their first experience, especially Japanese, as K-12 education in the province does not have a Japanese class. In addition, there is not a Japanese community in town, the opportunity to practice Japanese in the community is non-existent.

Considering the linguistic aspect, Thai and Japanese are different typology, which makes Japanese a difficult language for most Thai students. Moreover, taking 4 basic courses in Japanese seems to be insufficient for learning Japanese for Tourism 1 and 2, as Japanese for tourism includes a great deal of specialized vocabularies and expressions, especially honorific forms. Moreover, most textbooks in Japanese for tourism are written for Japanese majored students with an intermediate to high intermediate proficiency level, the beginning level students often find it difficult to learn Japanese for tourism.

The participants

The participants were Tourism-majored students of Phetchaburi Rajabhat University in Thailand. They were the third year students taking the last course in Japanese. The students had already taken 5 courses in Japanese, which was approximately 300 hours. Despite the fact that the number of learning hour could be considered as novice-high

level, lacking opportunity to use Japanese in communicative and authentic context resulted in low proficiency of Japanese.

Data collection and analysis

The project was designed as a part of a Japanese course “Japanese for tourism”. The main purpose was to increase the students’ motivation in learning Japanese and to experience from fieldwork about Japanese tourists for their future career. The students were teamed up in a group of 4 and explored Japanese tourist behavior at several tourist attractions and tourist service providers. The attractions and the service were surveyed from TAT’s website. As the website aimed to introduce Phetchaburi to Japanese tourists, the authentic nature of language and material were meaningful for the project work. The attractions and the service recommended to Japanese tourists included 1) historical spot; 2) natural spot; 3) hotel & Spa, 4) golf course. The analysis method for the study is content analysis. The data used for the analysis was the website, the students’ survey report, the students’ presentation, and relevant material.

Findings

Experience in the field

Learning by exploring the tourist attractions and services suggested to Japanese tourists by TAT resulted in the students’ insights about the attractions and service. Their findings were beyond Japanese lessons in the classroom. The students found the advertisement to attract Japanese tourists to historical places such as the three famous palaces and several temples in Phetchaburi might not be as effective as they expected. According to their interviews with official staff at the attractions and their own observations, very few Japanese tourists visited these places. The students offered suggestions for the small number of Japanese tourists; these historical spots may not be known to Japanese tourists or match their interest level. Other groups of students exploring natural spots such as beaches, mountains, and national parks in Phetchaburi found that Japanese tourists seemed to have interest in these spots but still in smaller numbers compared to other foreign tourists. However, tourism products that attracted Japanese tourists most are golf and spa. Therefore, hotels and resorts that provide golf course and spa service probably serve Japanese tourists far greater than natural tourist attractions.

Growing expertise (Japanese tourist behavior)

One concern for teachers of language for specific purpose is that most language teachers are not expert in context (which they do not need to be) so. As ESP professionals suggested, the teachers’ role is language consultant and facilitator for this kind of course. This study found that the students grew their expertise in their field from their project work. They understood Japanese tourists’ behavior much more than just learning Japanese in class. Some of their findings were supported by research in Tourism, but some were unique, probably due to the context and changing style of next generation Japanese. For example, the students found that the tourists prefer to travel in a group tour exclusively with Japanese, or travel with families and friends. Independent tourists are very rare. The students noticed that independent tourists from other foreign countries are far greater than the tourists from Japan. Students learned from Japanese tourists that being polite, being strict to time,

concerning with cleanliness and safety, and being discipline-oriented are very important. A unique finding is that Japanese tourists shopping souvenirs around beaches often negotiate product price with the sellers.

Motivation

As pointed out by several PBL studies the nature of project work that allows autonomy in learning, collaboration, problem-solving skill, real life and purposeful learning in meaningful context increases motivation. This is even truer when project work relates to discipline specific as supported by ESP and PBL professionals. The followings were students' reflection on how the project motivated their learning:

“The project is meaningful learning. It makes Japanese class more interesting”.

“It is a good combination between (Japanese) language and (tourism) content”.

“Learning from future work place is useful for our future career. Interviewing hotel managers and hotel staff is a good chance for showing our potential ”

“I like the challenging aspect of the project that we have to do independent study. It enhances our knowledge and skill. It provides more than what taught in a textbook. It promotes learning experience from the outside world”

Awareness of the needs

Learning from real context by involvement in the project, the students began to realize what should be top priority to promote tourism in this province to Japanese tourists. One group pointed out an interesting idea, the lacking of efficient public transportation in the province makes it difficult for independent Japanese tourists access to the attractions. Most tourist attractions in the province have no language support for Japanese tourists such as a brochure or instructions in Japanese. Most important is that many tourist attractions and service providers do not have a person who can communicate in Japanese. The students suggested having a Japanese brochure and instruction for Japanese tourists at all attractions. More importantly, Japanese language training should be provided to hotel staff and golf caddies that have direct contact with Japanese tourists.

Challenges

As mentioned above, the students' Japanese proficiency was beginning level, it was inevitable that a mismatch between the authentic material from the website introduced in the project and the students' ability to comprehend the material occurred. The authentic material reflects tourism language with its own rhetorical style. The teacher needs to provide information in Thai; otherwise incomprehensible material can demotivate the learning. However, recent studies in second language learning also provide evidence that second language learners can benefit from using their first language (Debski, 2006).

As the project work was a student-centered approach that needs to adapt to student level and motivation, requiring the students to present final product in Japanese in this class was significant pressure on the students. Thus, except the material provided by the teacher, there was little opportunity to expose the students to comprehensible input and output with the project work.

The context of learning Japanese as a foreign language in Phetchaburi is very challenging to encourage the students to use target language outside of the classroom as there is no speech community in the province. The fact that the tourist attractions, significant information providers, and the tourism product providers in Phetchaburi lack language support for Japanese does not promote learning Japanese for tourism.

Proposals for curriculum development

Considering needs analysis for curriculum development as suggested by Dudley-Evans & St John and findings from the students' project-based learning, the followings need to be taken into consideration for developing Japanese for Tourism for the students at Phetchaburi Rajabhat University.

- 1) Adding target situation in providing services of golf and spa into the course which usually includes only hotel services, food and beverage services, and shopping.
- 2) Inviting professionals who provide services of golf and spa to Japanese tourists to share their experience about the target events for task analysis for the curriculum development.
- 3) Analyzing linguistic features, discourse and genre from authentic material relating to golf and spa service. The examination of sentence patterns and lexis, and the gathering of linguistic information such as specialized vocabulary, phrases, and expressions relevant to target situations will support course design and lesson plan.
- 4) Providing support for learning needs such as study skills necessary for understanding unknown linguistic structure and vocabularies, for example, how to use various kinds of Japanese dictionary, and computer function that help read difficult Chinese characters in authentic material.
- 5) Integrating PBL in the curriculum with special designed language activities to promote comprehensible input and output relevant to the target situation.

Conclusion

The purpose of this study is to explore opportunities for developing a curriculum of "Japanese for Tourism" for Tourism-majored students of Phetchaburi Rajabhat University. While the findings of this study were limited by linguistic resource in the tourist attractions and service providers in the area, and the case study design, the following two conclusions can be drawn: (1) The integration of project work in Japanese for tourism promote experiential learning, expertise knowledge in tourism discipline, enhanced motivation, and awareness of the needs for linguistic support for Japanese tourists. (2) Students' learning needs and the learning context may affect the use of authentic material and comprehensible output, which is important for language development.

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REFLECTIONS ON THE ENHANCEMENT OF THE LEARNING EXPERIENCE THROUGH VARIATION OF THE MEDIUM USED IN THE TEACHING OF LEATHER-WORKING TECHNIQUES

Perihan TUNÇ*

SUMMARY

At the Selçuk University Faculty of Vocational Education Department of Handicraft Teaching, major courses on leather working instruction have been taught in the 3rd year. In the 5th semester, in the design and production of leather clothing accessories course, the basic leather working techniques have been taught, modeled and produced by the students.

This study is a qualitative research to determine teacher trainees' opinions about the Composition Practice Method used in teaching leather-working basic techniques learning.

Third-year students at Selçuk University Faculty of Vocational Education Handicraft Teaching Department who have been exposed to the Composition Practice Method of teaching the basic leather-working techniques form the population of this study. Here, the aim is the follow-up of the process. The researcher attended the course and 15 students were randomly selected from among 60 teacher trainees which formed the sample of the groups.

Students share close and common opinions about the teaching of 'Basic Leather-working Techniques' and the assessment used in Composition Practice Method. They expressed that the techniques enhanced learning with permanence, motivated them to think for themselves, and helped them be creative. They stated both their positive and negative points of view about the method.

Students are aware of the improvement of cognitive, emotional, and psychomotor behaviors throughout this process. As their coordination and operating speed were increased, their ideas broadened, their enjoyment was enhanced, and their attention to color harmony increased.

Based on the responses collected, the researcher is convinced that using the Composition Practice Method brings added success to the teaching of basic leather working techniques.

Keywords; vocational education, leather working, leather-working basic techniques learning, Composition Practice Method, leather,

INTRODUCTION

At the Selçuk University Faculty of Vocational Education Department of Handicraft Teaching, major courses on leather working instruction have been taught in the 3rd year. In the 5th semester, in the design and production of leather clothing accessories course, the basic leather working techniques have been taught, modeled and produced by the students.

For basic leather-working techniques to be learned permanently, knowledge of the field, skills, and habits are essential. Students must: learn accurately (cognitive side), and believe both in the necessity and importance of the acquired knowledge (emotional side), then they must apply these at a level of expertise (psychomotor side). Teacher trainees must both learn the basic techniques themselves and be able to use the techniques to teach others. In class they prepare flashcards, which they then use in their own instruction.

Education is not just a time of preparation for students, it is life itself. For this reason, it should not be thought of as separate from life. The educational environment is not to be something broken away from real life and times, it is to be real, meaningful and significant disciplines (Şahin & Yıldırım). Actually, the educational environments should be areas in which one desires to live with the process

Visual aids are primary and essential in acquiring psychomotor functions. It is unlikely that a student will be able to perform a function he has not seen. In other words, the visual aids and course tools used are important elements in instruction. Nowadays, when even a simple product demands research and development, of course, we cannot train people without transferring time, energy and financial resources. Increasing technology, the use of knowledge, globalization, the Internet and mass media affect the whole learning process. Today's students come to class having already encountered various stimulants. For this reason, consideration and improvement of the quality of course tools presented to students is necessary in both vocational education and art education. In giving shape and meaning to life, an individual must be able to think with values and distinguish quality. Only those who can perceive in this way can be viewed as aesthetic. With this perspective, one can refrain from making superficial judgments and judgments based only on his own tastes. The most important characteristic of course tools is their appropriateness to the curriculum. With the help of these tools, students should be allowed to practice and improve their skills. In addition, the tools must be realistic, durable, and current. They should activate students' attention and ensure that they will produce an emotional reaction. These characteristics enable students to concretize concepts and catch some elements which could have been missed via visual materials (Demirel, 2001).

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Supporting elements that make materials attractive are crucial. The approach of drawing attention (surprise), serves the purpose of keeping student's attention active. Thus, it is essential to introduce different stimulants. When the environment gets monotonous, breaks in learning begin and may continue.

When it comes to formation of figures, shape is most important. Materials must be familiar in order for students to internalize them with the highest level of attention and the least effort. The color scheme and its attraction are desirable characteristics (Demirel, 2001).

The basic leather working techniques are: cutting, shaving, adding, hardening, hemming, combining, smocking, decorating, and lining. However, as several methods are used in each technique, all these techniques require approximately 52 different applications (Gökçesu, 2002). Through the traditional method, the student displays the basic techniques on little squares or rectangular pieces, then glues them to a cardboard of A4 dimension and keeps them to use as course tools (or flashcards) when they are teaching their own classes. Later, they improve the techniques they have learned by making products such as jewelry, wallets, belts and handbags.

In general, this traditional method of teaching leather-working techniques has been the most common for many years. This is the method by which this researcher was taught, and observation and experience has shown that all other teachers and students used this traditional method. In this method, the student has the opportunity to use and reinforce the learned techniques with products in a short period of time.

Apart from this positive aspect, various negative aspects were observed. Students do not assimilate the learned techniques, but imitate their classmates, or practice in haste, or do not take the application seriously. It was observed that one student would practice a technique on a rather large piece, and then cut it up and distribute it to other students. Practical techniques which the student does not spend much time thinking about causes habitual insufficiency in transfer of the learned technique. Even though the student uses some techniques to produce an artwork, he cannot use other techniques at all.

Teacher trainees from the vocational education faculty need to learn these techniques thoroughly and accurately, not only for themselves but also for the quality of education of future students. When teacher trainees are ignored, not given adequate importance, or do not enjoy what they are doing, but just go through the mechanics of it; their high school students will also not be interested and these samples will not be closely observed and studied. For this reason, it could be said that simply made course tools may not be enjoyable or appreciated. While operating within the traditional method, the student is not interested in his classmates' projects, the course tools prepared, or artistic concepts such as composition, color, size, and proportion. The techniques are prepared quickly or borrowed from others. Although teacher trainees know what they should use as course tools, they do not seek to make anything original. After the techniques have been achieved, when they are asked about them, they confuse many of them, and do not remember some of them at all.

In order for these techniques to be learned well, the student must feel the need to produce something, but they do not use all the techniques on one product. In the process of learning these techniques, the student begins working on a product and he may struggle and remain deficient. Because the techniques are not improved, serious errors can result.

New teaching trends are needed to make learning permanent, pleasant, and delightful, and to get course tools to obtain the qualities desired. When learning becomes effective and permanent, individuals will use their creativity, profit from their personal learning strategies, experience the advantages of productive and fast learning, provide real learning experiences, and play an active role in the process of life-long learning (İşman, 2005).

During the process of learning basic leather techniques through the Composition Practice Method, the teacher trainees will improve their knowledge and skills in the areas of size, proportion, balance, harmony, color harmony, composition and design. For this purpose, observing one another's work with interest, attempting individual learning and a competitive environment will cause the need for a production strategy and a need for the product itself to be felt.

The method used by this researcher is expected to increase creativity, workmanship quality, the ability to observe acquired skills overtly, and also students' taking responsibility to punctually finish a product of desired quality, reflecting affective and psychomotor target behaviors. The course tools that are prepared by teacher trainees must be contemporary, colorful, and pleasant ... in addition to being instructional. With this in mind, each technique was required to be applied by illustrating it on creations, in order to form a meaningful composition.

The Goal of This Study

The **Composition Practice Method** is used by this researcher to teach leather-working techniques. The main goal of this study is to ensure permanent, full and accurate learning by making the learning delightful and pleasant. It ensures obtaining students' maximum participation and activating students' inner dynamics with efficient and fruitful application of vocational and art education techniques. Gathering the opinions of teacher trainees regarding the effectiveness of this method was the aim of the study. Teacher trainees were asked to respond to the following:

- 1) Evaluate the positive and negative aspects of the Composition Practice Method during the flashcard preparation process.
- 2) Which skills do you think you improved in using the Composition Practice Method?
- 3) Flashcards that you prepared were evaluated every week with feedback. What do you think about such a feedback?
- 4) How has the course gone from the beginning of this semester? What are your feelings about the process?
- 5) Do you think you learned all the techniques thoroughly and accurately? Do you remember all of them now?

- 6) What are your thoughts about the quality of your folder?
- 7) Explain how the techniques could be taught better.

METHOD

This study is a qualitative research to determine the trainees' opinions about the Composition Practice Method used in teaching leather-working basic techniques learning. This qualitative study of compositions is relevant to activity research.

Activity research includes the works of a practitioner by themselves or with the assistance of a researcher towards understanding and solving problems that appear during the application process. The proximity of the researcher to the data and his knowledge and experience are important. Activity research projects deal with collecting data about the problem focused on and working in its own environment through a specific time period (Yıldırım and Şimşek, 2006, p.78).

Experimental Group

Third-year students at Selçuk University Faculty of Vocational Education Handicraft Teaching Department who have been exposed to the Composition Practice Method of teaching the basic leather-working techniques form the population of this study. Here, the aim is the follow-up of the process. The researcher attended the course and 15 students were randomly selected from among 60 teacher trainees which formed the sample of the groups.

Data Collection

In the process of this study, it was felt that more than one data collection tool was required in order to get valid and reliable results in terms of the adequacy of the method used.

Observation records: In keeping with the purpose of the study, teacher trainees' techniques were observed during the learning process. Through the period of the courses attitudes and behaviors of teacher trainees such as listening to and following the course, practicing accurate techniques, and doing homework on time were all observed. It was announced that in each weekly class the flashcards would be critiqued, and evaluated.

Interview:

A semi-structured interview was conducted with two students who had both attended the same class at a vocational handicraft higher education institution, and then were able to pass the exam to enter the undergraduate program. They both completed their flashcard projects despite the fact that they had been exempted from this course. The interviews were recorded with an audio recorder.

Survey:

A survey including seven open-ended questions was given to the 60 teacher trainees. The answers are analyzed in Results and Interpretation. The questions were relevant to the goal of the study and expert opinions were collected.

Student Project Folder

The projects prepared every week by the teacher trainees were stamped to indicate their usage, and students were asked to compile a folder. Sample pictures were taken from this folder and are included in the appendices.

Data Analysis

The data was processed according to descriptive analysis. The descriptive analysis is organized and interpreted for presentation to the reader. The interpretation, the explanation, and study of the cause/effect relationships are essentials to reaching a conclusion (Yıldırım & Şimşek, 2006). The observations are the researcher's own observations. These observations are interpreted in Results and Interpretation. The recorded interviews were put into writing. Some characteristic comments are listed according to the data received from the survey. In addition, qualitative data are frequently mentioned.

RESULTS AND INTERPRETATION**Results based on observation**

This data was collected during four-hour classes over a ten-week period. Every class hour is 45 minutes. This research was carried out on three different groups composed of 18 individuals. In the beginning of the semester, teacher trainees were told that Composition Practice would be used in learning the basic leather-working techniques.

The aims of the method were clarified as ensuring permanent learning, being an interesting and enjoyable process, and enhancing the quality of the course tools to be prepared. Also, it was explained that their skills would improve with much practice.

With the purpose of motivating students, a showcase was prepared to exhibit flashcards. From time to time the students were asked what they thought about the flashcards. The researcher tried to present several samples of each technique to get a varied perspective of evaluation. General, technical and helpful information was given about the techniques. Each technique was separately demonstrated by the researcher/course instructor.

Teacher trainees were asked to select the composition that best integrated and clarified each technique, and to illustrate this by demonstration. In every lesson an average of five techniques were demonstrated. Techniques used alone or integrated with other techniques were pointed out and then listed on the board. Students were requested to study five samples for each technique.

The students were told to begin a composition in class and to ask about things they had trouble with while their work was observed. The next lesson, after the project was explained, the teacher trainees were called up one by one. Their projects were criticized--positive and negative aspects were mentioned. Each sample was stamped in order to prevent students' re-using projects. Many suggestions were given for improvement. The students were told what grade they received on their project. This application lasted 10 weeks.

In the first weeks, students often asked whether their composition was appropriate to the technique. In later weeks, they were much more confident.

At the outset of the course they were bringing simple composition samples, but in time they started to bring many resources to find the ultimate composition. They produced a serious competitive environment.

In the first week the technique of cutting was explained, demonstrated and practiced. After seeing some flashcards, the students were requested to apply the technique. Students asked questions and seemed anxious. The following week, the samples which students had completed were collected. Each was analyzed with positive and negative comments made.

The first projects were generally simple, and it was observed that the question of, "Is it acceptable?" was on their minds. As a typical example: the performance of one student was not up to standard, however, after having been told again what was expected and what was not acceptable, this same student produced one of the best compositions in the class.

Initially, the students' projects had many deficiencies in size, proportion, composition, arrangement, color, and material harmony. As time passed, the students became more careful and improved. The researcher was able to observe the atmosphere of competition which improved the quality of the projects and several experiences of art education: students were helping one another; exchanging materials, tools and compositions; critiquing or appraising each other artwork. A few weeks later, positive changes were seen in the students' work.

In addition to reports that working more carefully helped them improve, there were those who said that the preparation process was time consuming and tiring. They reported that they could not find leather in the desired color. Because a sizeable quantity of leather was necessitated, some students reported difficulty affording it. To deal with this problem some low-cost, or even free, leather was acquired from various shops and factories.

A conclusion can be drawn from these observations: although the advantages of this method outweigh the disadvantages, a negative aspect is the higher cost and increased time needed when compared with the traditional method. Beside this, only one student did very little work, and three students did not bring their work on time--but they completed it. According to the degree of difficulty of the techniques, sometimes one or two students from each group did not submit their work on the stated day, but completed it in the same week; others brought their work completed and on time.

Findings based on the survey

Seven open-ended questions were asked to the students/teacher trainees. These questions related to: the positive and negative aspects of the flashcard preparation process, their thoughts about which skills were developed through this method, their ideas about the evaluation, whether the learning was permanent or not, their feelings about the process, and their thoughts regarding the quality of course tools prepared, and their advice about how the techniques were taught.

1-Discuss positive and negative aspects of the Composition Practice Method during the process of preparing the flashcards.

Qualitative Data

The positive side is that our hand coordination improves as we work on the flashcard. We learn to be more objective in each composition. We definitely see an improvement every week. This is noticed by those around us. The negative side is that due to being busy with one style, time spent on other classes is reduced. **Sevcan**

The positive aspects are that techniques become more permanent. Help me not to forget. A wonderful folder remains in my possession. The negative side is the lack of time. I have difficulty finding a composition appropriate for the technique. **Merve**

Statements about positive aspects	Statements about negative aspects
<ul style="list-style-type: none"> - better comprehension of subject - sufficiently understood - helps me not to forget - separation into weeks helps to finish - helps me to think and to act upon my thoughts (2) - We learn where to do this technique - Good use of time - Encourages organization and carefulness - Easier to design a product - Positive for future stages of life - Important for the future - Leather is used without any waste - Being objective - Noticeable improvement - Improves taste - Improves coordination - enjoyable - Stays in my mind - Permanent - Wonderful folder 	<ul style="list-style-type: none"> - Less time for other activities (5) - Stressful preparing every week - difficulty in finding compositions (3) - too many techniques in some weeks - Unable to finish on time - Difficulty matching technique to composition - high cost - requires great effort - difficult finding colorful leather

<ul style="list-style-type: none"> - Excellent idea - Products are excellent - Enjoyable (2) - We learn well - Investigation is good - Meaningful - Beautiful - Related to real life - Encourage research - Reusable - Enable decision 	

Table no: 1 Positive and negative aspects of the Composition Practice Method.

The statements that students used to answer this question were listed. Repeated statements were indicated with numbers in parenthesis. In general, there are more positive statements about the method. These can be grouped as follows: permanent learning, contribution to improvement through various methods, and satisfaction with artwork produced. It was seen that the students' approach to how they benefited differed greatly. As they pointed out their improvements, being objective, design, decision making, thinking, applying what is thought, orientation to the research, and similar statements were used. Students find their work meaningful, enjoyable and beautiful. It can be said that there is a parallel between the purpose of this practice method and how the students benefitted.

Students explained that time consumption and difficulty are drawbacks. One student felt that working hard was negative. Yet, the starting point of vocational education is based on hard work. The researcher feels that this statement is not seen as a negative aspect of the method, but is the personal opinion of one who has not internalized vocational education. The difficulty in finding compositions was expressed as a negative aspect by three students.

The negative aspects seen are high cost—compared to costs of the traditional method—and having trouble finishing projects on time. Negative aspects are perceived that the cost is higher than traditional practice and bring out a problem to do on time. Doing homework completely and on time are important and basic necessary habits for teacher trainees. This is one of the habits that we are hoping to have students form during this process.

2-Which skills do you think you improved upon using the Composition Practice Method?

Qualitative Data

I can definitely use the leather in every application. I understand the subject better using the composition. I think I will use this method when I am teaching. **Ayşe K.**

I think my hand coordination has improved. I realized that the details contributed much to form a complete whole. **Ayşe G.**

Initially, I had difficulty finding compositions. Right now, if you ask me a technique, I can find the most appropriate composition from the design examples. I could even draw a composition if more time was given. My visual taste has really developed. I can make evaluations like: ‘This looks much better here’. **Merve**

Skills		
Use of leather in all applications	Learn techniques	Neat cutting
Better understanding (2)	Work with clarity	Use of imagination (2)
Coordination (7)	Importance of detail	Choice of model
Cognitive strength (2)	Apply the composition well	Produce original ideas
Broader thinking (2)	Visual taste	Think differently
Ability to be objective	Do homework on time	Gain skills that are permanent
Enjoyment	Do the best work	Products that coordinate with each other
Skill of clarifying	Get an idea about the appropriateness of the composition to the technique	Color and composition discrimination
Creativity (2)	Arrangement of composition	Skill of critiquing
Color harmony (6)		

Table No: 2 The acquired skills

Every student expressed himself with their own statements while responding to this question. Repeated statements were displayed by numbers in parenthesis. Students’ acquisition may be gathered into three main titles as: knowledge, skills, and habits.

Learning techniques, increased understanding, organizing the design, permanent knowledge, distinguishing color and design, complementation between products are all proof that there has been acquisition at the cognitive level.

Creativity, cognitive strengthening, wide thinking, objectivity, composition appropriateness, decision making, trying to make the best, developing the habit of completing homework on time, taking responsibility, working neatly, giving importance to details, development of visual taste, and using imagination are all related to acquisition at the emotional level. Improvement of coordination, neat cutting, and the ability to critique are related to acquisition at the psychomotor level.

It can be said that students’ knowledge, skill, and behavior have been changed positively.

3-Flashcards that you prepared every week, were critically assessed. What do you think about such an assessment?

Qualitative Data

I learn what my mistakes are. I work more carefully on the next flashcard. Neşe
I think it is right. Our instructor explains tricks of the trade that we could not see on our own,
 and helps us to notice and correct our mistakes. **Gülçin**

Positive Aspects	Negative Aspects
Totally accurate Discover something better Stop repeating mistakes (2) Enable to work carefully Helps to work differently Helps to work neatly Notice mistakes (3) Weekly assignments good- not stressful Self-improvement Relaxed in final exams Enable me to see my mistakes Learn what is right Getting ideas by seeing the best in the class Better learning Not making the same mistake See deficiencies Notice the lack of color harmony Knowledge about the correct use of the techniques Complete on time Learn the grades Not being stressed at the end of the term. Realize deficiencies (2) Wider range of view Self-evaluation Give more importance Not missing any details Enabled me to see my own improvement Work harder on my deficiencies	Hard to make deadlines Sometimes I get upset Stressful Lost interest

Table No: 3 Positive and negative aspects of the assessment method.

In this section, all the students considered the assessment positive. They can see how the assessment helps them improve. They respond positively to the criticisms made. They

understand that these criticisms are useful to see and correct their mistakes. It is essential to make them aware of their own mistakes.

It is obvious that they are making an effort to finish projects on time. One student found this kind of student assessment helpful and admitted that she may sometimes get upset. It is evident that one student is sometimes disappointed. Another student was influenced negatively by a criticism made regarding her classmate. As a result, the positive contributions of the assessment process to the learning process may be said to be greater.

4-How have the leather lessons gone since the beginning of the term? Write down your feelings about the term.

Qualitative Data

It was nice, but full. Some weeks I had a time crunch. Most importantly, I became more responsible. It enabled me to combine color, model, and technique integrity. I got upset many weeks, however, it encouraged me to do better. What seems excellent to me does not seem nice to others. **Mümine**

Process	
Positive aspects	Negative aspects
Nice (2) Enjoyable (4) Eagerness Fun (2) Productive Instructive Interesting Busy	Difficult Sometimes I got bored Tiring Rushed Intensive

Table No: 4 Positive and negative aspects of the process.

As they answered this question, teacher trainees, reported feeling the positive aspects of: nice, enjoyable, I became eager, fun, productive, instructive, and interesting. They reported feeling the negative aspects of: difficult, sometimes I got bored, tiring, and rushed. Whether the statement that the course seemed intensive is negative or positive can be debated. The statements ‘enjoyable and intensive’ were repeated four times. The statements ‘nice and fun’ were repeated also. According to these findings, the leather course was good and achieved its goal for students. However, it can not be ignored that the course was quite intensive.

5-Do you believe that you have learned all the techniques? Do you remember all of them?

Qualitative Data

Yes, I have learned the all techniques. In general, I remember them. But there are a few things we are stuck on or lack, however, I believe I know them. Yes, all the techniques are in my mind. **Mümine**

I have almost learned all the techniques. **Eda**

According to the data acquired, all the students think that they learned all the techniques. Two students explained that they may not remember one or a few techniques, but they would remember when they see them. The statements used are such as: I learned, I comprehended, I understand, it is perpetual, and I remember almost all of them. Thus, this can be said that the techniques were, in general, learned.

6-What are your feelings about the quality of your folder?

Qualitative Data

In general, I do not give importance to my work, but my flashcards were good. I can teach even young learners with the flashcards. **Derya**

When I look at my folder, I do not like the flashcards I made the first weeks. But, I think that my folder is encouraging. **Neşe**

The folder that I prepared could be nicer and neater. I believe that I did the best I could. But, it was not what I had hoped for. **Fatma**

According to what is understood from the data, students care about the folders they made themselves. They can compare the work from the first week with the work from the later weeks. They can realize their deficiencies; they can see their mistakes. They like them because they did the best they could. Furthermore, among the findings we see that some feel they have artistic value. Therefore, it may be said that students gave importance to their work, they realized their deficiencies, they enjoyed their work, and they find their work beautiful.

7-As for you, how can these techniques be taught better? Explain your suggestions on this issue.

Qualitative Data

The best way to understand the techniques is to set out a product. Techniques can be improved. Using various techniques some product can be made. **Hatice**

I have no idea how to teach it better. **Fatma**

Almost all the students expressed that techniques were well taught. Their statements were: permanent, effective, and good. Four students revealed that they wanted to apply the techniques on a product. Students think that they learned the techniques very well, but they wanted to work on the product.

Results based on the interviews

The interviews with the students were gathered into three main themes. They explained the reasons that they took the course despite being exempted from it, which skills they improved and whether they learned permanently or not.

1-Reasons for taking a course they were exempted from

The two exempted students were interviewed and they explained that they wanted to take this course because of the researcher/course instructor. During the interview, they were asked the reason, and they revealed they had neither any folder nor any sufficiently learned techniques.

‘We did not make a flashcard--our instructor was not experienced and that was her second year, so I felt inadequate in that issue’. **Özge**

‘I was exempted because I came with the external transfer exam. My friend and I decided to take the course because my department did not teach this intensively and because this would cause us to improve. **Selda**

2-Which skills have this method improved?

The views of these exempted students overlap with the others. Both students reveal that their coordination and the operating speed have improved.

‘For example, I am faster than I was initially’. **Özge**

‘This method enabled me to increase my speed, it improved my span of my thoughts, and I could see how to apply color harmony better. I can more clearly see which color to use where on the composition. **Selda**

3-Do you think you learned these techniques? How do you think you can benefit from them?

When these students are compared with the others, it can be seen that their awareness is greater than the others’. This is thought to be due to being graduates of a vocational high

school. They are aware that they can benefit from this through all of their lives, including fields outside education.

‘I will run into this everywhere. I think that I will look back on the techniques whether I am a teacher or not. For example, I will be able to teach something to someone else. I will show the techniques that I applied... Yes, I can count all of them. **Özge**

‘I think that I learned many techniques. Once they were taught as theoretic, we didn’t practice much. Throughout one term they gave techniques, then they wanted products and everyone did her best.

Frankly speaking, we did not make quality products; I took this course to enhance my quality. In my future, even if I don’t become a teacher, and open a shop or something, I am certain I will make more products by using these techniques. I can even open a shop. **Selda**

RESULTS AND SUGGESTIONS

Students share close and common opinions about the teaching of ‘Basic Leather-working Techniques’ and the assessment used in Composition Practice Method. They expressed that the techniques enhanced learning with permanence, motivated them to think for themselves, and helped them be creative. In addition, they were pleased to be able to keep the flashcards. There are many positive aspects of this application process. Also, they revealed their obligation of completing an average of five techniques in one week, and having to spend lots of time on this was a negative aspect of this process

Students are aware of the improvement of cognitive, emotional, and psychomotor behaviors throughout this process. As their coordination and operating speed were increased, their ideas broadened, their enjoyment was enhanced, and their attention to color harmony increased. They had improved.

The weekly assessment appears to ensure a positive and effective contribution to the students’ development process. They were able to recognize their own mistakes and correct them. They are upset when they think that their work is not appreciated. Students/teacher trainees felt that the classes go well, and are effective, but also view them as tiring and intensive. Students feel they learned almost all the techniques. While a majority of students think that their folders were very good, others indicated that their folders were not as they had hoped. In general, they appeared to be satisfied with their folders. Regarding the results of how these techniques could be better taught, almost all of the students express that they have learned well, but also state that they want to make a usable product. Results of the interviews and observations evidence a parallel with the results of the survey.

Vocational education is an entity of multiple disciplines that integrates mental, physical, and spiritual development and is fed by art education. Individual acquisitions enriched by their emotions, aim to reveal high quality, and the goal of producing functional items. Therefore, vocational education is one of the most basic needs of a society. The individuals who will take this education must have various qualifications. Also, the individual can succeed only if he

works willingly and enjoys his work. Currently in Turkey, the reasons for choosing vocational education are related to factors other than personal interest and ability. Students, who come from a low socio-economic class, are known to choose vocational education because of their parents' desires.

Another factor is the preference of vocational education by students who have a low academic achievement level. In the academic year 2005-2006, the Faculty of Vocational Training Education, Handicraft Education Department at Selcuk University received students whose university entrance exam results were below the 78th percentile. (Council of Higher Education, Student Selection and Placement Center: 2005-2006 Higher Education Programs and Quotas Guide, p.82).

Urgent measures must be taken to ensure education can be provided for those who are interested, not just for those who are unable to choose for themselves. The most important factor for enhancing quality in vocational education is the acceptance of students via aptitude tests.

Basic leather-working technique practices should be a separate course, not a lesson included in Techniques of Design and Production of Clothing Accessories. There should be another separate course for production of functional items.

Statements included in the decisions taken from the 16th National Education Ministry Consultation should be actualized:

The Vocational and Technical Teaching Faculties' curriculum needs to be renewed to involve, not rote memorization, but thinking, researching, interrogative, analysis, synthesis and evaluation orientated teachers... those who can use the changing technology, facilities/resources effectively. Moreover, Vocational and Technical Teaching Faculties must train teachers who are creative, critical, and scientific minded, who have aesthetic values related to man and nature, who use the latest information technology, and know a foreign language (Ref: Yazçayır, 2005, p.23).

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APPENDIX

Composition Practice Method examples

iafor







Title: Developing Intercultural Training Programs using Information Communication Technology in Higher Education in Japan: An Experimental Study for a Theoretical Framework of Teaching and Learning Methods

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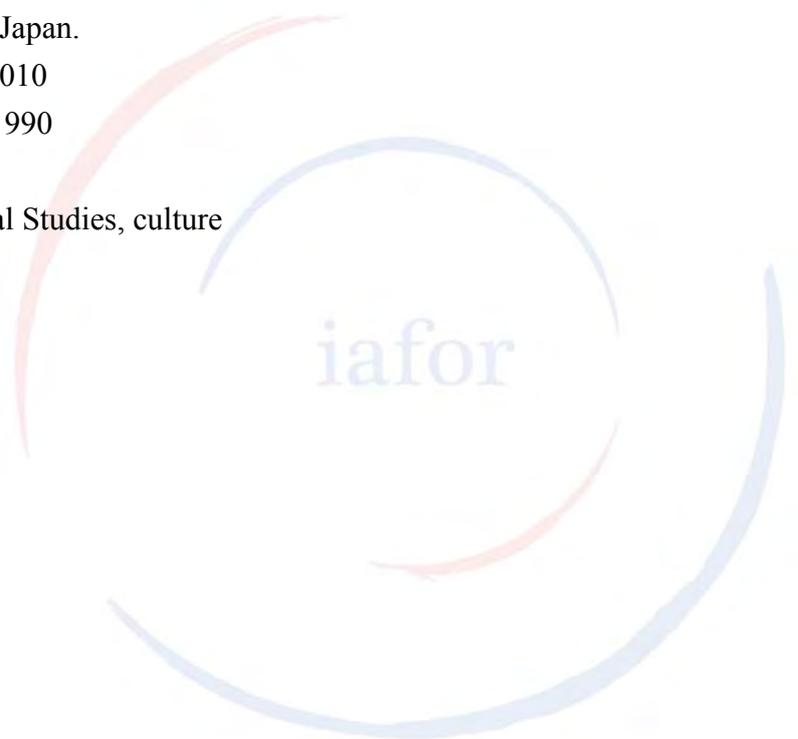
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Topic: Educational Studies, culture

The logo for the International Association for Frontiers in Research (iafor) is centered on the page. It features the word "iafor" in a lowercase, blue, sans-serif font. The text is surrounded by several overlapping, curved lines in shades of blue and red, creating a circular, abstract design that resembles a stylized globe or a network of connections.

Developing Intercultural Training Programs using Information Communication Technology in Higher Education in Japan: An Experimental Study for a Theoretical Framework of Teaching and Learning Methods

Yuko Kato

Abstract

As the number of foreign people living in Japan has rapidly increased in the last decade, the necessity for intercultural understanding among Japanese people and foreigners alike is becoming more imperative. Among various educational methods, Intercultural Training has been studied to develop intercultural competence which enables people to accomplish their aims, to act and relate effectively, and to have a meaningful life in various cultural contexts. Although Intercultural Training is implemented in higher education, some problems, such as difficulties in evaluation, lack of time and skilled facilitators, are reported. Therefore, the researcher aims at developing an original Intercultural Training program using information and communication technology with her co-researchers. This program intends to help teachers to overcome some of the problems implementing Intercultural Training in higher education and to make Intercultural Training more widespread. In this paper, the progress of this study and the experimental Intercultural Training programs organized for researchers and Japanese students are shown. In addition, theoretical and empirical research for studies of teaching and learning methods of Intercultural Training using information communication technology will be discussed. This study is supported by a grant from Fukui Prefecture in Japan and the Japan Society of the Promotion of Science (Grant-in-Aid for Young Scientists (B)).

Keywords: Intercultural Training, ICT, Higher Education.

1. Background

Intercultural Training (IT) has been studied in the USA to develop intercultural competence which enables people to accomplish their aims, to act and relate effectively, and to have a meaningful life in various cultural contexts. IT puts an emphasis on developing practical skills through empirical studies, which is also regarded as important in International Education, Multicultural Education and Intercultural Education (Mizuta, 1989). Although IT namely focuses on cultural backgrounds of different people, it is strongly concerned with developing

psychological aspects of communication activities in daily life.

However, some problems, such as difficulties in evaluation, lack of time and skilled facilitators, are reported in order to practice IT in higher education. The author, therefore, tried to develop an IT program as an educational support tool using Information and Communication Technology (ICT) as interdisciplinary joint research (refer to Note 1). It aims to overcome the above problems and enables more students to develop cultural awareness. In this paper, the progress of the IT using ICT, and an experimental IT program organized for researchers and Japanese students will be shown.

2. Studies relating to the IT using ICT

While there are many educational support systems using ICT, do programs treating IT exist? The programs aiming at promoting cultural understandings are mainly offered by commercial organizations. Although a few of them are in Japan, they are mainly found in the U.S. where IT originated. According to an investigation list of the Intercultural Communication Institution (SIIC, 2010), 37 organizations are carrying out cultural understanding training on-line in the U.S.

A common feature of these training programs is that they are commercial programs. The contents of the programs are not available for public use. The original purpose of these programs is to increase profits by training talented people who face cultural conflicts in multinational companies. Hence, neither the examples of using these programs in higher education nor performing academic research on these programs is reported.

As for the educational support systems using ICT in higher education, Learning Management System (LMS) such as Blackboard, Moodle is popularly used in Japan and the U.S. Although the use of LMS in Japanese higher education is gradually increasing (Center for ICT and Distance Education, 2010), studies about teaching intercultural issues online are found in the U.S. (Merryfield, 2003; Cheong and Martin, 2009; Martin and Nakayama, 2010). However, there are no reports on studies of the educational support systems specialized for IT.

Our original IT program using ICT was developed for cultivating students' intercultural understanding in higher education. In addition, this original educational support system has a self-learning function with game elements. These two characteristics cannot be found in LMS like Moodle and the training programs for company profits shown in the above.

In order for more students to experience IT, it is important to consider more effective methods. In this system, game elements are included for motivating learners. First, students will answer simple quizzes in relation to their intercultural understanding. Since it has some attractions with

audio and visual effects, it is not like studying but playing the games. As students complete more quizzes, they are exposed to more intercultural ideas and gain intercultural understanding in the process. In addition, the more students answer the quizzes, the more points they will get in this program. By getting many points, they will reach the final goal of the game to become “the Master of Intercultural Understanding”.

Although existing LMS such as Moodle could be effective, it cannot be denied that the “clickability” of our program makes navigating areas of personal interest easy and increases the students’ motivation to pursue the training. The original aim of this study is to increase the number of the students who have more awareness for intercultural understanding through IT. The educational support system in this study should attract not only the students who undertake intercultural studies but also various students in higher education. Therefore, this study considers that adding some attractive elements in the existing LMS is quite significant. Needless to say, the educational effects of adopting game elements in online education are already reported (Aldrich, 2009). Furthermore, it can be applied to theoretical frameworks for teaching-material development, such as the ARCS model (Keller and Suzuki, 1988) and Gagne's nine teaching phenomena (Tamaki, 2010). With the game elements as shown in the above, the educational support system developed in this study should be easier to access for all students.

3. Outline of the system

3.1. Making the contents of IT in the system

First, IT examples provided in many academic books were collected. Most examples were found in English literature such as Kohls and Knight (1994); Stringer and Cassidy (2003) and Hofsted et al. (2002). In Japanese, examples from Yashiro et al. (2002) were collected.

Next, we selected some keywords which are important for intercultural understanding. At the moment, the training examples are sorted by ‘culture’, ‘values’, ‘common sense’, ‘bias and stereotypes’, ‘communication styles’, ‘ethnocentrism’ and ‘cultural relativism’.

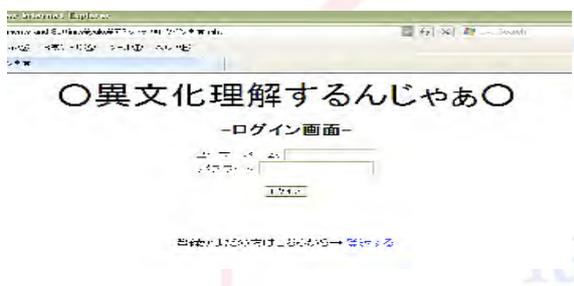
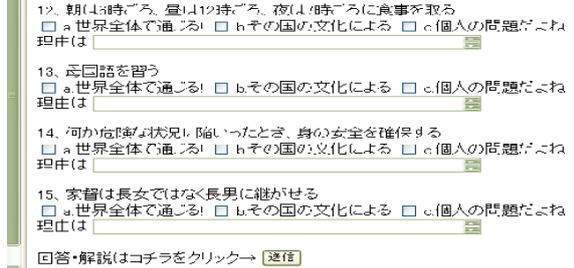
The third process was procuring copyright permission and adapting them for on-line application. This was the most significant and time-consuming part of the project, since there were two problems: it is impossible to implement the existence training examples without the authors’ permission due to copy right issues. Thus, to get permission for the source material was very time consuming. In addition, the training examples collected in processes 1 and 2 were basically prepared for classroom activities and workshops. For these reasons, in the third process, it was necessary to modify them for on-line based programs.

In the fourth stage of our research, text versions of our training programs were implemented. Since we made original training programs, we needed to examine their efficacy and modify them for grand scale online implementation. The pre-tests were implemented to the 441 students at 1 universities in Hokuriku area of Japan, between April and July 2009.

3.2. Outline of the system structure

Students answer the quizzes, and read through explanations of each question. The more they read the program, the more points they will get to become a “master of intercultural understanding”. Functions which show different opinions and carry out opinion exchange were added. Functions for teachers to analyze the results are now being developed.

Table 1. Outline of the system

	<p>1. Login Screen</p> <p>Students put their background information such as age, sex, birth place. After that, they login with password and nickname. Personal information can be observed only by an administrator or a teacher.</p>
	<p>2. Introduction</p> <p>Animations explain how to use this system. (Animations are created by Yumika Kamide, see Note 1.)</p>
	<p>3-1. Quizzes</p> <p>Other than simple quizzes, multiple-choice questions, fill-in-the-blank questions, and description questions are prepared.</p>

<p>① c どちらかといえば、個人的なことでしょうか。ただし、その地域の気候にも左右されますので、文化的となりえる可能性もあります。例えば、南太平洋の島サモアでは、窓のない家に住んでいる人々もいるのですよ。</p> <p>② b 信念・信仰の問題ですね。イスラム教では、蛙は神の玉座のあった水上にいたということから神聖なものと考えられているのですよ。ほかの宗教ではどうでしょうか？</p> <p>③ b 日本式に手を上げて呼び止めると、うっかり失礼にあたる行為になってしまう地域もあります。例えばギリシアでは、手の平を人に向けてはそなたを侮辱することになるので、それは避けなければなりません。</p>	<p>3-2. Explanations 1 Answers and simple explanations for quizzes.</p>						
<p>文化の全容を明らかにしようとする様々な試み：文化人類学的見方と心理学的見方 「文化」については様々な定義があります。いろいろな分類の方法の中で、見える部分を研究・考察するとは文化人類学的手法です。見えない部分の、個人の価値観や信念などの分析をするのは心理学的見方に分けられるといわれています。※1 文化人類学※2とは、人間の行動様式・生活様式全般について研究する学問です。人々が共有するシステムとしての文化を研究します。たとえば家族システム、教育システム、政治システム、経済システム、宗教システムについて研究し、その文化が持つ概念・特徴を見出そうというものです。この見方では、文化は主に以下の二点の特徴をもち合わせます：</p>	<p>3-3. Explanations 2 More detailed explanations are shown in accordance with the key topics. Academic references are also noted here.</p>						
<p>【問題】1. 文化とは何ですか？</p> <table border="1" data-bbox="199 817 758 1064"> <thead> <tr> <th>他人の回答結果</th> </tr> </thead> <tbody> <tr> <td>飲食、生活習慣、肌の色</td> </tr> <tr> <td>民族のステータス、民族の誇り、日本人にとって考える場面の少ないもの</td> </tr> <tr> <td>服、食、行動様式、言葉、音楽、祭典、部族</td> </tr> <tr> <td>各地域の礼儀作法、言葉のまりなど含む。ある地域では常識でも他の地域では常識でないもの。etc.....</td> </tr> <tr> <td>文明、言語</td> </tr> </tbody> </table>	他人の回答結果	飲食、生活習慣、肌の色	民族のステータス、民族の誇り、日本人にとって考える場面の少ないもの	服、食、行動様式、言葉、音楽、祭典、部族	各地域の礼儀作法、言葉のまりなど含む。ある地域では常識でも他の地域では常識でないもの。etc.....	文明、言語	<p>4. Description of different opinions Students can see other respondents' opinions immediately.</p>
他人の回答結果							
飲食、生活習慣、肌の色							
民族のステータス、民族の誇り、日本人にとって考える場面の少ないもの							
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文明、言語							
<p>雑談用掲示板</p> <p>本文</p> <div data-bbox="319 1108 742 1243"> <p>投稿日時 2010/08/27 08:50 名前 yuko 本文 文化って簡単に言ってもよくわからないな。</p> </div> <div data-bbox="319 1321 742 1366"> <p>投稿日時 2010/08/19 12:46 名前 紅花</p> </div>	<p>5. Forum Students can share their opinions with the others.</p>						
	<p>6. Evaluation After finishing quizzes, their evaluation for intercultural understanding is shown.</p>						

3.3. Differences in Teaching and Learning Methods between IT and IT program using ICT

One of the most distinctive differences between IT and IT using ICT is found in teaching methods. Usually IT in the classrooms or workshops is implemented by teachers or facilitators, while IT using ICT is implemented by the preset programs.

Next, a difference can also be found in learning styles. In the learning process of IT through workshops, debriefing led by facilitators and group discussions is quite important. Although there are no facilitators in case of IT using ICT, functions which can display the inputted replies instantly, and have students share opinions in the forum will support students' learning process. In fact, the effectiveness of these functions in teaching intercultural understanding online has been reported in the U.S. (Merryfield, 2003).

3.4 Possibilities of IT using ICT

The original IT program using ICT would be able to solve some problems in implementing IT in higher education. First of all, it will help teachers to spend more time on rational explanation of intercultural understanding and intercultural communication studies in lectures. When introducing IT in the course, time is often a limiting factor. If IT can be learnt through ICT, students can learn it by themselves anytime, anywhere.

Secondly, IT with autonomous learning functions doesn't require professional guidance. In general, most programs without autonomous learning functions cannot be carried out without the guidance of a teacher. Some of them even require more than one teacher to effectively execute. From a practical standpoint, this is too difficult to have 2 professionals in a lecture. If the IT training can be accomplished through autonomous learning functions, it helps to solve the problem of lack of teaching professionals.

Lastly, ICT helps to spread IT more. Usually, students who don't take an academic subject called "Intercultural Understanding" or an intercultural based English class would never have an opportunity to try IT. Consequently, many students would never have a chance to gain intercultural understanding made available through the program. However, if IT can be learnt through ICT autonomously, more students have the opportunity to participate in IT programs. There should be hundreds of thousands of ways to gain Intercultural Competence, since it covers the whole range of human ability. IT is one of the effective methods for achieving this competence.

In order to understand the advantages and disadvantages of the programs more clearly, a trial program was implemented to university students and teachers. The aim of this experiment was find out if.) the online program can promote the respondents' interest in intercultural understanding, and 2.) it can help to solve implementation problems of IT discussed in the above. In the following section, the experimental usage of the trial program is shown.

4. The experiment of the original IT program using ICT

4.1 Methodology

The experimental IT program was organized in January 2010 and in July 2010. In the first step, 18 Japanese students at X University in Hokuriku area, and employees from Z City International Association tried the experimental IT program concerning ‘culture’ as follows:

Table 2. Experimental IT program using ICT (Source: Kato, et al. 2010, p.29)

Aim: Understanding the terms of culture	
1.	to think about the cultural influence on standards of behaviour
2.	to recognize that some behaviours can be either acceptable or unacceptable according to cultural values
3.	to widen the academic background concerning to the term “culture”
Questions and explanation sections	
<i>A. Beginners (students get 20 points after Finishing Questions)</i>	
1.	What is culture? Describe it in terms and words you imagine as much as possible.
2.	Explanations
<i>B. Intermediate Quiz (30 points)</i>	
1.	Following behaviours or values, choose A for common ones in the world, choose B for cultural, and choose C for individual.
Quiz 1:	A frog is a sacred creature, while an octopus is the devil incarnate.
A.	Universally recognized belief B. cultural belief C. personal belief
2.	Explanations
3.	Learn some key words concerning culture using a picture drawn by the researcher. In the following screen, some key words are displayed and students are required to divide them into numbers 1 to 3 in the picture.
4.	Answers
<i>C. Theoretical studying of culture with a closed test (40 points)</i>	
1.	Definition of culture (by dictionaries, and the common understanding of it in the academic field of Intercultural Communication)
2.	Functions of culture (Same as above)
3.	Elements of culture (Same as above)
4.	Cultural studies based on Psychology and Anthropology
<i>D. Advanced Quiz (20 points)</i>	
1.	Was your description of culture in question A.1 based on Psychology or

Anthropology?

After collecting opinions about the program and making some revision, in the second step, 1 Japanese facilitator and 2 American lecturers who specialize in intercultural communication also tried the program in July 2010. The researcher explained carefully the purpose of this experiment and guided how to use the program to the Japanese facilitator, American lecturers and people from Z City International Association in Japan, while students at X University tried the program without any guidance. The students were majoring in Engineering and had never experienced IT before.

After going through the above program, the respondents were asked the following questions:

Questionnaire for the respondents:

1. Have you ever been abroad?
2. If your answer was yes in question 1, please describe your experience concerning cultural differences.
3. Did you notice a diversity of cultures and values by studying this program?
4. If your answer was yes in question 2, in which quiz did you notice it?
5. Which quiz did you think was interesting?
6. Please describe your impressions of this program.
7. Please describe cultures, custom, countries you are interested in.
8. Please describe your ideas to make the program more interesting and effective.

Questions 1 and 2 are prepared to collect information concerning knowledge of culture which is based on the respondents' experience. Questions 3 to 8 are asking about the respondents' opinions and effects of this program.

4.2. Analysis

In the first step, 54.6% of the respondents who had never been abroad and 70.6% of all the respondents found the IT program using ICT is useful to promote intercultural understanding. As for the respondents of the second step, all of them agreed that they became aware of some cultural diversity due to the program.

Some students noted that "all of the contents of this program were quite new and interesting for me to read", and "It was an interesting program, since I'd never thought about cultural issues and never seen this type of program before." Some of them mentioned they want to know more about computer programmers around the world, while others answered they were interested in different customs and religions in the world. There is a comment which shows an interest in a specific

culture such as “I want to know more about China and Korea, since we are close but still have many differences”. Their opinions show that there might be a possibility that indifference towards different cultures might be reduced through the program. In addition, one student said “I want to know about Japanese culture more”.

None of the student respondents of this program had ever studied cultural issues before, so their interest in the program shows that these quizzes were to a degree effective in teaching cultural studies to them. In addition, these opinions indicate that there is a possibility that students who never thought about cultural issues would have further interest in participating in this program.

In addition, there were many opinions which indicate an interest in viewing other respondents' opinions on-line. After finishing the program, the respondents can read other respondents' answers immediately, indicating that an objective of this program using ICT was effective in getting students to learn from each other.

As for the content of the program, many respondents in the first step indicate that “it would be easier for us to start with familiar issues rather than academic cultural studies”. According to this, we arranged put quizzes about common sense first in the second step. Accordingly, all the respondents of the second step answered “the content is easier to answer since it starts with familiar issues”.

Let us now discuss if the aim of this experiment was achieved. The aim of this experiment was to examine 1.) if an online IT program can promote the respondents' interest in intercultural understanding, and 2.) if such a program can help to solve implementing problems of IT shown in section 3.4.

First, the findings indicate that the trial IT program using ICT successfully met the demands in the above. In the first step, students can learn intercultural issues through ICT without the guidance of the researcher. It indicates that the autonomous learning function of this program works well, and it will help to solve the problems of limits of time and lack of teaching professionals.

Secondly, the findings also showed that there is a possibility that students who major in various subjects other than intercultural issues can also have an opportunity to try IT using ICT.

Most of all, it succeeded in promoting the respondents' interest in intercultural understanding regardless of their academic background.

4.3 Further Discussion on Teaching and Learning Methods of IT using ICT

The findings also indicate that more rational studies on teaching and learning, and evaluation methods of IT using ICT, and more experimental research are needed. In the first step, some students showed their interest in cultural differences in their studying area. It indicates that the content of IT should be carefully considered and prepared in accordance with needs of participants.

As for teaching methods, the experiment showed that the program set in ICT removes the need for learning facilitators. Nevertheless, teachers still need to control and monitor students' learning progress. Different from usual teaching style, teacher needs to have more skills for teaching online.

Moreover, evaluation methods should be considered more carefully, as one facilitator mentioned in the questionnaire. The issues of evaluation always made IT difficult to implement in higher education (Kato, 2009).

Lastly, more empirical research based on the above theoretical framework should be implemented in order to make IT program using ICT more effective and meaningful tool in higher education.

5. Conclusion

In this experiment, the respondents learnt intercultural understanding by using the IT program on ICT. The program effectively removed a problem concerning the limits of time and the lack of teaching professionals available for teaching cultural understanding. The questionnaire revealed that sharing other peoples' opinions on-line was quite effective in generating interest about different cultural values in the respondents. The program also helped the participants appreciate the diversity of cultural values. These findings show the advantages of the IT program using ICT.

However, as mentioned in section 4, this experimental program needs more improvement. Theoretical framework, further modifications such as an effective display of explanations, an analysis system, more game elements, a forum to share views and discuss with others, an advanced database system, and more empirical research should be developed to make the program more effective. For further study, the findings from this IT program using ICT will be reviewed carefully to help students improve their intercultural competence in Japan and the rest of the world.

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Running head: ASIAN AMERICAN PARENTAL INVOLVEMENT

Relationship of parenting practices to academic outcomes in Asian American populations

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Abstract

This study examined the process of Asian American parental involvement and its direct and indirect effects on student academic achievement. To uncover directional processes working within this relationship, structural equation modeling (SEM) was conducted using data from a nationally representative sample of 10th grade Asian American students from the Education Longitudinal Study of 2002. Results indicated (1) significant direct effects of parent academic support, communication, participation, and expectation on achievement with the strongest direct effect being expectation; and (2) significant indirect effects of involvement dimensions on achievement via three mediators with academic support and communication being the strongest mediators.

Parental involvement has been a topic of increasing interest in education because of its effects on students' academic performance. Over the past several decades, parental involvement has been positively linked to students' academic achievement (Henderson & Mapp, 2002; Hong & Ho, 2005; Jeynes, 2007; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Researchers and

the education community have come to recognize parental involvement as a multidimensional process that involves many levels and types of parent and child interaction (Fan, 2001; Grolnick & Slowiaczek, 1994; Hoover-Dempsey & Sandler, 1997; Sui-Chu & Willms, 1996; Wong & Hughes, 2006). The term *parental involvement* has evolved into a more inclusive definition that covers educational support at school, at home, and outside of the home (Epstein, 1996; Jeynes, 2007). Parental involvement as a construct refers to parent practices that support children's educational experiences, particularly factors relating to achievement, behaviors, expectations, attitudes, and goals. The multiple dimensions of parent involvement range from direct to indirect forms of parent participation in school-based and home-based activities that influence students' school success (Epstein, 2002; Hong & Ho, 2005).

Researchers and educators have also noted that parental involvement extends beyond school related activities. Parental involvement advocates have suggested that promoting children's success in school includes a wider range of involvement in all aspects of children's lives. Participating in activities such as social events, art events, or religious services provide children with additional educational opportunities (Barbour, Barbour & Scully, 2005). There is evidence to suggest that engaging in a diverse range of activities in addition to school activities facilitate positive educational outcomes (Eccles & Harold, 1996; Grolnick & Slowiaczek, 1994). In addition, parents who are involved in outside-of-school activities are more likely to be involved in school-related activities (Eccles & Harold, 1996).

Researchers have suggested that family plays an important and influential role in the educational experiences of Asian American students (Anguiano, 2004; Asakawa, 2001; Hardway & Fuligni, 2006; Park & Bauer, 2002). Studies on parenting style indicate that parents believe it is their responsibility to support children's educational activities; this involvement contributes to children's academic achievement (Chao, 1996). Successful parenting, then, means providing academic support and resources for their children (Chao, 1996, Chao & Tseng, 2002). Parental involvement has been found to be a significant factor in the completion of high school for Asian American students compared to other groups (Anguiano, 2004). It was also suggested that the structure of involvement might be different for Asian American families. For example, examination into the degree of parental involvement reveals home practices that are not typical of the traditional direct engagement in school-related activities (Kim, 2002).

The positive impact of parental involvement has been well documented in the literature. However, the process of parental involvement is still unclear. Studies have suggested that different parental involvement dimensions may function as mediators in the relationship between parental involvement and academic achievement (Fan & Chen, 2001; Grolnick & Slowiaczek, 1994).

While some factors may have direct effects on academic achievement, other factors may have indirect effects. This is called mediating effects and involves mediating factors. Mediating factors are possible mechanisms through which causal effects of one factor influences another factor (Kline, 2005). Conceptually, the process by which parental involvement affects academic achievement may involve mediating factors. For example, Hong and Ho (2005) found that parent participation in school activities had direct effects on achievement while aspiration and communication had both direct and indirect effects on academic performance. This suggests that aspiration and communication may be significant mediating factors in the process from

involvement to achievement. In their study of factors affecting student achievement trajectories, Sy and Schulenberg (2005) indicated that expectations influenced home environment and parent school participation. In turn, these two parental involvement factors were significant predictors of achievement. Chao (1996, 2002) suggested that parent practices such as academic support are directly related to student success in school. Parents of high achieving students also provided or participated in more activities that are educational for their children suggesting a direct influence of participation on achievement (Sijuwade, 2003). Hoover-Dempsey and Sandler (1995) proposed in their causal model of parental involvement that through academic support or participating in educational activities, parents are passing onto their children values about the importance of school. In addition, these interactions allow opportunities to communicate and practice successful school behaviors and attitudes, which may be beneficial for children's cognitive, intellectual, and psychological development. Given the uncertainty of the causal process, examining the structural process of parental involvement will contribute to the understanding of its influence on academic achievement, particularly for Asian American families.

The purpose of this study is to explore the process of parental involvement by examining the relationship between family involvement factors and students' academic performance. Using structural equation modeling (SEM) to analyze data from the Educational Longitudinal Study (ELS: 2002), this study addresses the following questions:

- 1) Which dimensions of parental involvement (i.e., parent academic support, parent-child communication, parent-child participation in school and out-of-school activities, educational expectation) have significant direct effects on Asian American student academic achievement?
- 2) What are the processes through which parental involvement factors directly influence student achievement; i.e., specifically, do parent academic support, parent-child communication, parent-child participation in school and out-of-school activities serve as important mediators between parental involvement dimensions and student's achievement in Asian American families?

Generally, researchers have focused more on direct effects of parental involvement on academic achievement. This study views parental involvement as a more complex process and considers direct and indirect operations of parent-child interactions based on findings that mediating factors may be involved in the effect of parental involvement on academic achievement. It is expected that parental involvement factors will be able to explain student academic achievement. It is also expected that parental involvement factors within the home have both direct and indirect relationships to student academic achievement.

Method

Data Source

This study analyzed data from the Education Longitudinal Study of 2002 (ELS: 2002). ELS: 2002 is a longitudinal study from the National Center for Education Statistics of the U.S. Department of Education. The purpose of ELS: 2002 is to track students' educational

experiences from high school to postsecondary education and/or employment sector using a longitudinal and multi-level approach. In its base year (2002), data collection began with a nationally representative sample of approximately 17,000 sophomore level students from 752 public and private schools across the United States.

Sample

A sample of 1,645 Asian American students was extracted for analysis. That is, this study focused on experiences and academic performance of this student group at one time point (10th grade). This sample included 724 (49.4%) females and 741 (50.6%) males. Analysis examined tenth grade data from students and their parents.

Variables

The variables selected for this study included items relating to home-based parental involvement practices and student academic achievement. There were four parental involvement factors and one academic achievement factor created for analysis. The four factors representing parental involvement were: *Academic Support (AS)*, *Communication (C)*, *Expectation (E)* and *Parent-Child Participation (PC)*. Each factor included items that have been identified as relevant to parental involvement processes (Eccles & Harold, 1996; Epstein, 2002; Hong & Ho, 2005; Hoover & Dempsey, 2005; Jeynes, 2007; Sy & Schulenberg, 2005)

The outcome variable measuring *Academic Achievement* included reading and math scores. Both 10th grade reading and math scores were measured using item response theory (IRT) scale scores.

Statistical Analysis

This study used structural equation modeling (SEM) to examine the relationship between family involvement and academic performance and uncover directional processes working within this relationship. The purpose of SEM is to explain relationships between variables in the most parsimonious and meaningful way possible. Through SEM analyses, it is possible to estimate a measurement model, identify relationships for measured and constructed factors, and identify structural relationships among factors. Analysis involved two steps within the SEM procedure: (1) factor analysis, which includes exploratory factor analysis, confirmatory factor analysis, and (2) overall structural model evaluation.

Results

The first objective of this study was to assess the adequacy of measurement models for each factor using factor analysis (FA) procedures. The first step was to determine the number of factors to include in the model through exploratory factor analysis. Based on the scree plot and eigen value greater than 1 criterion, three to four factors were suggested. After conducting separate exploratory factor analyses for the three-factor model and four-factor model, the four-factor model was substantively more meaningful. Therefore, the final selected model included four family involvement factors.

Finally, analysis of the structural relationship of the three proposed models yielded varying degrees of good fit. In comparing the models based on goodness of fit indices (Hu & Bentler, 1999), results indicated that all models had NNFI and CFI values well above .95, which

equals good fit. RMSEA value for the hypothesized model had best fit at .051, followed by alternative model 1 with .053. Based on comparison of all three fit indices, it was determined that the hypothesized model best represented the relationship between family involvement factors and academic performance.

The second and third objectives were to evaluate direct relationships between family involvement factors and academic achievement and whether the same factors function as mediators. Direct paths from each of the four factors to academic achievement yielded medium effects, which represents meaningful effects. Among these direct relationships, the highest relationship was from *Expectation to Academic Achievement* (.303). The direct effect of *Academic Support on Academic Achievement* was significant but in a negative direction, that is, higher academic support may be related to lower academic achievement. In other words, children who are not doing well academically have parents who display more academic support practices. All paths were significant except for *Parent-child Participation to Communication*. The largest path coefficient was from *Academic Support to Communication* (.870), followed by the path from *Expectation to Academic Support* (.462), indicating that the academic support dimension of family involvement influences the level of parent and child communication and indirectly affects academic achievement. *Academic support* and *Communication* may also function as mediators for *Expectation*. *Parent-child Participation to Communication* had the smallest effect and was not significant. However, the direct path from *Parent-child Participation to Academic Achievement* showed relatively medium effects. Based on the structural model, *Academic Support* and *Communication* were important mediators.

Discussion

The connection between parental involvement and academic performance is an area that has captured the attention of educators. What counts as involvement has expanded beyond attending school related activities to factors that occur within the home environment. This study was an attempt to understand the process of Asian American parental involvement practices within the home as it relates to academic outcomes. The hypothesis was that parental involvement factors would be related to student academic achievement and this relationship would have direct and indirect effects.

Results indicated that the four-factor structure of parental involvement was able to explain student academic achievement. Measured items representing each of the parental involvement factors (*Academic Support, Communication, Expectation, and Parent-child Participation*) were good indicators of their respective construct. The findings also suggested that the hypothesized model was a good representation of what occurs in Asian American parental involvement processes. Direct effects from *Academic Support, Communication, Expectation, and Parent-child Participation* were all significant for student academic achievement. Parental expectation as a direct influence was the strongest predictor of achievement. This was consistent with previous studies linking expectation with student success (Fan & Chen, 2001; Hong & Ho, 2005; Jeynes, 2007). Similar to other studies, expectation was also able to predict other home involvement practices (Sy & Schulenberg, 2005). Within expectations, there is the underlying message that parents convey to their children about the

value of education. Children's understanding of these values means that they also understand and adopt successful behaviors and attitudes that may contribute to success.

There was a negative direct effect between academic support and academic achievement, meaning higher parental academic support was related to lower student achievement. It would seem that family involvement in this case would not be beneficial for students. However, one possible explanation for this finding is that parents are more involved when their children are not doing well in school. They may participate more in direct instruction such as helping with homework when they see there is a need for assistance. Therefore, the negative relationship may actually represent positive family involvement.

This study also found that parental involvement factors may have direct and indirect relationships to academic achievement. Examination of possible mediating effects showed that academic support was the strongest predictor of communication, which then had a significant effect on academic achievement. It is reasonable to suggest that parents who engage in academic support practices also communicate with their children by discussing academic and personal issues. In addition, academic support practices may also function as opportunities for parents to convey educational expectations and that could influence parents and child communication. Another notable structural path was from expectation to academic support. That is, parent expectations predicted their participation in academic support practices. Expectation factored into the degree of perceived educational support from parents. It is possible to consider that if there is an expectation that students will achieve academic success, families will do whatever is necessary to help students reach that goal. For example, higher expectation would mean higher academic support (e.g. helping with homework and projects). The significant path from expectation to parent-child participation also adds evidence to the relationship between expectation and involvement practices. Although the effect size was small, the significance of the path as well as its subsequent significance on academic achievement represents parent engagement in a variety of activities to enhance student achievement. In looking at Asian American parenting and high expectation, children's academic success was associated with high involvement because parents believe it is their responsibility to provide children with many types of educational support, which will contribute to academic success (Chao 1996, 2002). This participation and interest in the daily lives and activities of children serves as positive influences on their success in school (Eccles & Harold, 1996; Grolnick & Slowiaczek, 1994). Overall, academic support and communications were important mediators in the family involvement process on academic achievement.

It is important for the education community to recognize parental involvement as a resource for students. The presence of increased diversity in schools means that students' needs are also diversifying. It is crucial that factors impacting academic achievement be recognized and fully explored. Understanding parental involvement processes of students from diverse backgrounds will help educators create more effective home-school connections. Specifically, in working with Asian American families, educators may emphasize the beneficial role of home environment and practices. Families and school can then work together to promote and strengthen home involvement strategies. Research that expands the understanding of the structure and function of family involvement will ultimately help educators improve the quality

of students' academic experience. Therefore, continuing efforts will be made towards reaching the goal of providing students with an optimal learning experience.



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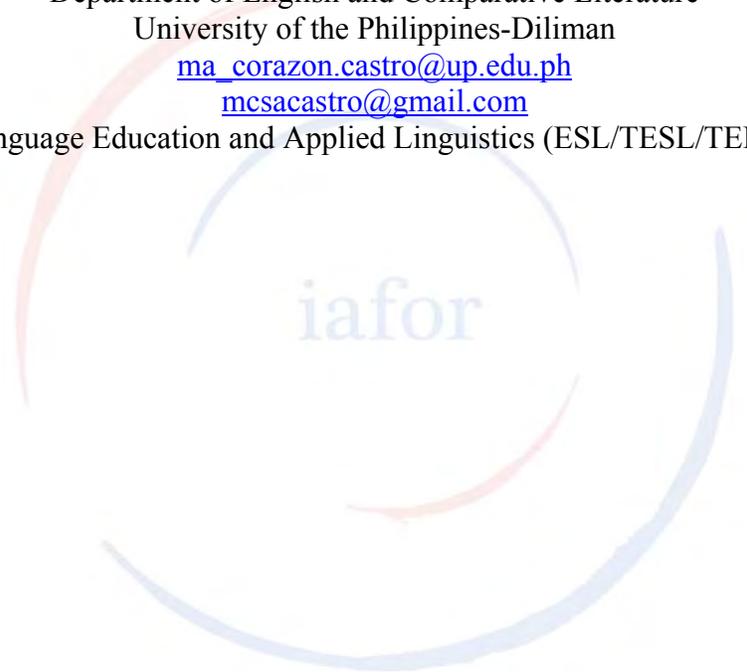
TEACHING ENGLISH THROUGH LOCAL AND FOREIGN LITERATURES

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Language Education and Applied Linguistics (ESL/TESL/TEFL)

The logo for the International Association for Applied Linguistics (iafor) is centered on the page. It features the lowercase letters 'iafor' in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of several overlapping, semi-transparent arcs in shades of red, orange, and blue, creating a dynamic, swirling effect around the central text.

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TEACHING ENGLISH THROUGH LOCAL AND FOREIGN LITERATURES

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Literature has many genres but for this paper, the term *literature* is qualified to mean the narrative form—that which tells a story. Storytelling is said to be the oldest form of teaching. Great teachers like Jesus Christ, Plato, and Confucius used stories to connect to their students/followers. In the ESL/EFL classroom, stories provide the foundation for the acquisition of language and function as a vehicle for language output. This paper will examine the reasons for using stories in language teaching; evaluate the kinds of stories that are suitable to the ESL/EFL students; and present strategies that can be adopted/adapted to suit different levels.

Why use stories in the classroom?

1. *To increase motivation.* Everyone enjoys listening to a story—whether it is the teacher’s personal anecdote or the students’ report on some strange or interesting thing that happened to them. Stories bring real communication into the classroom and provide an authentic reason for listening. In dealing with stories, learners experience the language of personal communication rather than the usual teacherese (register of the teacher) of the EFL classroom. Stories stimulate discussions and spontaneous natural responses. The sharing of stories gives the learners the chance to engage in interactive spoken language. In discussing stories, the teacher may ask students how they feel about the actions/motivations of characters; she may even ask them to provide beginnings or endings of stories. Doing such activities encourages the students to engage in collaborative discussions that can stimulate interest, perception, and imagination.

Stories help lower student anxiety. Theorists concerned with language teaching have emphasized the role of affective factor in foreign language teaching. Krashen, Burt and Dulay highlighted the role that reduced anxiety plays in the classroom. The naturalness and spontaneity of sharing stories decreases negative attitudes toward the difficulty of formal learning.

2. *To provide a meaningful context for decoding and processing language and to encourage students to be creative in their use of language.* As parents, we have always told stories to our children both to entertain them and to develop their critical thinking. It is believed that children who are not exposed to stories find it difficult to listen and understand for their power of imagination and their experiences are often too limited. Discussions on certain aspects of a story can polish the learners’ ability to express and defend ideas. In storytelling, learners listen to ideas, give their own and in the process develop new ones by listening to others. Through interactions, some vague impressions are foregrounded and sorted out.

Since there is less pressure felt during storytelling time, the students contribute more freely and respond more meaningfully.

Stories encourages learners to be creative in their use of language. One can do a lot of things with stories. For instance, teachers may ask students do story theater. Teachers simply give the students the plot and the students have the freedom to create their own dialogue, the names of characters, etc. This activity is often more acceptable to learners than asking them to repeat the story after the teacher for it allows them to focus on whole messages rather than word-by-word recitation.

3. *To reinforce language structure or vocabulary.* In presenting a story, we may focus on its general meaning but the story itself may be used as a vehicle for introducing new grammar structures and vocabulary. In a story, new words may occur in context making it easier for students to recall them. The learners may not know some of the words in the text but constantly exposing them to stories will help them develop confidence in getting meaning through contextual clues. The focus will not be on isolated words but on associative background.
4. *To develop the skill of predicting and getting the meaning of words from context.* Using stories in the classroom teaches the students to predict. Predicting involves a general knowledge of the world and the knowledge of the language system coming in contact to facilitate comprehension. Such activity encourages the students to work out meaning from context.

In storytelling, the teacher need not limit her questions to comprehension questions. She can ask prediction questions, opinion questions and experience questions. Prediction questions allow the students to guess about the plot of the story; opinion questions encourages them to express their own beliefs about the actions, characters and events related to the story; experience questions give the students the chance to broaden everyone's comprehension of some aspects of the story. Since there are no right or wrong answers with these types of questions, the students are more likely to participate and to be genuinely interested in listening to what others have to say. At the same time, the teacher is able to maintain the students' interest.

5. *To introduce a cultural context.* Traditional stories of other countries may illustrate differences but they can also indicate some similarities. Through stories, the students may experience unity/oneness with the various cultures found in an EFL class as they gain awareness of motives and patterns of human behaviour. Some motifs found in one culture may also be reflected in other cultures. Some values in one culture can also be reflected in the mind/psyche of another.
6. *To encourage listening.* Speaking entails listening and stories can be a rich source for listening practice. Listening in a foreign language is NOT easy but if done in the context of

storytelling, it becomes exciting, entertaining and enjoyable. According to Brewster (1991), students of learners' comprehension skill show that many aspects of the listening skill are mastered in contexts where social interactive skills are highlighted — a context that can very well describe a storytelling session.

7. *To encourage writing.* Stories may be used as take-off points for writing activities. For instance, the teacher may ask the students to complete stories, innovate/modernize fairytales, etc. Students are encouraged to develop a mastery of words to be able to express their stories in an interesting and captivating manner. Initially, students may use simple words but as they become more “at home” with the language, they may start using more vivid and specific diction.

Some points to consider when using stories in class

1. How are stories chosen?

- a. Choose stories appropriate to the learners. Stories should match the age and language level of the students. Fairytales, traditional stories which blend fantasy and reality and use repetitive language may be used with beginners. For the higher levels, the classics (modified or otherwise) may already be introduced.
- b. Choose stories with a simple structure. Look for a single, well defined theme; well developed plot; conflict resolution and interesting subject matter. Avoid stories with long explanations/descriptions, subplots or any device that breaks the flow of the story.
- c. Choose stories with positive values. In a classroom, the students not only learn the subject matter. More importantly, they should learn values from the teachers and their classmates and the activities that they do in the classroom. Stories must deal with the more positive aspects of human nature and universal themes. Stories must also be carefully chosen in terms of ideas and context presented especially if students come from different cultural backgrounds. Caution must be observed when stories have references to race, religion, or ideology. Learners will often fall back on previous conceptual knowledge and unfamiliar themes and contexts may present some problems in comprehension.

2. What kind of follow-up activities may be used?

- a. Ask questions — whether they are comprehension, prediction, opinion or experience questions.

- b. Have exercises in phonetics, morphology, syntax, semantics, etc. such as vocabulary exercises, sentence formation and generation, extracting meanings from context.
 - c. Do listening activities such as listening to poetry reading, listening to the oral reading of the story by an invited reader or by any member of the class.
 - d. Do oral activities such as group discussions, and choral interpretation.
 - e. Do written activities such as free and controlled compositions.
 - f. Do visual activities such as visual interpretations of the stories in the form of photography, painting, sculpture, etc.
 - g. Do creative drama activities such as student theater, puppet show, radio show.
3. *What other kinds of stories are suitable for use?* Aside from stories from literature, the teacher may also use:
- a. Personal experiences that are teacher or student generated
 - b. Newspaper reports
 - c. Stories developed from pictures/headlines/music
 - d. Any published selection of interesting short stories which can be adapted for different age groups and levels
 - e. Incomplete stories for which the students provide a beginning or an ending

How can we use literature to develop language skills?

Let me now show how the use of foreign or local literature can reinforce language skills. For the first illustration, the poem *Jabberwocky*, a nonsense verse written by Lewis Carroll is used. This piece can be used to target three levels of language—syntax, semantics, and discourse. The exercises that follow are meant for English 1 students (ESL) in my university. English 1 is Basic College English.

JABBERWOCKY

Lewis Carroll

(from *Through the Looking-Glass and What Alice Found There*, 1872)

’Twas **brillig**, and the slithy toves
 Did **gyre** and gimble in the **wabe**:
 All **mimsy** were the borogoves,
 And the mome **raths** outgrabe.

"Beware the **Jabberwock**, my son!
 The jaws that bite, the claws that catch!
 Beware the Jubjub bird, and shun
 The **frumious Bandersnatch**!"

He took his **vorpal** sword in hand:
 Long time the **manxome** foe he sought --
 So rested he by the Tumtum tree,
 And stood awhile in thought.

And, as in uffish thought he stood,
 The Jabberwock, with eyes of flame,
 Came **whiffling** through the **tulgey** wood,
 And burred as it came!

One, two! One, two! And through and through
 The vorpal blade went snicker-snack!
 He left it dead, and with its head
 He went **galumphing** back.

"And, has thou slain the **Jabberwock**?
 Come to my arms, my **beamish** boy!
 O frabjous day! Callooh! Callay!"
 He **chortled** in his joy.

`Twas brillig, and the slithy **toves**
 Did gyre and gimble in the wabe:
 All mimsy were the borogoves,
 And the **mome** raths outgrabe.

The fact that the poem is made up of nonsense verse makes it difficult for students to comprehend and appreciate the literary piece. Heightening the students' awareness of the structures would, however, assist them in understanding the poem. Initially, the students are asked to determine the word classes of the words in bold. As the students identify the word categories, they also analyze contextual clues to support their answers. For instance, *wabe* is labeled a noun and the category is affirmed by the preceding article *the*. The students are able to make generalizations regarding slots that can be filled by specific word categories. There are instances when a nonsense word may belong to two word categories and students are forced to look for more contextual clues to substantiate their answer. *Raths* may either be a plural noun (due to the -s ending) or a verb that is 3rd person singular present tense. The students need to take into account the entirety of the verse. The presence of the verbs *was* and *were* in the first stanza establishes the tense of the narrative which is in the past; hence, *raths* must have been a plural noun. The students are able to review various affixes that can be used to determine nouns, verbs, adjectives, and adverbs. Without them knowing it, they do morphological analysis and categorical selection that emphasize structural dependencies and hierarchies.

From syntax, the exercises can move to semantics. The students are asked to hypothesize on the possible meanings of the words in bold. In this stage, the linguistic environment plays a crucial role once again. For instance, the students may hypothesize that *vorpal* means magical and may support this observation by saying that given a hero without super powers, only a magical sword can slay a

monster as hideous and powerful as the Jabberwock. We see students actually processing word associations, collocation, and semantic restrictions.

Part of the exercises is the substitution of the nonsense words with existing words (those that are currently used) in English. Again, this is a test in vocabulary and word association. At the end of the exercise, the learners realize that words do not just combine freely with other words. There are some constraints that are due to the syntactic system of the target language. For example, the articles always precede nouns in NPs (noun phrase) and not the other way around. Other constraints are semantic in nature. Students observe semantic compatibilities between words having a particular syntactic form and function. *Magical, mystical, mighty* are possible substitutes for *vorpal* but students prefer *magical and mythical* because of the identical syntactic structure (-al ending indicating adjective). On the other hand, *magical, mythical, frugal, jovial* have similar ending and word category but *jovial* and *frugal* require the semantic feature +animate and therefore not appropriate to describing a sword.

My students enjoy this poem so much that they make their own scripts and actually act out *Jabberwocky* at the end of the term as part of their performance test. Basically all language skills are accounted for by the exercises in *Jabberwocky*—from form to function.

Another form of literature that I use in my class is *Noli Me Tangere*, a novel written by our national hero Dr. Jose Rizal during the 19th century. This novel is a required reading in High School so by the time the students are enrolled in English 1, they are already familiar with the general plot of the novel.

Noli Me Tangere
By Dr. Jose Rizal

Sample Exercise: Subordination and Coordination

Direction: Combine each of the following groups of short sentences into one effective sentence. Express the most important idea in the main clause, and put lesser ideas in subordinated clauses, phrases or words. Use coordination only for ideas of equal importance.

1. Crisostomo Ibarra is the son of a wealthy Creole landlord. He is betrothed to Maria Clara. She is the only daughter of Capitan Tiago de los Santos.
2. He has just returned from abroad. He learns that his father died in jail. His father was a free thinker. He stopped going to confession. The parish priest denied him a Christian burial. The parish priest of their hometown of San Diego was Padre Damaso.
3. Ibarra is first overcome with outrage. He is dedicated to uplift his people through education. He puts aside his plans for revenge. He wants to secure official approval. The approval is for the establishment of a town school.....

In this exercise (there are about 10 numbers), the students are presented with basic sentences and they are supposed to connect them using appropriate connectors generating only one grammatically correct sentence per number. This exercise targets cohesion and coherence. Connecting sentences requires the students to be aware of appropriate logical connectors for smooth transition of ideas. This exercise helps students determine which connectors exhibit relationships in addition, negation, comparison, contrast, cause and effect, and so on. Brevity and conciseness, two important features of writing, are also emphasized as students reduce structures via rewording and rearranging. At the end of the exercise, the students are asked to put together the 10 sentences they constructed. The result is the novel in capsule form. The product then becomes a take-off point for the discussion of other types of academic writing –one of which is the précis or the summary.

For my foreign students in the Intensive English Program (EFL class), I have tried an activity called *Pattern Stories* which I adapted from a Materials Course I took in England. This activity is appropriate to intermediate EFL learners. It is based on students intervening in a reading of the text to suggest what follows. The task is made more natural by a specialized kind of text; usually traditional stories which have repetitive structures are used in this activity. The prediction process which is a crucial part of the activity involves the class in a collective kind of story-telling. The following is an example based on an African folktale:

African Folktale

A spirit went to his father and said:

“Father, I want to be alive.”

“That is complicated,” his father told him.

“To be alive you must first think, next you must remember, then you must feel, then smell, after that you must see, next hear, and finally when you can do all these things, you are alive.”

“How can I do this?” the spirit asked

“**Go and walk in the world,**” said the father, “and get what you can where you can.”

The spirit followed a path through the forest and met a young man. The young man sat under the tree and frowned.

“Man,” said the spirit, “please help me, I want to think.”

“To think you need a mind.” Said the man.

“Can I have your mind?” asked the spirit.

“Certainly,” said the man and after he gave away his mind, he looked happy and young.

“Oh father, help me,” the spirit cried in fear.

“**Walk on through the world,**” his father said, “he who thinks also fears.”

The spirit came to the village and found an old man.

“Man,” said the spirit, “please help me, I want to remember.”

“To remember you need a memory,” said the man.

“Can I have yours?” asked the spirit.

“Certainly,” said the man and after he gave away his memory he looked happy.

The spirit looked at the path ahead but could not remember which way to go.

“Oh Father help me,” he cried.

“**Walk on through the world,**” his father said, “he who remembers also forgets.”

(the narrative continues with each stanza ending in the same line and students say this part in chorus)

Conclusion

Too often, it is not clear why stories are discussed in class. Are the stories used to find particular information on grammar or vocabulary? Are they used to test comprehension/understanding of the students of a general idea? Whether the stories are used to find information on grammar, test comprehension, or practice fluency, the teacher must be able to relate the activity to the needs of the learners, the general objectives of the lesson, and the integration of the language skills.

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**SOME TECHNIQUES AND RESOURCES IN TEACHING ENGLISH
TO STUDENTS OF PUBLIC SCHOOLS
IN KAWASAKI CITY**

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Education and Applied Linguistics (ESL/TESL/TEFL)

The logo for the International Association for Applied Linguistics (iafor) is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by two large, overlapping circular arcs. The upper arc is light blue and the lower arc is light red, both appearing as thin, glowing lines.

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It was in the school year 2005 that I came across an offer to teach in the elementary school. At first I was hesitant because I knew that teaching elementary would mean singing children's songs which I was not yet ready to do.

Prior to my board of education experience, I taught English conversation to adults and review class in the school that my son attended. My classroom experience was limited to invitations to do lectures and I never had the chance to teach a class of elementary students. Needless to say, the BOE experience was something novel to me. New to the field, I would like to share my experiences and how I finally got around the various challenges I encountered in my 5 years of teaching in Kawasaki City as an English language teacher.

I believe that in doing this paper, I am able to give new foreign language teachers ideas on what to expect in a public elementary school in Japan. With a more concrete idea about what to expect, I am sure foreign teachers will be more emotionally prepared to teach in the classrooms.

My first teaching experience was a big challenge. I did not expect it was a '0' English environment. The children were just too nervous to hear words from a foreign speaker. The first reaction to my simple greetings of "Good morning" was a surprise look on their faces. Everybody turned quiet and waited what will be next. Simplifying the word 'Good morning' to 'HELLO' drew a better reaction

and some smiles were seen and a shy response of HELLO was heard whispered in the classroom.

Given such teaching and learning context, a foreign teacher wanting to teach in Japan must be ready to face some challenges which albeit, may still cause some apprehensions on the part of teacher.

It is important to first study the school prepared curriculum since there is no available official curriculum. If the school does not have one, the teacher must be ready to present one or offer one. The foreign teacher must communicate well with the Japanese teacher in charge. My knowledge of Japanese helped me develop not only rapport but more importantly professional relationship with the faculty. Most of the time, they can speak and understand English to a limited degree. My knowledge of the language helped me place my position within the faculty and established a good professional relationship.

Preparing simple lesson outlines for the Japanese teachers can help them feel at ease. Knowing the outline gives them some degree of confidence in dealing with the lessons. Keeping simple means starting lessons with words that the students can easily follow and presenting situations that are appropriate for the students' age and culture.

Weekend gathering with family and friends is not common. So it is best to present some greeting words in situations where they often see themselves in. For example, in the playground or supermarket, where often short conversations are made to politely acknowledge the presence of somebody they know.

In the early stage of learning a new language, students are unsteady in articulating words. They feel intimidated, and afraid of making a mistake. In Japanese society, making a mistake can be embarrassing. Instead of having surprise quizzes or recitations, the teacher must think of an option that will allow the students to practice the Target Language and the teacher to monitor the progress of the students' understanding of the language.

Children by nature are easily distracted, and getting their attention is a challenge and keeping them interested in the lesson can test a teacher's creativity.

How does the foreign teacher get the students' interest plays a significant part in my lesson preparation. For example, presenting an activity that incorporates the modern Japanese culture of exchanging calling cards on first meetings. Using simple greetings, class teachers (the Japanese teacher and the foreign teacher) can do a role playing to show how they can use the short greeting to start the lesson NICE TO MEET YOU which is a lesson in introduction.

Presenting lessons that will allow children to increase their vocabulary and help in their communication is a challenge. With no official textbook to follow, it is important to note the continuity of each lesson to make sure that a review of the previous lesson is always incorporated into the present lesson.

On first meetings I try to test the children's English comprehension by doing a short self introduction that includes four important points students maybe interested in.

For example; FT: Good morning! My name is Maria

I am from the Philippines

I live in Yokohama, Tsurumi

I have been here in Japan for more than (20) years.

Name

Country of origin

Present residential location

Number of years in Japan

Most students know when they hear the words MY NAME IS _____ . They can also pick up the word PHILIPPINES, and confidently guess my country of origin. The next will be YOKOHAMA TSURUMI which is of course very easy because they are familiar with these Japanese sounding names. Upon hearing the Japanese sounding names they are confident that is where I live. The last one can be a source of laughter for a couple of minutes as they joyfully guess my age.

I get their attention and encourage them to ask me questions about myself and my country. During this time I get to know my students, the class and their character. Children love to ask about my likes and dislikes. At this point, I form in my head my next lesson for them. Activities can start and we can continue to introduce new words/nouns so they can ask the same questions they asked me during the first meetings in English. I simplify my English answers in a way they can easily understand or repeat the same for them to practice with.

Example: Do you like _____? What ____ do you like?

I often reply in a very simple ‘*Yes, I do*’ or ‘*No, I don’t*’ and often add ‘*I like _____*’ . If the Japanese teacher gamely participates, the class becomes more interactive and affective filter is lowered. When the Japanese teacher is popular among the students, the students are motivated to interact and participate freely in this exercise. It is also good to show that anyone can make a mistake and I often do this to assure the children that it is ‘OK’ to commit mistake, and that they will not be punished for making one. What is important is for them to practice the Target Language orally.

When words are difficult to pronounce and to remember, chants can be incorporated so they can use the rhythm to say the words. Repetition is important and as they do this routine they get to correct themselves without embarrassment. Singing songs and doing action songs are effective with the younger learners.

Example of chants to the beat of Queens’ “WE WILL ROCK YOU”

Ss: What do you want? What do you want?

FT: (vocabulary) apple

Ss: repeats the word (vocabulary) apple

Depending on the class, I sometimes get lucky to find two or more students to gamely participate and try the conversation drill. I encourage them by giving the students a nice seal or sticker they can keep to show their parents.

Problems in pronunciation and word comprehension may also be supplemented by using visuals and games. Visuals and games make vocabulary learning fun and interesting if presented with funny pictures or pictures having characters they know. Other games can also be used as I often do to make sure they do not get bored each meeting. I love to introduce new games even when the pictures are the same. I play lot of games and add some short sentences to allow them to form their own words. An example of these games is the “DRAGON BALL.” In this game you will need a very nice danceable music that the children can enjoy and a ball or any object they can pass around while the music is playing. When the music stops I ask the whole class to ask questions in the Target Language and the person holding dragon ball/object will answer. The short reply is easy for a student to do alone, but asking the question can cause too much stress for a student so I prefer to ask the whole class ask questions in the Target Language as a practice for them to speak.

The PEEK A BOO is another game that helps in introducing vocabulary and a chance for the students to use the Target Language either in a question or in a sentence.

In this game, the material is an A4 size box with window like holes. I put numbers on the windows or letters of the alphabet that is often miss pronounced like letters L, M, R, D, T, C, Z, V. A picture that needs to be identified is placed and students will ask the teacher to open a window so they can take a peak of the picture. The students say OPEN PLEASE. After a few windows are opened, students get to identify the picture in the target language. They say IT'S A/AN _____

Another game is WHO AM I? After introducing colors and clothes names, I prepare some pictures of a boy and a girl wearing clothes we have learned. The target language is DO YOU HAVE (color and

the clothes) a yellow cap? Do you have a red T-shirt? Do you have green socks? Until they can guess who among the pictures is wearing the identified clothes.

Print activities too can be made fun. I learned from my first year of teaching that children love to collect signatures. Perhaps it is due to the fact that in Japan signing is not usual as people stamp *hanko* instead of sign documents. Signatures are done by famous TV personalities. After doing a conversation drill with a classmate, a student gets to collect signatures. Since this game requires them to collect as many signatures as they can in the classroom for a limited time, the game allows them lots of movement. They get to correct each other and this is far better than letting the teachers or adults around them hear their mistakes. During this game, teachers participate and surprisingly even adults enjoy the interaction.

Children also love to play cards. I have also adopted an original card game from Japan, “*KARUTA*”. In the old days this game was played in the royal courts of Japan during the long New Year celebration. A reader shouts some passages the players try to identify this card and throw the card away from the opponent. In my adaptation I would have my vocabulary in card form as pictures. The basic idea of any *karuta* game is to be able to quickly determine which card out of the set of cards is called out and then to grab the card before it is grabbed by an opponent. The class forms five to six groups with each group getting one set of picture cards. I usually ask the students to ask me questions in the target language and my answers are found in the cards for them to get first before their opponents. Of course the player with the most card wins and can either get a stamp or seal from me. The more cards they get indicate that their vocabulary is improving and can identify objects by listening to my answers.

The elementary class is focused on developing the children’s oral fluency in English. Instructions of formal structures takes secondary role as premium is given to the communicative competence of the students – that is to say, being able to articulate their intended message to the listeners. In general the grammar is not much of a focus, so during their delivery of the target language an article or two maybe missing but that is not given much attention. The focus is more on their speaking in public and their effort to get the message across. This according to some university professors is the extreme opposite of what is being taught in high school or middle school. But then again, encouraging the students to be orally articulate is important to motivate the young students to express

themselves clearly and in a manner that is still in line with the accepted norms in the society.

Knowing and understanding Japanese culture is crucial not only in the preparation and presentation of instructional materials but also in establishing good rapport with Japanese teachers from whom ideas and concepts for the instructional materials may be generated.

Communicative language learning is engaging for both the teachers and students. I enjoy the challenge I face each lesson preparation and learn a lot to improve a lesson that does not work well in some classes. Some children are also excited to try the target language. I often hear them use the target language during their own playtime or to surprise their Japanese parents and enjoy the unexpected reaction of taking up the challenge to answer their child the best they can.

Communicative language learning is effective if taught carefully. Functional language that can be applied in the childrens' daily activity. It is also important not to forget that competence in communicative language does not erase the need for training in grammatical structures. Elementary English language should also be a foundation towards a higher level of learning. When young learners overcome their fear of learning English it allows them to aggressively seek opportunities to better their knowledge.

The support given by the board of education, the schools faculty and the officers of the PTA(parent, teacher association) who tirelessly disseminate information to all parents in connection to the English language curriculum, bring about positive results to better the English language program for the Elementary school level.

I wrote this paper to share with those teachers in English wishing to teach in a country where English is not spoken first hand experiences and my encounters with situations where I thought giving up was the easy way out. Positively changing my attitude, and putting my energy into developing ways to encourage participation to the lessons, I realized that it was the greatest challenge ever in my professional career. Keeping up with the children and their present interest can be an exercise that keeps me young and happy with each day.

PERCEPTIONS OF STAKEHOLDERS ON POLYTECHNIC SOFT SKILLS

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Abstract

Malaysian institutions of higher learning have been urged to produce graduates with skills that are highly regarded by employers and who are able to contribute to the country's prosperity and social capital. This challenge has been taken by polytechnics via the introduction of the Industrial Training Soft Skills (ITSS) module to their students. This paper will briefly provide a study of employers' feedback on the module. It was conducted using a survey questionnaire measuring employers' ratings of the importance of eight soft skills elements and the perceived level of students' competencies in them. The eight soft skills considered most important by employers are: time management; team work; communication; learning and interpersonal; problem solving; decision making; leadership and report writing. From the comparisons made, students are yet to meet the expectation of employers, particularly in decision making, time management, leadership and problem solving skills. By making soft skills more explicit to employers, the study can assist in identifying the nature of the gap that exists between the relevant stakeholders and determine the appropriate skills that need to be emphasised in the future. The findings are useful as reflective tools on ITSS curriculum design and delivery for Malaysian polytechnic education in preparation of students for industrial training and employment.

Introduction

The challenges currently faced by Malaysia are the development of a competent and effective workforce. Malaysia needs a workforce which is highly skilled and ready to face global competition. Hence, future employees should be able to work flexibly and intelligently across business contexts, responsive to economic, social, cultural, technical and environmental changes. This view is shared by institutions of higher learning, employers, and professional bodies. They agree that there is a need to develop a workforce that is highly skilled and ready to face the challenges of increased global competition.

However, to be able to work effectively in the workplace means more than just having the necessary technical skills. It requires the ability to apply a broad range of other skills learned in many contexts and through a range of experiences. This indicates that future employees should be equipped with both technical and non-technical skills. The non-technical skills are always referred to as soft or generic skills. Recognizing this need, Malaysian institutions of higher learning have been urged to produce graduates with skills that are highly regarded by employers and who are able to contribute to the country's prosperity and social capital. This challenge has been taken by polytechnics via the introduction of the Industrial Training Soft Skills (ITSS) module to their students.

This paper attempts to empirically explore the generic skills introduced in polytechnic education through the ITSS module. The study analysed employers' perceptions towards the importance and generic competencies of polytechnic industrial training students in the northern region of peninsular Malaysia, comprises the states of Penang, Kedah and Perlis. In addition, problems in defining soft skills in the higher

education context are outlined. This paper then presents and discusses the findings of the study and draws conclusions for education and curriculum development.

What are Soft Skills?

Soft skills are known as key, core, common, people, essential, generic, general or employability skills and so on, depending on contexts and regions. Golding, Marginson and Pascoe (1996, p. 17) for example define soft skills as those common to more than one occupation or field of knowledge. Bennett et al. (1999, p. 76; 2000) defined soft skills as those skills which can support study in any discipline and also skills that have the potential to be transferred to a range of contexts, education and workplace. The Commonwealth of Australia (2002, p. 3) refers to soft skills as employability skills, and defines its as “skills required not only to gain employment, but also to progress within an enterprise so as to achieve one’s potential and contribute successfully to enterprise strategic directions”. The definitions also describe soft skills as not industry specific, but useful in different contexts in the workplace, further study and adult life in general. In summary, soft skills are common to everybody and can be employed in any kind of environment.

The broad scope in soft skills definitions and terminologies has brought vast confusion in describing soft skills particularly between industry and academic. Among the institutions of higher learning themselves there is little uniformity in which skills can be identified as ‘soft’ or ‘generic’ and there is even more uncertainty as to how those skills are defined, as well as whether ‘skills’ is the most appropriate term. Indeed, the definition and understanding of the term “skills” has become more complex with overlapping between skills, qualifications, characteristics and attributes. Soft skills and hard skills also have been seen as a complementary to each other (Coll, Zegwaard, & Hodges, 2002) and cannot be clearly separated. Interestingly, the never ending discussion worldwide about soft skills is on terminologies used in the literature and at certain extent it is found to describe similar situations. Consequently, a different conception in defining and describing soft skills has led to disagreement and misunderstanding amongst stake holders.

In Malaysia, there are also no specific definitions on soft skills and terminology used (Aziz, et al., 2007; Shakir, 2009). However, the terms mostly known amongst Malaysian institutions of higher learning and industry are “soft” and “generic” skills or in Malay language “kemahiran insaniah”. Perhaps it also always closely describe as ethics and attitudes. Aiming to clarify the problem, the Ministry of Higher Education (MoHE) has come out with its own framework, and refers to soft skills as skills that can incorporate all aspects of generic attributes including cognitive elements associated with non-academic skills (Ministry of Higher Education Malaysia, 2006). Though there are no specific soft skills, the majority of these skills are very much related to attributes such as positive values, leadership skills, teamwork, communicative skills and life-long learning. Institutions of higher learning in Malaysia are allowed to adopt, and at the same time develop, their own soft skills elements which may vary from institution to institution or even within the faculties of one institution.

For the context of this study, soft skills have been referred to as skills which cut horizontally across all industries and vertically across all jobs and as a minimum proficiency required to successfully function in practical training or one's career field (adapted from Cotton, 2001) and the term usually used in the Malaysian context, "soft skills" and generic skills will be employed interchangeably.

Why are Soft Skills Needed?

Employers globally and locally insist that they need graduates who are equipped with both soft and hard skills for their future employees. Traditionally, employers looked for hard skills, work experiences or technical background in a particular area when hiring employees. However, this trend has changed gradually since the 90s. Indeed, employers recently have raised concerns that many graduates of tertiary institutions, are not "job-ready" (Maiden and Kerr, 2006 as cited in Fuller & Scott, 2009, p. 1). Employers claim that graduates still lack the soft skills needed in most workplaces (Ford, 2007; Saunders & Zuzel, 2010). Increasingly, employers are demanding skills from graduates which are outside the subject area of their course of study (Yorke, 2006). Employers seek employees with the right attitudes and dispositions toward work or individuals who are motivated, reliable, willing to learn and take responsibility for their own learning (Stasz, 2001). The finding by Workforce.com indicated that 67% of managers would hire an applicant with strong soft skills even if their technical skills were lacking (Kearns, 2001). Research by Branine (2008), found that the majority of organisations expect newly graduated professionals to have good transferable skills rather than excellent academic grades.

In addition, soft skills are seen as vital for success among employers. A study conducted by the Stanford Research Institute and Carnegie Mellon Foundation, involving Fortune 500 chief executive officers, found that 75% of long-term job success depended on people skills, and only 25% on technical knowledge (Hill, 2007). According to a Price Waterhouse-Coopers consultant, "Technical and job-related skills are a must, but they are not sufficient when it comes to progressing up the ladder. It is important to be technically sound, but one should also have the ability to convey the idea to the derogate masses in the simplest possible manner" (Iyer, 2005).

The Malaysian employers prefer graduates with generic skills among their graduate employees. Hence, to be employed graduates need to be highly competent and adaptable in the changing workplace amid stiff competition (Bakar & Hanafi, 2007; Muhamad & Idris, 2005; Quek, 2005). A research carried out by Dr Parmjit Singh of Asia Pacific Institute of Information Technology (APIIT) in 2004, showed that the top three complaints were that graduates have poor communication skills, lack initiative and lack creativity (Hill, 2007). Employers have expressed the view that graduates were often good technically and could produce engineering solutions to technical problems but often had weak non-technical skills and so failed to complete a project successfully" (Lee, 2003, p. 6). This statement by Former Deputy Human Resources Minister Datuk Abdul Rahman Bakar confirmed the findings of those study, "It is this lack of soft skills which is largely responsible for the difficulties faced by some 90,000 young people in finding employment" (*The Star*, Sept 23, 2007).

Institutions of Higher Education and Soft Skills

Knowing the importance of soft skills and realising of the lack of soft skills amongst graduates, institutions of higher learning have a vital role to play in imparting soft skills to students. The institutions of higher learning now have given more priority to better prepare students for employment (Dunne & Rawlins, 2000; Keep & Mayhew, 1999; Ministry of Higher Education Malaysia, 2005; Ong, Sharma, & Heskin, 2003). However, these institutions can only provide soft skills settings that are limited and confined to simulated environments, and the students might not be able to learn the real skills required. Hence, a missing link or 'skills gap' exists (Askov & Gordon, 1999; Atkins, 1999; Evers, Rush, & Berdrow, 1998; Kivinen & Silvennoinen, 2002; Morley, 2001; Robinson, 2000; Shivpuri & Kim, 2004), and this can only be rectified and established through actual experience.

In Malaysia, the call to incorporate soft skills into the curriculum has been seriously pursued by the Ministry of Higher Education (MoHE) for the past two years (Ministry of Higher Education Malaysia, 2005). Malaysian institutions of higher learning have been urged to review their curriculum to ensure graduates are equipped with skills and knowledge required by industry and employers. Soft skill subjects such as communications, problem-solving and language skills (especially English), have been introduced into institutions of higher learning (Shah, 2008). The importance of preparing students for their future working environments has been a key issue in both higher and vocational education particularly polytechnics. Hence, apart from the demand from the industrial sector, government policy was one of the reasons that engineered to the implementation of the Industrial Training Soft Skills (ITSS) module in polytechnic education.

The Industrial Training Soft Skills Module (ITSS)

The Industrial Training Soft Skills module was introduced by the polytechnic education system as part of the industrial training program. This is very important as the program can offer appropriate training contexts for students to practice the skills learnt immediately. It was designed for polytechnics with the aim of developing soft skills in students as preparation for the world of work prior to industrial training. The ITSS module consists of five elements: positive personality, communications skills, work etiquette, work exposure and report writing. It is a stand-alone module carried out in semester two and three for certificate and diploma students respectively. An hour credit has been allocated and students are not allowed to enrol for industrial training without first going through the module. As a stand-alone module, students are exposed to the theoretical underpinnings of soft skills prior to their practical training through a variety of teaching and learning methods.

Industrial training which commences after the completion of the module will be the real-world context for students in applying the soft skills learnt. During their industrial training, the students are evaluated by their employers and polytechnic lecturers. Therefore, employers are able to observe the application of soft skills through-out the duration of the five months training. Thus, application of soft skills elements identified in the module can be examined across industrial sectors.

Problem Statement and Objective of the Study

The ITSS has been implemented mainly due to the feedback from industry concerning the lack of soft skills amongst polytechnic students and graduates. Although the importance of soft skills has been acknowledged by the management strata of Malaysian polytechnics, the implementation of soft skills training in depth is still new in the Malaysian tertiary education system, particularly in polytechnics. Hence, questions have been raised as to how well the module has been implemented. It is therefore very important that the effectiveness of the module is evaluated. Not only do we need to determine whether the students have acquired the knowledge about soft skills, we also need to know whether they are applying what they have learnt, whether the skills acquired actually meet the employers' needs, which areas still need the most improvement in the module and lastly, how effective soft skills teaching is. Thus, the perceptions from three related groups; students, lecturers and employers were collected and investigated. This process is also known as a 360-degree feedback (Stasz, 1997; van der Heijden & Nijhof, 2004).

However, this paper will report only on the employers' responses, partly due to restrictions of space and time. But it can be argued that perceptions from employers are a crucial asset, given that they are the consumers of academic products. As an independent group, employers' feedback is considered as valid assessment in informing academia about the quality of their product. Indeed, they are the group who are able to provide valuable information on the application of students' soft skills in real work settings. In addition, it is also very useful in seeking information about the current needs of soft skills in the industry.

The study focuses specifically on the development of students' soft skills during the commencement of industrial training. This involves employers' perceptions on the importance of soft skills as practiced in the organization and perceived level of competence observed through-out their training. The employers in this study referred to training companies which directly involved in polytechnic industrial training program. Respondents were represented by the company human resource manager, supervisor or technician who had direct contact with polytechnic students during their training. The following research issues are explored:

- i. Employers' perceptions on the importance of soft skills as listed in the module;
- ii. Employers' perceptions of the level of students' soft skills while at training; and
- iii. Employers' perceptions of what soft skills are best developed in the workplace context.

Research Method

Instrument

The instrument used in the study was a survey questionnaire given that this is an exploratory study and questionnaires were divided into three parts: Section one

consisted of questions on the respondents' demography. The second section was designed to measure, in general, the preparation and importance of knowledge, skills, and abilities of polytechnic students in soft skills before the commencement of industrial training. The respondents were required to state their agreement on students' soft skills knowledge and ability using a scale from 1 (Disagree) to 6 (Agree). In section three, respondents were asked to rate the importance of the various soft skills elements and students' competency in performing these skills on a scale ranging from 1 (not important at all/not competent) to 6 (very important/very competent). This section required employers to answer the questions on the extent of students' ability in transferring the skills learnt while undergoing their industrial training. In addition, there was an open-ended question pertaining to the skills which were not included in the module, but might be appropriate to include in the module in future.

Sampling

Data was collected via mail survey. Population comprised selected companies participating in industrial training program. This sample was chosen with the rationale that 80% of polytechnic students in the northern region are placed in the same area. Furthermore, the lists obtained from the polytechnic industrial training unit are active companies. A total of 180 questionnaires were utilized and mailed to the identified companies. The survey was directed initially to human resource or personnel managers or to those managers or trainees superior responsible for training and recruitment. The rationale behind using these individuals is that they have a close relationship with, and knowledge of trainees due to the nature of their work. It is believed they would be qualified to comment on the trainees' soft skills because assessment of employees and industrial training students is an integral part of their job description. They were also believed to be the personnel who possess substantial experience in making judgments and opinions on the importance of soft skills or in a position to pass the questionnaire to the right person if unable to participate.

Analysis

The survey data were analysed using the Statistical Package for Social Sciences (SPSS) version 17. Descriptive statistics mean and frequency were used to analyse the importance and employers' perceptions of generic competencies of students. The employer's perceptions reflected the level of soft skills application amongst students during their industrial training. Indeed, a hierarchy established from the mean importance and competency level from the employers' perceptions will assist in examining the effectiveness of the module.

Findings and Discussion

The population included various companies from different backgrounds. The employers were categorised by sectors such as services, trading, manufacturing, finance, consultancy and government. A total of 107 questionnaires were returned which was equivalent to a 57% response rate. The majority of the respondents were from the service industry, making up 38.3%, with 41 companies. Trading companies contributed 25.2 % (n = 27) participation in the polytechnic industrial training

program, followed by manufacturing companies with 18.7%, (n = 20), government sector with 8.4%, (n = 9), finance with 6.5%, (n = 7) and consultancy with 2.8% (n = 3). Medium sized companies (number of employees from 10 to 50) seemed to form the biggest number of respondents involved in the polytechnic industrial training program with 43.9% (n = 47) as shown above. Small companies with less than 10 employees contributed 31.8% (n = 34), and large companies with more than 50 employees chipped in with 24.3% (n = 26). Thus, small and medium enterprises (SMEs) contributed 85.7%. This is in keeping with the fact that (SMEs) account for more than 90% of total number of businesses in Malaysia (Zakaria and Hashim, 2003 as cited in Juhdi, Jauhariah, & Yunus, 2007). About 40% of the respondents have a long term relationship of at least 3 years with the polytechnics. Of these 19.6% (n = 21) have participated in the program for more than 5 years (10 times). However, 60.7% (n = 65) of companies are still new to this program with experience of 2 to 5 times.

Employers' General Perceptions of Students' Soft Skills

This section explores perceptions of employers regarding students' soft skills preparation before the commencement of industrial training (Table 1). Generally employers are pleased with the polytechnics' preparation in imparting soft skills to students prior to industrial training (M=4.1963). They agreed that students with soft skills were also competent in technical skills (M=4.6448). This indicated the importance of soft skills to the organization. Students have found themselves to be able to practice their soft skills during their training (M=4.1028), and their soft skills are up to company's expectation (M=4.1402). However, it was reported that students' soft skills do not benefit the organization much. This could be due to the thinking that these people were only training students and a five months training period is too short for the supervisor to form a clear evaluation on students' contribution to the organization. For some, it is only a requirement to complete their studies, and their presence and position was on a temporary basis.

Table 1 General Perception of Students' Soft Skills

No.	Item	Mean
1.	Polytechnics students were equipped with soft skills before industrial training	4.1963
2.	Students with high soft skills were more competent in technical skills	4.6448
3.	Students practice their soft skills well while at training	4.1028
4.	Students' soft skills meet up company expectation	4.1402
5.	Students' soft skills benefited the organization	3.2897

Meanwhile, the comparison made between the students' knowledge before the commencement and at the end of their industrial training clearly indicates the progress and improvement of students' soft skills (Table 2). Decision making skills were reported as the skill area which had the highest improvement (+0.7476). The results revealed that the transferability and learning process relating to soft skills does occur. Soft skills are proven to be transferable but only to a certain extent. Input given by employers derived from their observation of students' performance throughout the

industrial training. This indicates that soft skills can be improved through learning and practice. The skill area with the weakest improvement was time management skills (+0.2524). While student performance in this skill has managed to stay above the overall mean, its variability is considered a cause for moderate concern. It is suggested that performance in this area may be improved simply by making this attribute a point for greater emphasis in the module. Additional emphasis might include procedures for industrial training students to strive to be “early” rather than just “on time” with regard to meeting deadlines or arriving for work. This emphasis could be reinforced by having the lecturer increase the weightage given to this criterion in the learning and teaching of the ITSS module.

Table 2 Students’ Soft Skills Competency in General

No.	Item	Mean		
		Beginning	Ending	Difference
	Students’ soft skills competency :			
i.	Decision Making	3.2991	4.0467	0.7476(1)
ii.	Teamwork	4.4019	4.7477	0.3458(5)
iii.	Problem Solving	3.6542	4.1776	0.5234(3)
iv.	Time Management	4.1121	4.3645	0.2524(7)
v.	Communications	4.0187	4.5514	0.0527(2)
vi.	Report Writing	3.9252	4.2523	0.3271(6)
vii.	Leadership	3.6075	4.0841	0.4766(4)
viii.	Learning and Interpersonal skills	4.1121	4.4579	0.3458(5)

**The number in bracket indicated the ranking*

Eventually, no matter how good the skills were rated, and regardless of employers’ satisfaction with students’ soft skills, the disparities still exist and are need to be improved (Table 3). Hence in minimizing the disparity, employers suggested polytechnics give more attention to certain skills. The results revealed that leadership skills are the skills that need to be improved the most (M=3.5888), followed by problem solving (M=3.3364), time management (M=3.2617), decision making (M=3.3084), communications (M=2.9533), teamwork (M=2.9252), report writing (M=2.9159) and learning and interpersonal skills (M=2.8692). This implied on area of greater emphasis in order to better prepare students for their internship (and ultimately permanent job) experiences. A study by Poh Yen et., al (2009) and Annie and Hamali (2006) on employers’ perception of Curtin and MARA University of Technology Sarawak campus revealed that leadership and problem solving skills has also been highly rated by employer.

Table 3 Students’ Soft Skills that still Lacking

No.	Item	Mean
	Soft skills that still lacking and need to be emphasis by polytechnic	
i.	Decision Making	3.3084(3)

ii.	Teamwork	2.9252(6)
iii.	Problem Solving	3.3364(2)
iv.	Time Management	3.2617(4)
v.	Communications	2.9533(5)
vi.	Report Writing	2.9159(7)
vii.	Leadership	3.5888(1)
viii.	Learning and Interpersonal skills	2.8692(8)

**The number in bracket indicated the ranking*

Leadership skills appeared to be the skills which are still lacking the most amongst polytechnics trainees, followed by problem solving and decision making. These skills initially were not placed as main skills in the ITSS module. The result gave a strong indicator of the rise of importance of these skills regardless of the academic level of students. These skills were not highly prioritised in the module as polytechnics are supposed to produce semi skilled workers (para-professional). However, the latest development seems to offer another perspective. These skills are needed in all situations regardless of the qualification. It is also a warning to academia that, in practice, soft skills are needed at all levels in an organization. The difference is in only the scope and context. These results also suggest the educational process may need to be revised in order to improve student workplace performance in this area. Communications skills were ranked fifth as the skills that were still lacking and needed to be emphasised by polytechnics. The ranking seems to reflect that polytechnic students are competence in this skill. Hence, less priority was given to it by employer compared to other skills. Finally, the learning and interpersonal skills became skills suggested as least priorities.

Employers were also asked to rate those skills according to their organization needs, using mean ratings obtained for the extent of importance were between 1 and 6, where 1 implies “not at all important” and 6 implies “extremely important”. As noted, these skills received mean averages ranging from 4.8 to 5.2, which highlighted differences and patterns. The highest priority was teamwork ($M = 5.2710$), followed by time management ($M=5.2430$), learning and interpersonal skill ($M=5.1776$), communications ($M = 5.0935$), problem solving ($M = 4.9907$), leadership ($M = 4.8692$), report writing ($M = 4.8318$) and decision making ($M = 4.8131$). The mean scores rated were ranged between 4.0 and 5.0 which were considered important, though their relevance varied with the size and nature of the business. No skills were rated less than 3.0 indicating the importance of these skills to the organization.

Table 4 Soft Skills Ranking by Company

No.	Item	Mean
	Soft skills ranking based on organization need:	
i.	Decision Making	4.8131(8)
ii.	Teamwork	5.2710(1)
iii.	Problem Solving	4.9907(5)

iv.	Time Management	5.2430(2)
v.	Communications	5.0935(4)
vi.	Report Writing	4.8318(7)
vii.	Leadership	4.8692(6)
viii.	Learning and Interpersonal skills	5.1776(3)

**The number in bracket indicated the ranking*

Perceived Importance and Competency Level of Identified Soft Skills

The results revealed that employers were more concerned with work-related skills that required trainees to manage time effectively, function as a team member, analyse and solve workplace problems confidently, be self-reliant, trainable and motivated as well as maintain professional ethical standards. Time management was ranked highest by employers with a mean score of 5.3069 followed by team work (M = 5.3014), communications (5.2687) and learning and interpersonal skill (M = 5.1811). The remaining four soft skills elements had a mean importance of less than 5. These were problem solving (M = 4.9813), decision making (M = 4.9782), leadership skills (M = 4.9393) and report writing (M=4.9065) respectively.

The ranking by importance also revealed a remarkable result particularly for communications skills. Typically, these are the skills always most universally valued by employers (Divine, Miller, & Wilson, 2006; Vice & Carnes, 2001) and academics alike (Hyman & Hu, 2005). In Malaysia itself, communication has always been a talk of the town and claimed to be the skills needed most by employer (Hoo, Nasuridin, Chai, & Ignatius, 2009). This outcome verifies the above result pertaining to skills which are still lacking and need to be emphasis by polytechnic. Although, it is always referred to as the most important skills, the result seems to suggest that communication is no longer the most important skills as in this study. However, Bennett (2002), instigates that there is no consensus in the academic literature regarding which particular soft skills are most and least important. It is dependent on the context and need of particular organization. The ranking usually end up in mixed result, however communication skills always occupied a leading position (Bennett, 2002, p.459).

The next measurement investigates the employers' perceptions of students' competency level. Employers' mean scores levels ranged from 5.0397 to 4.1713. As observed, mean scores competencies were generally lower than mean scores for importance. Nevertheless, the mean score for competency was above four, suggesting that polytechnic students had an acceptable level of soft skills competency but to meet industry's expectation, further improvement is needed. The skills that employers perceived polytechnic students, as most competent in ranking order, were teamwork (M = 5.0397), communications (M = 4.7687), learning and interpersonal (M = 4.5870), time management (M = 4.5810), report writing (M=4.5748), problem solving (M=4.3551), leadership (M = 4.3014) and decision making skills (M = 4.1713).

Table 5 Employers' Perception on the Importance and Perceived Level of Students' Competency Level of Soft Skills in Rank Order (n = 107)

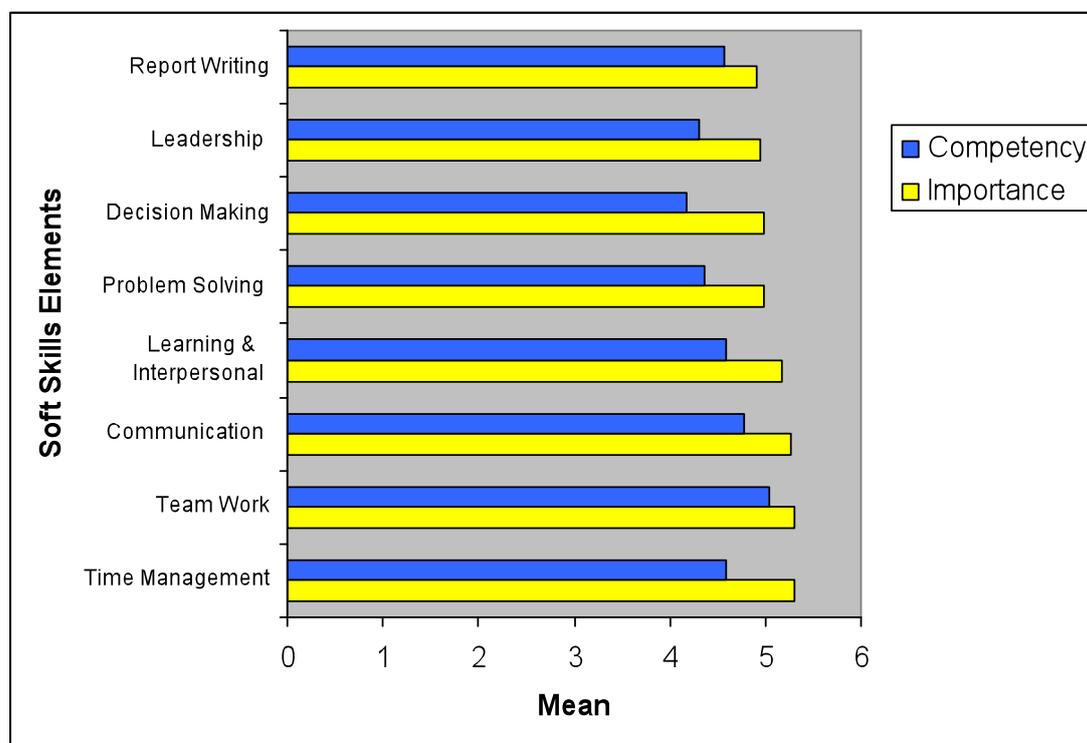
No	Soft Skills Elements (Important)	Mean	Soft Skills Elements (Competent)	Mean
1.	Time Management	5.3069	Teamwork	5.0397
2.	Teamwork	5.3014	Communications	4.7687
3.	Communications	5.2687	Learning & Interpersonal	4.5870
4.	Learning & Interpersonal	5.1811	Time Management	4.5810
5.	Problem Solving	4.9813	Report Writing	4.5748
6.	Decision Making	4.9782	Problem Solving	4.3551
7.	Leadership	4.9393	Leadership	4.3014
8.	Report Writing	4.9065	Decision Making	4.1713

The Comparison between Mean Score Importance and Competence

To further elaborate on this matter, comparison was made between employers' perceptions of the importance of soft skills elements with what they initially expected and observed with polytechnic trainees. The comparison hoped to spell out and ascertain the application of soft skills by trainees. Table 6 compared the mean scores of the importance of soft skills as expected and the actual performance of trainees as perceived by employers. A higher mean gap value denoted a bigger discrepancy between what is expected of the work force and trainee performance as perceived by the employers. The skill is considered deficient if the expected skill differs considerably from performance, but if their values are close, the employers' expectations then are very much fulfilled.

Overall, students seemed to be good in theory, they were poor in skills application. Employers on the whole voiced that, the polytechnic trainees were still not proficient in time management, teamwork, learning and interpersonal skills and communications. The similar result can be found in problem solving, decision making and leadership skills. Taking into account the relative importance of the skills to employers, the gaps-in-skills deficiency can be ranked in decreasing order as follows: decision making; time management; leadership; problem solving; learning and interpersonal skills; communications; report writing and teamwork skills. The analysis revealed that the decision making skills showed the highest mean deficiency (0.8473) compared to other skill elements. This was followed by time management (0.7259), leadership (0.6379), problem solving (0.6262), learning and interpersonal skills (0.5941) and communications skills (0.5000). Report writing (0.3317) and teamwork (0.2617) did not show much difference as indicated by the smaller gap between the expectation and the performance of students' competency. Generally, polytechnics students were rated above four for all the soft skills elements surveyed, which is not particularly poor *per se* but could be improved further.

Table 6 Comparison on the Employer's Perceptions on the Importance and Perceived Level of Students' Competency Level in Soft Skills



Conclusions

An imbalance in the demonstration of some of the soft skills is one of the problems which employers are facing with graduates or to be more specific trainees. The results from this study revealed that teamwork, time management, communications and learning and interpersonal skills were among the most important soft skills elements. Employers were happy with polytechnic students' competency given that none of the skills received a mean score of less than three. Of the eight skills, employers agreed that time management and teamwork skills were the most important. Students were found to be very competent in teamwork and communications skills. From the comparison made the gap between the importance and students' competency still exists. Students are yet to meet the expectation of employers particularly on decision making, time management, leadership and problem solving skills. By making soft skills more explicit to employers, the study can assist in identifying the nature of the gap that exists between the relevant stakeholders and determine the appropriate skills that need to be emphasised in the future.

These findings are very valuable as possible guidelines to academia for future planning. Generally, the results indicate those skills that should be given priority from the employers' perspective. Apart from that, it is also useful knowing which skills are considered important to be acquired by students before they undergo industrial training. In summary, this study suggested employers agreed that soft skills contained in the ITSS module are very important and up to current needs, but student application is still not up to their expectations. This indicated that full transferability

of the skills is yet to be achieved. Hence, feedback and communication loops between industry and polytechnics and vice versa should be strengthened and harnessed to the full potential. However, employers' perspectives cannot be the only basis on which to justify the effectiveness of the module. Perhaps, a study from other stakeholders such as teachers and students will verify the outcome expected. Therefore, to further enhance the overall outcome, further research should include a study of other relevant stakeholders.

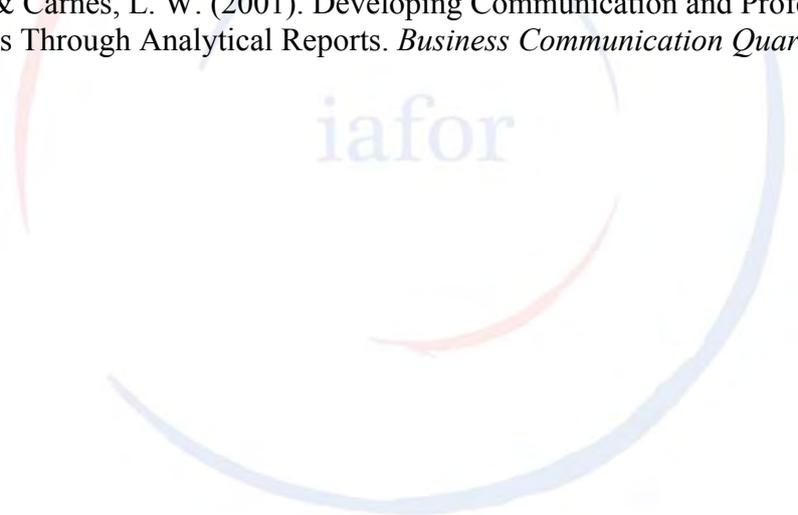


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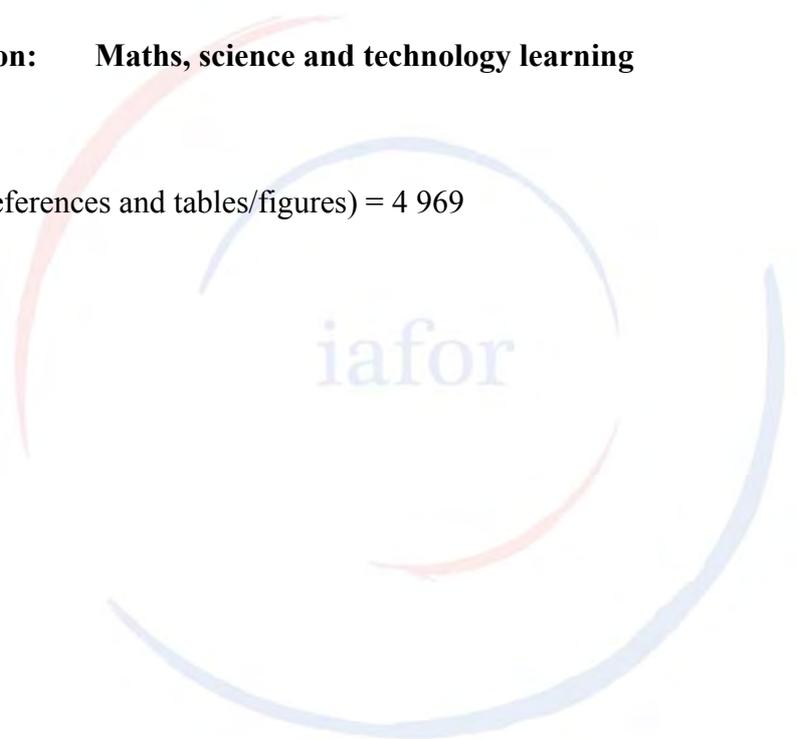
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Chinese students' perspectives of effective mathematics learning: An exploratory study

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There is compelling support for the argument that the teacher and his/her professional practice in the classroom constitute one of the most important, if not the most important, factors in lesson effectiveness (Rice, 2003; Sanders & Horn, 1998). The classroom teacher's intended and implemented practice is guided by the values and beliefs he/she subscribes to (see, for examples, Barkatsas & Malone, 2005; Seah, 2005), and much of this professional practice presents itself in the form of mathematical tasks, each of which is "a classroom activity, the purpose of which is to focus students' attention on a particular mathematical idea" (Stein, Grover, & Henningsen, 1996, p. 460). Specifically, this paper reports part of an exploratory study into students' perspectives of the types of tasks that are regarded as being especially helpful in their studies, situated in the middle years of schooling in the city of Chongqing, China. The research design of this exploratory stage of the study is based on the recently-concluded Task Types and Mathematics Learning [TTML] research project conducted in Australia by Peter Sullivan, Doug Clarke and Barbara Clarke. The findings of this project will be briefly reviewed in the next section. A case that relatively little is known about the Chinese mathematics classroom will be put forward. The research design will then be presented, accompanied by a reflection on what we learn in the process of translating the questionnaire used from the English language to the Chinese language. This will be followed by a report of the results obtained, ending with a discussion of the findings.

Mathematical tasks

The assumption in this exploratory study has been that mathematical tasks constitute the gateway to student learning of mathematics/numeracy, and that the form of these tasks as they are implemented in the classroom is the result of interactions between the teacher and his/her students, and amongst the students themselves. Learning tasks open the door to the introduction of relevant knowledge, skills and dispositions that students are expected to learn. Lappan and Briars (1995) expressed their view that the most important teacher decision that affects student learning concerns the selection of tasks. Mathematical tasks constitute one of the three components in Simon's (1995) Hypothetical Learning Trajectory, and its significance in this conception is all the more greater given that it is interdependent with another component, that is, hypotheses about students' learning process.

At the same time, teachers are sensitive to their own students' learning styles and needs, and their ongoing engagement and interaction with these learners situated as they are in the particular sociocultural context of the classroom regulate the ways in which the same task in a teacher's planning might operate differently in different classrooms. Boaler's (2003) study is an example of this, wherein different teachers with similar beliefs planned to give students similar tasks, yet these took on different forms in the classrooms. Indeed, Stein, Grover and Henningsen's (1996) Mathematical Task Framework demonstrated that there are three phases through which an intended task is set up by the teacher, then enacted together by teacher and students. This last phase is regarded as being especially important in determining student learning.

In Australia, the Task Types in Mathematics Learning [TTML] project set out to examine teacher use of three types of mathematical tasks: Type 1, in which the tasks are involved with the introduction to or use of models, representations, tools or explanations to exemplify the mathematics; Type 2, in which mathematics has been situated within a contextualised practical

situation; and Type 3, which are open-ended tasks. The experience of the 16 teacher participants who had been involved with the project over two years showed that prior to the project, teacher use of contextual tasks (type 2) was relatively less than the other task types. With professional development and support, however, teacher confidence and skill can be raised to the extent that all three task types are equally adopted by these same teachers (Clarke & Roche, 2010).

The Chinese mathematics classroom

East Asian students have been outperforming their peers from many other countries in international mathematics comparative assessments. Amongst the Year 4 participants in TIMSS 2007, 3 of the 4 top performing regions are East Asian (Hong Kong, Taiwan and Japan), with the other country (Singapore) being Southeast Asian geographically, but substantially East Asian culturally (Thomson, Wemert, Underwood, & Nicholas, 2008). In the Year 8 component of TIMSS 2007, the East Asian advantage is extended to an additional region, Korea; that is, 4 of the 5 top performing regions are East Asian (Thomson, Wemert, Underwood, & Nicholas, 2008). In PISA 2006, 2 (Taiwan and Hong Kong) out of the top 3 performing regions – and half (Taiwan, Hong Kong, Korea, and Macau) of the top 8 regions – are East Asian (Thomson & de Bortoli, 2008).

Subsequently, there has been much academic interest in how mathematics is taught and learnt in schools in East Asian nations. The academic and societal interest following Ma's (1999) book is a good example. More recently, an edited volume of academic writings on the mathematics pedagogical traditions amongst Chinese classrooms was compiled and published (see Fan, Wong, Cai, & Li, 2004). Also, Stevenson and Stigler's book, 'the learning gap: why our schools are failing and what we can learn from Japanese and Chinese education' has a second edition in 2006, 12 years after the first edition was published (Stevenson & Stigler, 1994): it does show that there remains much interest in East Asian education systems!

In particular, in recognition of the crucial role that teachers play in the pedagogical process, there has been research attention to the ways in which teachers in East Asia and their students interact with each other, with an aim to understand the respective didactic contracts. The growth in interest around the world in the Japanese Lesson Study, for instance, demonstrates this focus on how planned lessons play out in the classroom.

Despite being part of East Asia, however, the typical mainland Chinese mathematics classroom is relatively less understood, despite the long-term implications within China and without of (mathematics) education initiatives and norms in the world's most populous nation. Perhaps such research has not been disseminated in the English language. Nevertheless, international comparative studies such as the Learners' Perspective Study provide some insights into the Chinese mathematics classroom (see, for example, Clarke & Seah, 2005). In this light, the research design of this study had been set up with the objective of better understanding the pedagogical practices that are commonly found in mainland Chinese mathematics classrooms. In particular, we focussed on the mathematical tasks that are introduced by teachers, and how these are perceived by their students.

Stein, Grover and Henningsen (1996) proposed that any particular mathematical task takes on three forms as it is conceptualised, set up, and enacted. The last phase, whereby the teachers and their students interact and negotiate to enact the various mathematical tasks, is regarded as being especially crucial in determining student learning. Yet, the ways in which tasks relate to student learning have not always been made explicit (Simon & Tzur, 2004). Also, the nature of teacher-student and student-student interactions in the classroom varies from country to country. That is to say, the same mathematical task can be expected to be transformed in different directions once it is implemented in different classroom settings across different cultures. The nature of these negotiations as they pertain to the mainland Chinese classroom is thus significant in the context of deepening our understanding of how students respond to and engage in mathematical tasks in

general, and of how this plays out in high performing education systems (such as in China) in particular.

A feature of the wider study, which is made up of this exploratory phase and the subsequent detailed inquiry phase, is the privileging of student voice (Mitra, 2006) as a source of information and knowledge. Instead of working with adult informants, that is, the teachers, to achieve an understanding of how mathematical tasks are set up for and subsequently negotiated with their respective students, the study acknowledges the active roles which students assume in this process, and seeks to investigate it from their perspective. In so doing, it is hoped that the mainland Chinese students' attitudes, beliefs and self-goals will be made explicit, thereby enhancing our capacity to make sense of comparative research studies.

This paper will focus on a part of this exploratory phase of the study, one which seeks to provide answers to the following research questions:

- (1) What types of mathematical tasks are commonly used in Grade 5 and 6 classrooms in Chongqing, China?
- (2) What types of mathematical tasks are preferred by Grade 5 and 6 students in Chongqing, China?
- (3) Through what types of mathematical tasks do Grade 5 and 6 students in Chongqing, China learn the most?

Research design

The methodology being outlined here is applicable only to this exploratory phase of the study, which involves the collection of data and information from more than 1100 students in a major city in mainland China. Underlying the methodology is our subscription to the constructionist research paradigm (Wiersma & Jurs, 2009), which relates to our epistemological stance of constructivism. Thus, the research questions have not been structured in such a way to test particular hypotheses or theories. Indeed, it is evident from the discussion so far that there is a desire to understand the social phenomenon of the enactment of tasks in primary school mathematics lessons, as opposed to one of establishing relationships, determining effects and identifying causes.

This exploratory phase constitutes the first part of the wider mixed methods sequential explanatory design. In this phase, the research method adopted is the survey questionnaire. The 15-item questionnaire developed for and used in the TTML study was selected. Laid out over three A4-size pages, this questionnaire is a mix of Likert-scale items, ranking exercises, and open-ended questions.

The contextual information of several items in the TTML version was changed to accommodate the societal realities in mainland China. For example, a question in item 9 features the context of movie tickets costing \$13 for adults and \$7 for children. These ticket prices were changed to RMB25 and RMB12 respectively, to better reflect the societal context in China. Since student respondents were asked to rank the given mathematical problems rather than solving them, this change of numerical values is not expected to render the Chinese data incomparable to the Australian one. This adapted-version of the original questionnaire was then passed on to our bilingual co-researcher in China for translation into the draft Chinese version.

Validating the translation of questionnaire items

Back-translation of the draft Chinese-language version of the questionnaire – and the subsequent comparison with the original TTML version – was conducted in Melbourne to optimise the equivalence of item content across the two languages. It was believed that culturally-different ways of describing phenomena, and of teaching, might act as blindspots in the process of translating an

item from the English language to the Chinese language. Observed differences in meanings implied by the Chinese expression were discussed and resolved with our co-researcher in China.

We observed examples of how cultural sense-making of pedagogical concepts novel to one's professional setting can contribute to the representation of different ideas. The notion relating to "work on the same problem for more than one lesson" (item 7i) must have been one such novel pedagogical concept: the translated item reads in the following way after back-translation, "work on those questions which have appeared in many prior lessons". Similarly, the notion of open-ended questions must have been relatively new in the Chongqing context, for the item "work on questions where you have to give more than one answer" (item 7iii) became "work on those questions which have multiple ways of solving". Another example is in the ways in which textbooks are used by teachers and students across education systems: "work from a textbook" (in item 8i) was translated into "learn with the textbook".

Some of these threats to item content equivalence and to the questionnaire's experiment validity were due to the multiple possible meanings of non-technical terms in English, which has made it difficult for our co-researcher in China to discern the actual intention of the original question. For example, item 6 asks, "How do you know when you have learnt something in mathematics," in which the term 'when' was used as a conjunction to mean 'during the time that'. The Chinese-language version, on the other hand, demonstrates an interpretation of this term 'when' as being used as an adverb, posing the question of 'at what time', and in so doing, shifting the emphasis of the item from the intended 'how do you know' to 'when'.

After the last translated version of the questionnaire was validated, hardcopies of this finalised version in the Chinese language were then printed, ready for administration in participating primary schools.

Participating schools and students

Data were collected in 2009 from 1109 Grade 5 and 6 students from 15 classes across 3 (state) primary schools in Chongqing city. Six hundred and nine of these students were in Grade 5, and five hundred were Grade 6 students. Chongqing is a major inland city in Southwestern China, situated at the confluence of the Yangtze and Jialing Rivers. This city with a population of more than 31 million is of economic and political significance to China. As is elsewhere in China, and indeed in the East Asian culture, school education is a social leveller, and parents place a high emphasis on their children's achievement in school.

Results

Research question 1

The first research question is: What types of mathematical tasks are commonly used in the Grade 5 and 6 classrooms in Chongqing, China? Items 7 and 8 in the questionnaire provide the information relevant to this question. In each of these questions, respondents were given a list of classroom activities (item 7) and teaching activities (item 8), against each of which a student is invited to tick in the box which corresponds to the frequency of the activity. The collated results are shown in Table 1 below.

As can be seen in Table 1, in terms of classroom activities, Grade 5/6 students in Chongqing were most likely to be engaged in working out how to do questions for themselves (item 7iv), with 70.05% reporting that it took place almost every lesson, and a further 19.63% reporting that it took place about once a week. The question type varies though, as a large percentage also reported doing questions in which they practised what the teacher had showed them (item 7vi) almost every lesson and about once a week. In terms of question/task type, the majority of students reported working on

Table 1
Frequency (Percentage) of Occurrence of Classroom and Teaching Activities

Code	Never	About once a term	About once a month	About once a week	Almost every lesson	Valid n
	0	1	2	3	4	
7i Work on the same problem for more than one lesson	673 (61.29)	137 (12.48)	122 (11.11)	118 (10.75)	48 (4.37)	1098
7ii Make up your own maths questions to solve	228 (20.77)	197 (17.94)	262 (23.86)	325 (29.60)	86 (7.83)	1098
7iii Work on questions where you have to give more than one answer	123 (11.27)	118 (10.82)	285 (26.12)	334 (30.61)	231 (21.17)	1091
7iv Have to work out how to do questions for myself	20 (1.83)	31 (2.83)	62 (5.66)	215 (19.63)	767 (70.05)	1095
7v Work on questions that are about people using mathematics in their lives	30 (2.76)	41 (3.78)	131 (12.07)	363 (33.46)	520 (47.93)	1085
7vi Do questions in which I practise what the teacher showed me	59 (5.40)	102 (9.34)	199 (18.22)	416 (38.10)	316 (28.94)	1092
8i Work from a text book	53 (4.84)	49 (4.47)	111 (10.13)	293 (26.73)	590 (53.83)	1096
8ii Work from a worksheet	74 (6.76)	57 (5.21)	201 (18.36)	525 (47.95)	238 (21.74)	1095
8iii Answer questions the teacher has written on the board	27 (2.46)	45 (4.09)	73 (6.64)	235 (21.38)	719 (65.42)	1099
8iv Work on information from the newspapers or magazines	384 (35.26)	181 (16.62)	271 (24.89)	193 (17.72)	60 (5.51)	1089
8v Use calculators	557 (50.68)	329 (29.94)	116 (10.56)	84 (7.64)	13 (1.18)	1099
8vi Use computers	742 (67.45)	138 (12.55)	98 (8.91)	99 (9.00)	23 (2.09)	1100

questions that are about *people using mathematics in their lives* (item 7v): 47.93% almost every lesson, and 33.46% about once a week. On the other hand, what appeared not to have happened in the Chongqing mathematics classroom is students *working on the same problem for more than one lesson* (item 7i) (61.29%). The other two classroom activities, that is, *students making up their own mathematics questions to solve*, (item 7ii) and *students working on questions in which more than one answer is expected* (item 7iii), did not appear to exhibit dominant patterns of occurrence.

With regards to the teaching activities posed in item 8, the data collected suggest that *student answering questions which their teacher had written on the board* (item 8iii) took place very frequently, with 65.42% citing it as occurring almost every lesson, and a further 21.38% reporting that such activity took place about once a week. The majority of students reported that they are *working from textbooks* (item 8i) almost every lesson (53.83%) and about once a week (26.73%) and *from worksheets* (item 8ii) almost every lesson (21.74%) and about once a week (47.95%). *The use of newspapers and magazines* in mathematics classes was less frequent, it appeared, with 35.26% reporting that it never occurred and 16.62% that it occurred only once a term. The majority of the respondents reported that *use of calculators* (item 8v) and *of computers* (item 8vi) was not very common, with 80% reporting that *computer use* never occurred in their classroom or it only occurred once a term, and 80.62% reporting that *calculator use* never occurred in their classroom or it only occurred once a term.

Given the possibility that teachers may organise their pedagogical activities differently in Grade 6 to prepare students for secondary schooling, we were interested to examine if there were any statistically significant differences between activities in Grade 5 classrooms and activities in Grade 6 classrooms. To this end, the conduct of chi-squared (χ^2) tests at $p < 0.001$ revealed that statistically significant differences exist between Grade 5 and Grade 6 response patterns for all activities except the first three listed in Table 1. For example, as illustrated by Figure 1, with regards to the classroom activity “*Do questions in which I practise what the teacher showed me*” (item 7vi), the examination of the observed cell frequencies with $\chi^2(4, 1092) = 66.75, p < 0.001$ revealed that more Grade 6 (16.39%) than Grade 5 (12.55%) students in Chongqing reported that this activity occurred almost every lesson (coded 4, see Table 1), more Grade 5 (19.23%) than Grade 6 (18.86%) students indicated that this occurred about once a week (coded 3), more Grade 5 (10.90%) than Grade 6 (7.33%) students indicated that this occurred about once a month (coded 2), more Grade 5 (7.23%) than Grade 6 (2.11%) students indicated that this occurred about once a month (coded 1), and more Grade 5 (4.67%) than Grade 6 (.73%) students indicated that this never occurred in their mathematics classrooms (coded 0). This aspect of the results will be elaborated in a future publication.

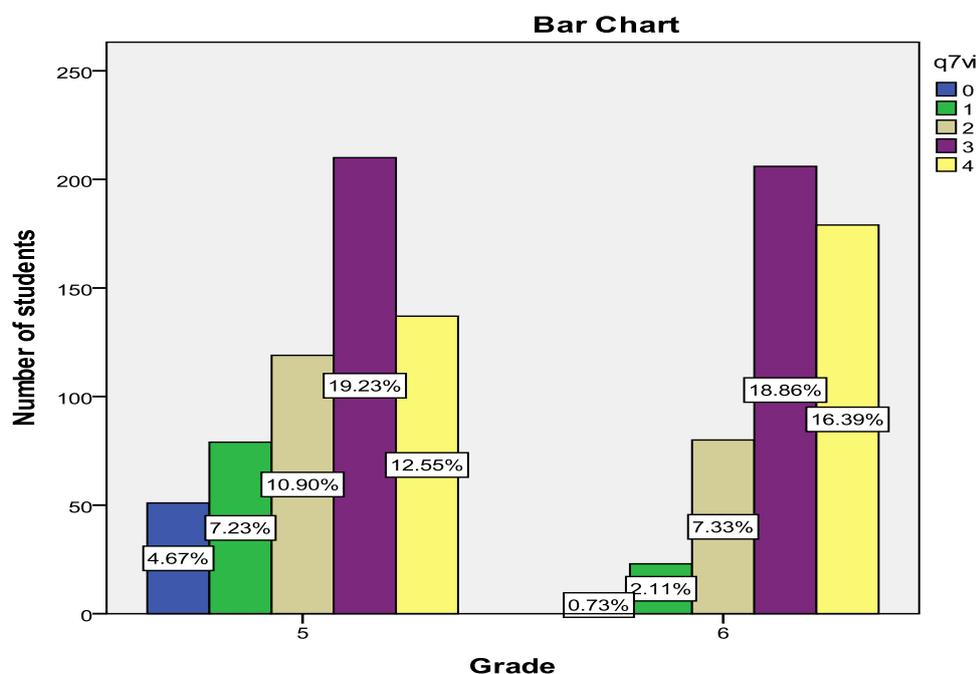
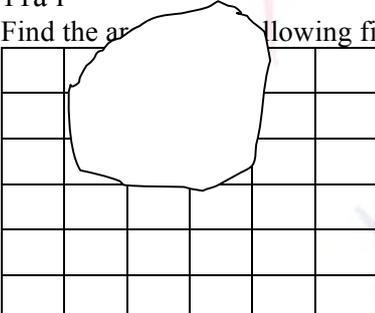


Figure 1. Grade 5 and 6 students’ observed cell frequencies for the classroom activity ‘Do questions in which I practise what the teacher showed me’ (item 7vi).

Research question 2

This question was posed as “What types of mathematical tasks are preferred by Grade 5 and 6 students in Chongqing, China?” Data for this research question came from Items 9 and 11 in the questionnaire. In each of these two items, each respondent was asked to rank a set of three questions according to the extent to which he/she likes the question, where ‘1’ would be placed beside the favourite item, and ‘3’, beside the least liked. The distribution of responses is shown in Table 2 below.

Table 2
Grade 5/6 Students' Ranking of Favourite Mathematical Tasks

Item number and Question	Task type	Favourite	Like next best	Like the least	Valid n
9a i An adult cinema ticket costs RMB25, and a child ticket costs RMB12. How much would the tickets cost for 2 adults and 4 children to watch a movie?	2	514 (47.24%)	463 (42.56%)	111 (10.20%)	1088
9a ii 2 adults and 4 children spent RMB120 on movie tickets. How much might an adult ticket and a child ticket cost?	3	380 (35.12%)	321 (29.67%)	381 (35.21%)	1082
9a iii $25 \times 2 + 12 \times 4 =$	1	377 (37.55%)	286 (28.49%)	341 (33.96%)	1004
11a i Find the area of the following figure. 	1	247 (22.74%)	311 (28.64%)	528 (48.62%)	1086
11a ii If the area of a figure is 10 square units, what might the shape of the figure be?	3	335 (31.54%)	395 (37.19%)	332 (31.26%)	1062
11a iii An athletic track is made up of two straight sections and two semi-circles. The straight section is 100m long. What is the area of the athletic track? 	2	464 (42.73%)	400 (36.83%)	222 (20.44%)	1086

Focussing on question 9 alone, it can be seen from Table 2 that amongst the three question/task types, type 2 (contextualised questions) was nominated the favourite (47.24% of the valid nominations) and the second favourite (42.56% of the valid nominations) question type. This question/task type was also nominated by 10.20% of the students as being the least liked question.

On the other hand, the other two question/task types were nominated as the least liked items. There is a rather similar observation for the three question/task types featured in question 11. The most number of nominations (42.73% of the valid nominations) for the favourite question/task type was associated with type 2 (contextualised questions), and the most number of nominations (48.62% of the valid nominations) for the least liked question/task was associated with type 1 (model/representation/explanation type questions).

Respondents were also invited to provide a reason for the nomination of a particular question as being the favourite amongst the three questions (9i-9iii and 11i-11iii) in each of the two sets of questions (9 and 11). The reasons given by the respondents were coded into 9 categories, as shown in Table 3.

Table 3

Codes for Reasons Cited by Respondents in Ranking Exercise

Codes	
1.	Challenging (more complex, lots of steps / have to think / I learn something new / improve)
2.	Easy to do / understand (instructions clear) / I'm good at this / we do this a lot
3.	Real life scenario
4.	Involves a model / drawing / grid
5.	Multiple solution strategies available, need to devise own strategies
6.	Has more than one possible answer
7.	Fun / I like this type of operation (eg division) or topic (eg area)
8.	Numbers not words
9.	Other

The following bar charts (Figures 2-4) show the percentage of student respondents in each coding category (1-9) for each question in item 9 (9ai, 9aii and 9aiii respectively in Figures 2-4).

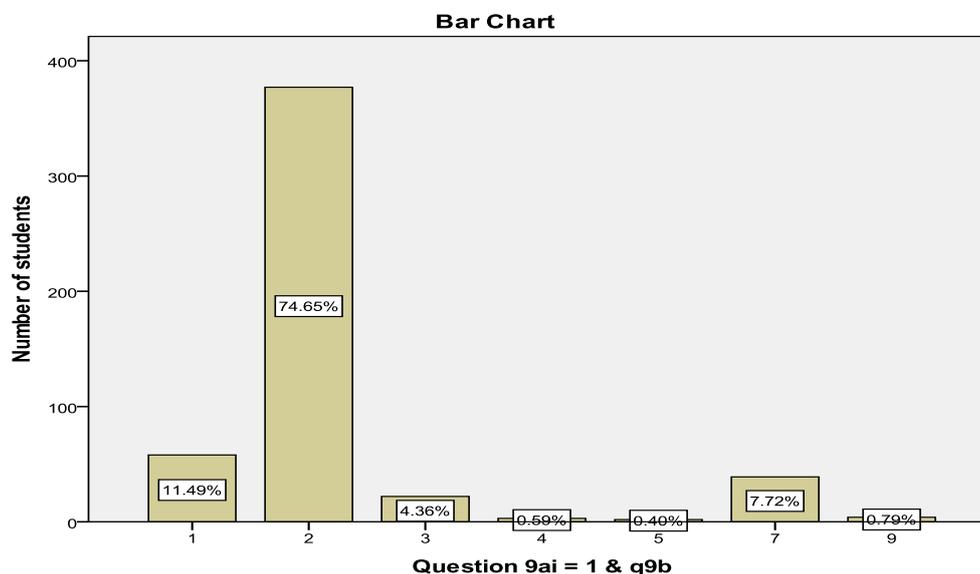


Figure 2. Percentages by coding category for ranking Item 9ai (task type 2) as their favourite.

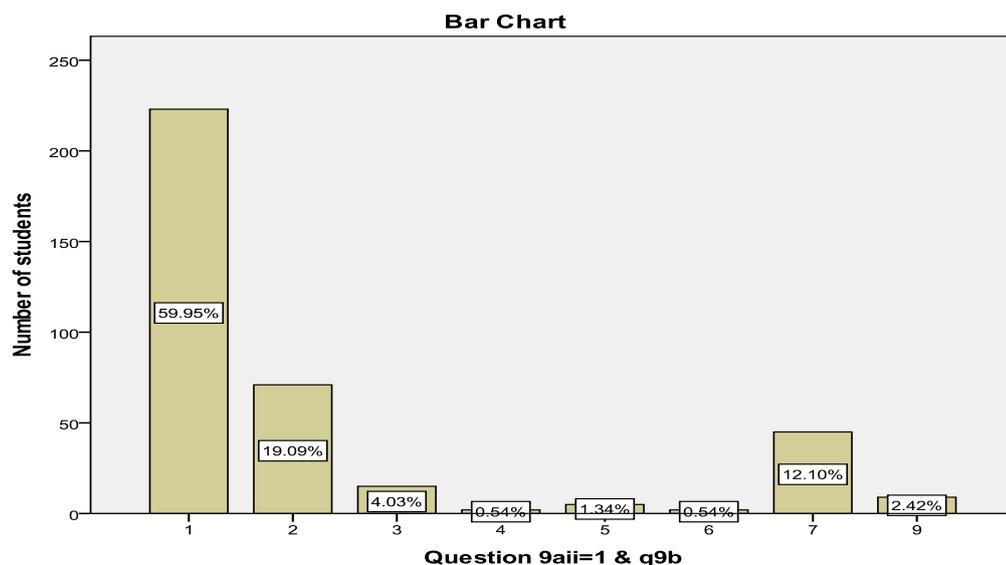


Figure 3. Percentages by coding category for ranking Item 9a ii (task type 3) as their favourite.

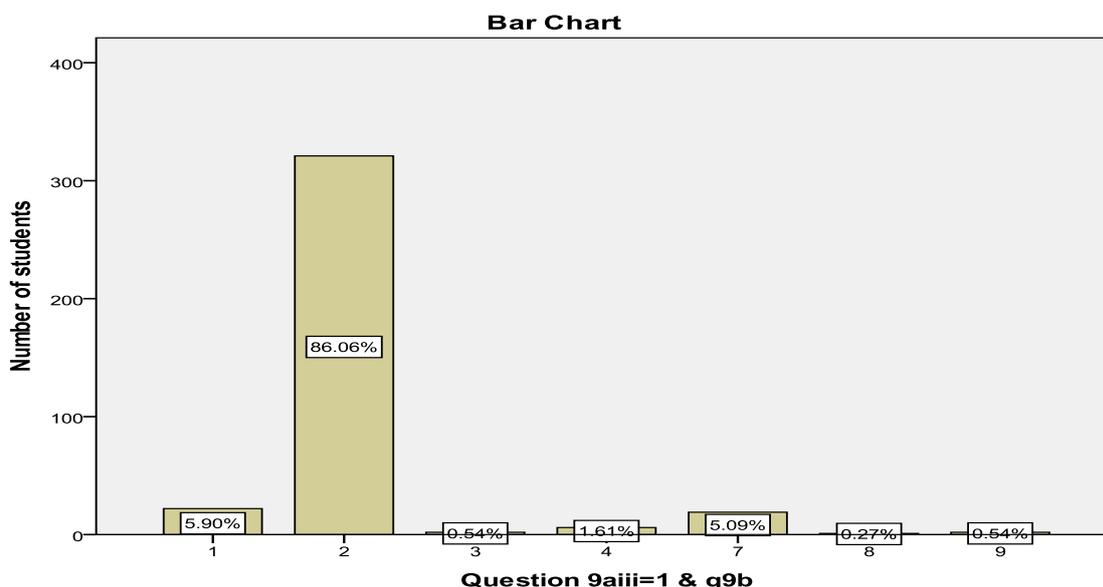


Figure 4. Percentages by coding category for ranking Item 9a iii (task type 1) as their favourite.

It can be observed from figures 2-4 that amongst the Grade 5/6 students surveyed, the majority of those students who ranked Type 1 tasks as their favourite (86.06%) valued these tasks because they are “easy to do / understand (instructions clear) / I’m good at this / we do this a lot” (coding category 2). Students who ranked Type 2 tasks as their favourite did so for one of two dominant reasons: “Challenging (more complex, lots of steps / have to think / I learn something new / improve)” (coding category 1, 11.49%), or “easy to do / understand (instructions clear) / I’m good at this / we do this a lot” (coding category 2, 74.65%). On the other hand, type 3 tasks were ranked favourite amongst students for three dominant reasons: “Challenging (more complex, lots of steps / have to think / I learn something new / improve)” (coding category 1, 59.95%), “easy to do / understand (instructions clear) / I’m good at this / we do this a lot” (coding category 2, 19.09%), or “Fun / I like this type of operation (eg division) or topic (eg area)” (coding category 7, 12.10%).

This examination can be repeated with item 11 of the questionnaire. Figures 5-7 summarise the results for items 11a i, 11a ii, and 11a iii respectively.

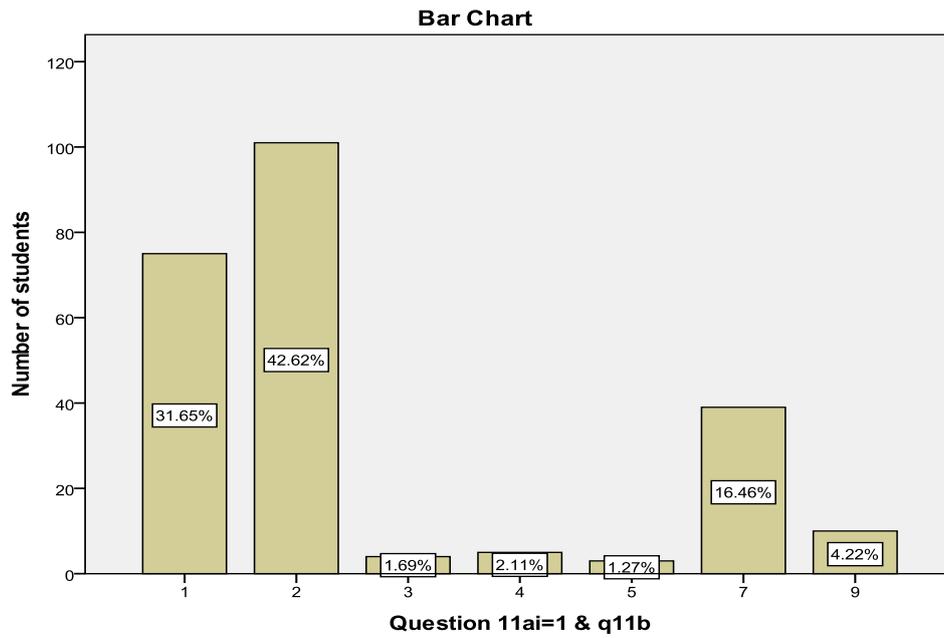


Figure 5. Percentages by coding category for ranking Item 11a i (task type 1) as favourite.

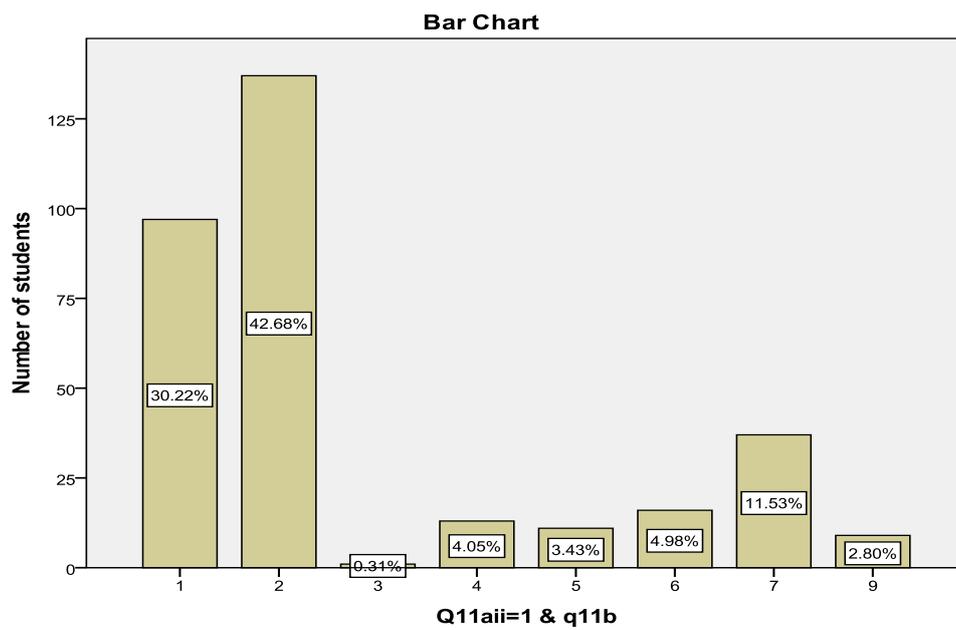


Figure 6. Percentages by coding category for ranking Item 11a ii (task type 3) as favourite.

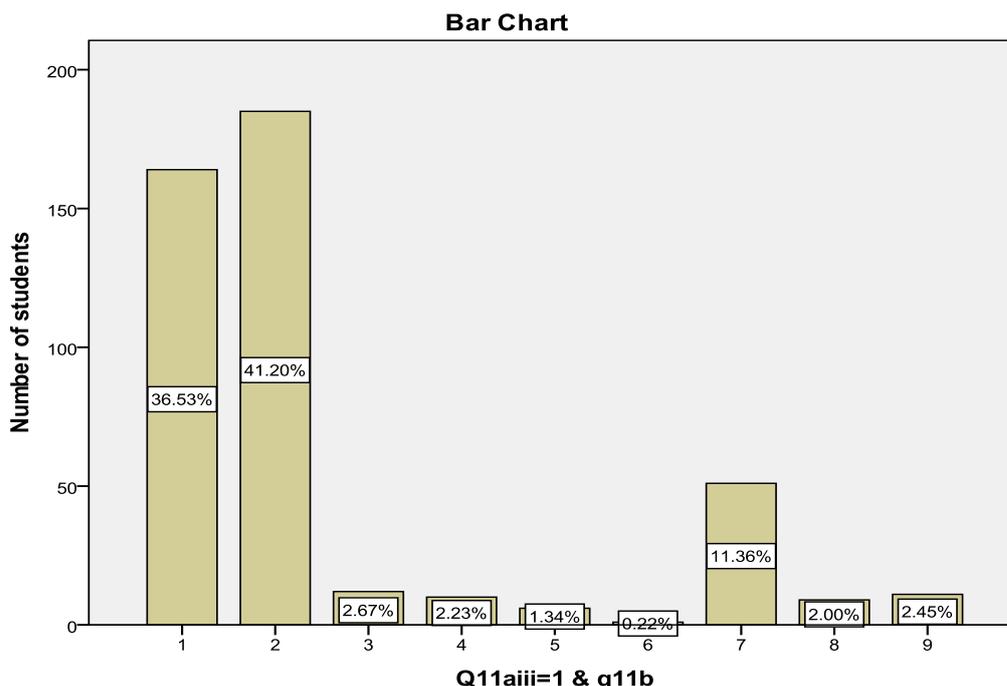


Figure 7. Percentages by coding category for ranking Item 11a iii (task type 2) as favourite.

It can be observed from figures 5-7 that amongst the Grade 5/6 students surveyed, those students who ranked type 1 tasks as their favourite valued these tasks for one of the following three categories of reasons: “Challenging (more complex, lots of steps / have to think / I learn something new / improve)” (coding category 1, 31.65%), “Easy to do / understand (instructions clear) / I’m good at this / we do this a lot” (coding category 2, 42.62%), and “Fun / I like this type of operation (eg division) or topic (eg area)” (coding category 7, 16.46%). Type 2 tasks (item 11a iii) were nominated as favourite by students for the same categories of reasons, namely, coding categories 1 (36.53%), 2 (41.20%), and 3 (11.36%). Similarly, the same reason categories (30.22%, 42.68% and 11.53% respectively) corresponded to student nomination of task type 3 (item 11a ii).

It is worth noting that across both items 9 and 11, student reasons for nominating particular questions as being their favourite amongst task types 1, 2 and 3 were deemed to be dominant in the sense that the reason categories collectively accounted for 84.43% to 91.14% of reasons provided for each question.

Research question 3

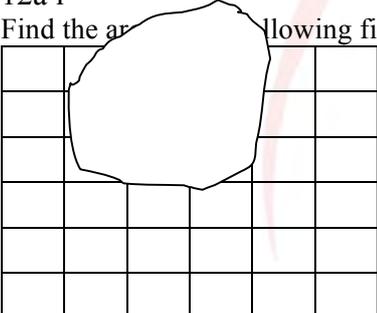
The third research question is: Through what types of mathematical tasks do Grade 5 and 6 students in Chongqing, China learn the most? Responses to items 10 and 12 of the questionnaire provide the requisite data to help us better understand the nature of such tasks. Table 4 summarises the collated frequencies.

Looking across the three types of questions/tasks in question 10, the data shown in Table 4 indicate that the majority of student respondents found themselves learning the most from task type 3 (open-ended questions) (75.88%), followed by task type 2 (contextualised questions) (60.48%), and least from task type 1 (model/representation/explanation type questions) (62.96%). Interestingly, this trend was not observed amongst the three question/task types in question 12. In fact, as shown in

Table 4, it seems that a similar number of respondents associated the most learning with task types 1 and 2, the second most learning with task types 2 and 3, and least learning with task types 1 and 3.



Table 4
Grade 5/6 Students' Ranking of Mathematical Tasks from which they Learnt the Most

Item number and Question	Task type	Learn the most	Learn second most	Learn the least	Valid n
10a i An adult cinema ticket costs RMB25, and a child ticket costs RMB12. How much would the tickets cost for 2 adults and 4 children to watch a movie?	2	167 (16.75%)	603 (60.48%)	227 (22.77%)	997
10a ii 2 adults and 4 children spent RMB120 on movie tickets. How much might an adult ticket and a child ticket cost?	3	758 (75.88%)	161 (16.12%)	80 (8.01%)	999
10a iii $25 \times 2 + 12 \times 4 =$	1	151 (16.17%)	195 (20.88%)	588 (62.96%)	934
12a i Find the area of the following figure. 	1	387 (39.17%)	265 (26.82%)	336 (34.01%)	988
12a ii If the area of a figure is 10 square units, what might the shape of the figure be?	3	266 (27.45%)	345 (35.60%)	358 (36.95%)	969
12a iii An athletic track is made up of two straight sections and two semi-circles. The straight section is 100m long. What is the area of the athletic track? 	2	478 (48.33%)	332 (33.57%)	179 (18.10%)	989

Student respondents were also invited to provide reasons why particular tasks help them to learn most. The same codes as those used in analysing students' favourite task types (see Table 3) were used here. It can be observed that amongst these Grade 5/6 students, the most dominant reason cited for learning the most from type 3 tasks (as represented by item 10a ii) was that of "Challenging (more complex, lots of steps / have to think / I learn something new / improve)" (83.51% of students).

As observed above, student ranking of the three questions in item 12 according to which would have afforded the greatest learning opportunities was rather equivalent across the three task types.

An examination for the reasons which the students attributed to their respective ranking choices revealed that regardless of task type, the one deemed to be helping the students to learn the most was so for the dominant reason category again of “*Challenging (more complex, lots of steps / have to think / I learn something new / improve)*”, made up of 83.20% of students for task type 1, 74.90% of students who ranked task type 2 first, and 74.81% of students who ranked task type 3 first.

Findings

Based on the results presented above, we propose tentative findings in this section. With regards to mathematical tasks which are commonly used in Grade 5/6 classrooms in Chongqing, it was found that the following activities were dominant: working from textbooks and worksheets, answering questions which the teacher has written on the board, answering questions which allow for student practising of what the teacher has shown, and working out how to do questions themselves. On the other hand, the students reported that activities involving working on the same problem for more than one lesson, or activities involving the use of calculators or computers, took place rarely, if at all. Statistically significant differences were found between the responses of Grade 5 and Grade 6 students for 9 of the 12 activities used in this study.

In particular, three task types have been explored in this study. Type 1 tasks pertain to the introduction to or use of models, representations, tools or explanations to exemplify the mathematics; Type 2 tasks refer to contextualised practical situations; and Type 3 tasks are open-ended tasks.

The majority of the Chinese students nominated Type 2 tasks as their favourite or second most liked. On the other hand, most of them nominated Types 1 and 3 tasks as their least liked, and consistently so for the former. Across all task types, one or more of the following three categories was cited as the reason for being nominated most liked: ‘challenging (more complex, lots of steps / have to think / I learn something new / improve)’; ‘easy to do / understand (instructions clear) / I’m good at this / we do this a lot’; and, ‘fun / I like this type of operation (eg division) or topic (eg area)’.

There is no sufficient evidence, however, that favourite task types translate to opportunities where students learn most. This is not to say that there were consistent nominations of the task types through which students learnt best, although Type 3 tasks were commonly cited. What was consistent, however, was the reason students associated with any task type which helped them learn best, that is, ‘challenging (more complex, lots of steps / have to think / I learn something new / improve)’. Thus, it appears that the extent to which students learn best is regulated by student valuing of *challenge*, regardless of task types.

Concluding remarks

Three types of mathematical tasks were examined in this research study. In general, it may be proposed that Grade 5/6 students in Chongqing, China liked to engage with tasks involving contextualised, practical situations most, followed by open-ended tasks; and then tasks involving representations. While a variety of reasons were given for preferring particular task types, a majority of these fall into one of three reason categories, which we will loosely associate with the valuing of *challenge*, *confidence*, and *fun*. In class, on the other hand, these students reported being given tasks involving problem-solving or practice work from textbooks, worksheets and/or questions written on the board, with little or no use of calculators and ICT technologies, nor of extended investigations. Further investigations will be made in the next phase of this study to help us understand better the extent to which these classroom activities match the students’ task type preferences, as well as the nature of the differences in the relative frequencies of use of these classroom activities between Grade 5 and Grade 6 classes and between genders. In terms of the task

types which students learn most with, the data do not show any definitive trend, although there appears to be a skew towards open-ended tasks. Interestingly, student learning from mathematical tasks did not appear to be in line with student preference of task types. However, it seems that student valuing of *challenge* has consistently accounted for those mathematical tasks with which students learnt most. The possibility that effective mathematics learning is associated with particular features of mathematical thinking and activity, and that such values can manifest through a variety of task types, would be one objective of investigation in the next phase of this study, involving targeted inquiry with a sample of participants purposively selected from amongst the 1109 students.

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Title: A New Bilingual Instructional Model: Health studies in Thai secondary school level

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Seminar sub-theme: Teaching and learning methodologies

Seminar sub-theme: Languages Education and Applied Linguistics (ESL/TESL/TEFL)

Title: A New Bilingual Instructional Model: Health studies in Thai secondary school level
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ABSTRACT

The purpose of this paper is to introduce a new bilingual instructional model for Health Studies in a Thai secondary school. Health Studies is one of the most difficult subjects for the bilingual students within an L1 context; the main obstacle being the complicated English topical terminology that is used. Therefore, it made sense that a new instructional model, which incorporated Experiential Learning Theory (ELT) and Content and Language Integrated Learning Approach (CLIL), should be developed. Consequently, in an attempt to promote more effective bilingual learning, this model is now in an experimental stage. The model teaching course for Health Study is named "HEC" (Health Studies module based on Experiential Learning Theory and Content and Language Integrated Learning Approach). So far the student response has been positive in both their attitude to learning and their task performance. HEC has been evaluated by focusing on several different aspects of the model and by using a questionnaire employing a 5-point Likert scale. The model was then analysed by seven qualified experts with an average result of 4.87. It is hoped that this HEC model will contribute to the development of an innovative and effective bilingual teaching model within an L1 context.

Key Words: bilingual, instructional model, Health Studies, Experiential Learning Theory (ELT), Content and Language Integrated Learning Approach (CLIL), HEC, attitude, task performance

1. Introduction

English language is now the most widely taught foreign language in the world. English is the language that people use to communicate through numerous forms of media; libraries, schools, and telecommunication systems. The increasing quantities of teaching materials are also available in English (Crystal, 2003; Richard, 1985). Many studies have supported that language learning is most meaningful when the language is used as the medium of receiving information or in real communicative environments and situations (Genesee, F., 1987; Curtain & Martinez, 1990, p. 202; Baker, C., 1993; Dalton-Puffer, C., 2005). Thus, many countries have provided bilingual teaching by integrating English language content subjects into the classrooms in order to enable learners to develop the ability of using English as a global language.

Thailand is one of a number of countries where the Ministry of Education (MOE) establishes a policy of developing bilingual teaching as part of innovative school projects under a law called Basic Education of Thailand (Ministry of Education, 2008). Teaching health studies at the secondary level is one of the main content subjects which are provided in Thai bilingual education. Therefore, the implementation of the Content and Language Integrated Approach (CLIL) for teaching health studies in English encourages the use of health content discourse in authentic communicative situations.

A study of the needs in a bilingual program in a Thai secondary school where the experimental process take place, indicated that the students had negative attitudes towards health studies, with difficulty in understanding technical terms being cited as the main cause (Samawathdana, 2009). In addition, negative attitudes and low motivation make language learning more difficult. Thus, it is important for teachers to be aware of, and to encourage positive, attitudes in their pupils (Gardner -- Oxford, 2001, p. 168).

Consequently, the development of a new way of teaching to bilingual students is a necessity and a challenge for the teachers. This paper aims to describe the model named "HEC" (The new Health Studies module based on Experiential Learning Theory and Content and Language Integrated Learning Approach). This bilingual teaching model for Health Studies was constructed by synthesising Experiential Learning Theory (ELT) and Content and Language Integrated Learning Approach (CLIL). Though in experimental stages, the expected outcomes of the HEC model are directed at investigating two main areas, health behaviour and the ability to use English for specific content communication.

The details of the research outcome will be presented further after the implementation has been completed. Since the HEC model has been approved by seven qualified instructional specialists, here demonstrated is the theoretical framework, the HEC model, and the model's implementation.

2. Theoretical Framework

2.1 Experiential Learning Theory (ELT)

Kolb created the Experiential Learning Theory (ELT) from the work of Dewey, Lewin, and Piaget (Kolb, Boyatzis, & Mainemelis, 2002). Dewey's experiential educational theory claimed that a way of teaching and learning that values the individual and collective learning is gained by lived experience (Dewey, 1938). Lewin's experiential learning was based on social psychology and the well-known T-Group project where learners can share a common objective, and act together to achieve the learning objectives (Lewin, 1951). Kolb explains, "Stated most simply, Piaget's theory describes how intelligence is shaped by experience." Two of the processes studied by Piaget, accommodation and assimilation, have particular relevance to understanding the ways in which experience informs thinking (see more in Kolb, 1990; Jacobson and Ruddy, 2004, p. 13).

All stressed that the centre of learning lies in the way of processing experiences, in particular, critical reflections on experiences and the meanings we draw from them. Learning in terms of ELT means "the process whereby knowledge is created through the transformation of experience" (Kolb 1984, p. 41). Learners build deep understanding and expertise by cycling through the four steps of the experiential learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb et al., 2002).

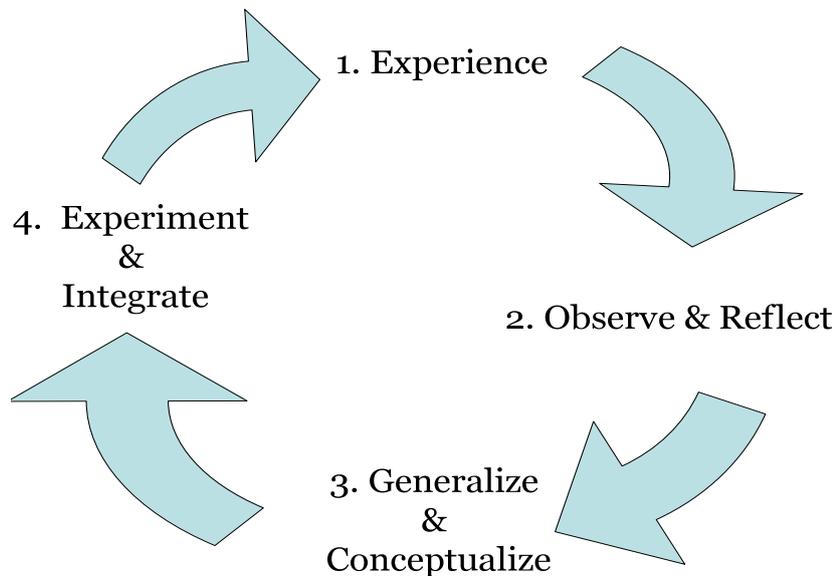


Figure 1: Experiential Learning Theory's Cycle (Kolb, 1984)

- Concrete experience (feelings): Learning from specific experiences and relating such learning to people. Being sensitive to other's feelings.
- Reflective observation (watching): Observing before making a judgement by viewing the environment from different perspectives. Attempting to look for the meaning of things.
- Abstract conceptualization (thinking): Logical analysing of ideas and acting on intellectual understanding of a situation.
- Active experimentation (doing): Having the ability to get things done by influencing people and events through action. Includes risk-taking.

Kolb's ELT provides opportunities for students in leadership programs to explore effective behaviors in handling the myriad of tasks they will face, and it also has generative power to be used as a reflective tool for those who teach in those programs. Others (Armstrong & McDaniel, 1986; Jackson, 2002; Holman, Pavlica & Thorp, 1997; Katz, 1990; Kayes, 2002) have argued that learning how to access all four modes and learning styles can help potential leaders become flexible and discerning in responding to organizational problems. Moreover, ELT encourages students to be passive learners and have a more active role in their classroom. The marketing education literature has proposed numerous activities, such as games and simulations to foster experiential learning (Crookall, D. & Oxford, R. L., 1990; Anselmi & Frankel, 2004; Bobbitt, Inks, Kemp, & Mayo, 2000; Daly, 2001; Gremler, Hoffman, Keaveney, & Wright, 2000; Hamer, 2000; Petkus, 2000).

2.2 Content and Language Integrated Learning Approach (CLIL)

CLIL is a general term that covers diverse ways of using a foreign language in instruction (Nikula, 1997). CLIL has been widely used in Europe since the 1990s, largely due to the language policies. Moreover, the policies were an important part of The Action Plan of the Commission of the European Communities from 2004-2006 urging the member countries to promote language learning and linguistic diversity. It has been written: “CLIL has a major contribution to make to the Union’s language-learning goals. It can provide effective opportunities for learners to use their language skills now rather than learn them now for later use.” As a result, the schools that wished to introduce a CLIL approach were able to receive increased support (Commission of the European Communities, 2003). It is well known that many countries use English as an L2 or as EFL.

When teaching a subject through a foreign language, it is sometimes necessary to use the pupils’ L1 to clarify the content. Especially for young learners, some content can be taught first in their mother tongue and afterwards in the foreign language. In order to make understanding and the language-learning process easier, teaching methods are of an illustrative and concrete character. Teaching is more comprehensive and more concise than when it is carried out in their mother tongue (Nikula & Marsh, 1997, pp. 52–54). The same concepts are repeated several times in different manners. Phrases and expressions related to the school day, repeated day after day, are an important part of the teaching norm. It is sometimes difficult for struggling learners to understand what is being taught in a foreign language, but if familiar with the often repeated routines and structures of instruction being used, learners are able to predict what will happen next. The CLIL research that has so far been conducted on education in Europe suggests that its results are quite encouraging both in terms of language development and subject mastery (e.g. Huibregtse, 2001; J’appinen, 2003; Laitinen, 2001).

CLIL is the use of an L2 in the teaching of non-language subjects (Dalton-Puffer, 2006). According to (Mehisto, Marsh, & Frigols, 2008). CLIL is a tool for the teaching and learning of content and language. The essence of CLIL is the integration of a dual focus: (1) Language learning is included in content classes (e.g. maths, history, geography, science, civics, etc). This means repackaging information in a manner that facilitates understanding. Charts, diagrams, drawings, hands-on experiments and the drawing out of key concepts and terminology are all common CLIL strategies. (2) Content from subjects is used in language-learning classes. The language teacher, working together with teachers of other subjects, incorporates the vocabulary, terminology and texts from those other subjects into his or her classes. Students learn the language and discourse patterns they need to understand and use the content. In addition to a focus on content and language, there is a third element that comes into play. Learning skills constitute the third driver in the CLIL triad. The three goals of content, language and learning skills need to fit into a larger context. There are also principles in CLIL to be aware of in order to apply them into the teaching process. The principles can serve as a reference point for lesson planning. The principles or CLIL drivers can be further broken down as follows into teacher and student outcomes for CLIL lessons (Mehisto, Marsh, & Frigols, 2008).

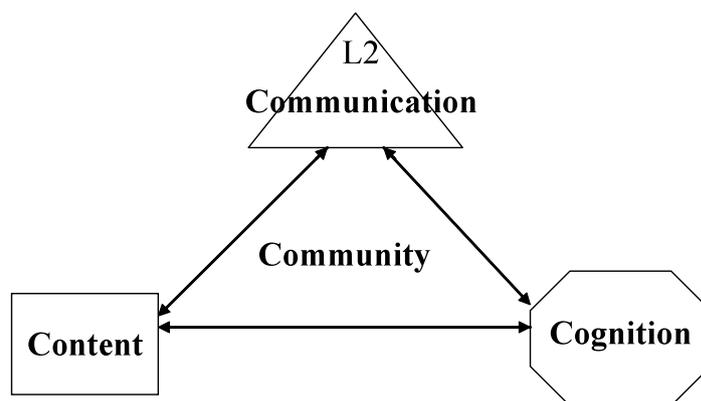


Figure 2: The 4 Principles of CLIL (adapted from Mehisto, Marsh, & Frigols (2008)).

- (1) **Cognition:** Content, language and learning skills outcomes are articulated in co-operation with the student's learning building on the student's existing knowledge, skills, attitudes, interests and experience. The student analyses the achievement of learning outcomes independently, with other students, and with the teacher, then work to set a new goal. The student synthesizes, evaluates and applies the knowledge and skills acquired in several subjects.
- (2) **Community:** Students feel that being members of a learning community is enriching. Students have the self-confidence and skills to work within a group and the local community, balancing personal interests with those of other students. Teachers, (and parents, employers, etc) are partners in their education. Students can define their role within the classroom, the local area and a global context.
- (3) **Content:** Content is clearly linked to the community within and outside of the classroom. Students apply new content and develop related skills through experiential activities. The content is substantive without being overwhelming. Content from various subjects is integrated. Cultural content is integrated into all subjects.
- (4) **Communication:** Students actively use the right to participate in activities and communication in the classroom and in the community. Desk placement, displays on classroom walls and other available resources support learning and communication. Students and teachers co-construct and negotiate. Meaningful language and communication skills are developed in all subjects.

2.3. Health Studies in Thai Secondary Schools

According to the Ministry of Education of Thailand (2008), many schools in Thailand are using or are going to use the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) which replaces the Basic Education Curriculum B.E. 2544 (A.D. 2001). The school where this study was involved used the curriculum under the Ministry of Education (MOE).

2.3.1 The Basic Education Standards of Thai Education under the Ministry of Education's curriculum for Health Studies also covers the content of Physical Education, together they are composed of five themes as presenting in Table 1 (The Ministry of Education of Thailand, 2008).

However, the Standards for Health Studies is only composed of four of the five themes, the third theme is reserved exclusively for Physical Education. Secondary level has eight main subjects: Maths, Sciences, Social Studies, Thai Language, Foreign Languages, Home-economics and Technology Studies, Art Studies, and Health and Physical Studies. Health and Physical Studies are unique in that just one period of each is provided per week. There are two terms in an academic year, with each term comprising 20 weeks. Since the Health Studies curriculum represents 0.5 of a credit (one term), it consists of 20 periods (hours). Table one illustrates theme contents with indicators and learning standards for Mathayom 2 or Grade 8 (See Table 1).

Table 1 Standards and Indicators for Health Studies in Mathayom 2 (Grade 8) (Thai Ministry of Education, 2008)

Key Stage Indicators for Grade 8	
Strand 1: Human Growth and Development	<p>Standard H1.1: Understanding of nature of human growth and development</p> <ol style="list-style-type: none"> 1. Explain changes in physical, mental, emotional, social and intellectual respects among teenagers. 2. Specify factors affecting growth and development in physical, mental, emotional, social and intellectual respects among teenagers.
Strand 2: Life and Family	<p>Standard H2.1: Understanding and self-appreciation; family; sex education; and life skills</p> <ol style="list-style-type: none"> 1. Analyse factors influencing attitudes about sexual matters. 2. Analyse problems and effects of having sexual intercourse at school age. 3. Explain methods of self-protection and avoid sexually transmitted diseases, AIDS and unwanted pregnancy. 4. Explain the importance of gender equality and conduct themselves appropriately.
<p>Stand 3: Movements, Exercises, Games, Thai and International Sports</p> <p style="text-align: center;">This theme is exclusively Physical Education.</p>	
Strand 4: Health Strengthening,	Standard H4.1 : Appreciation and skills in health strengthening; maintaining

Capacities and Disease Prevention	<p>one's health; disease prevention and strengthening capacity for health</p> <ol style="list-style-type: none"> 1. Choose to use health services with proper reasons. 2. Analyse effects of technological applications on health. 3. Analyse medical advancement affecting health. 4. Analyse relationship of the balance between physical and mental health. 5. Explain basic characteristics and symptoms of those who have mental health problems. 6. Recommend methods of self-conduct for managing emotions and stress.
Strand 4: Health Strengthening, Capacities and Disease Prevention	<p>Standard H4.1: Appreciation and skills in health strengthening; maintaining one's health; disease prevention and strengthening capacity for health</p> <ol style="list-style-type: none"> 7. Develop their own physical capacities so as to meet the criteria prescribed.
Strand 5: Safety in Life	<p>Standard H5.1: Prevention and avoidance of risk factors; behaviours detrimental to health; accidents; use of medicines; addictive substances and violence</p> <ol style="list-style-type: none"> 1. Specify methods, factors and sources of assistance and rehabilitation for drug addicts. 2. Explain methods of avoiding risk behaviours and risk situations. 3. Apply life skills for self-protection and avoid emergent situations conducive to dangers.

2.3.2 Health Studies learning process as suggested by The Ministry of Education of Thailand, (2008)

The goal of Health Studies is to encourage good health and an improved lifestyle for individuals, families and communities. Students can gain knowledge and self-confidence and apply their

knowledge to daily life. Students must be aware of their health and physical ability. It is important to strive to build a good and safe lifestyle based on Thai standards. There are a variety of learning processes in the physical and health education group. They depend on a student's abilities, needs and interests. There is an emphasis on activities such as planning, practice, tests and assessments in order to improve decision-making. Activities include encouraging good health and active learning. Students must practice management and communication skills, as well as be responsible and able to face problems. They learn to take care of their own bodies and health.

2.3.3 Learning Measurement and Assessment as suggested by Thai Ministry of Education, (2008)

Learning measurement and assessment is necessary for learning management. The measurement and assessment of students is useful in many ways. For example, past information helps to monitor students' progress, adjust activities to meet students' needs, help students become aware of their own ability and learning development, discover new things and solve problems. The National Education Act B.E. 2551, Section 26, states clearly that schools must evaluate students. Teachers have to evaluate students in many areas, including their development, behavior, learning techniques, participation in activities and examinations before receiving a final grade. Therefore, teachers should evaluate students based on the following principles, so that the Health Studies' learning process is in agreement with the National Education Act:

- Formative Evaluation and Summative Evaluation covers knowledge, skills, processes and values. The emphasis is on using the evaluation results to improve teaching and learning processes and achieve the curriculum goals.
- Authentic Learning and Assessment reflects students' ability and performance.
- Assessment during Teaching and learning processes evaluates the work and work processes of learners.
- Student Participation involves self-evaluation, evaluation by friends or groups of friends and evaluation by related persons.
- Evaluation of Students in All Areas includes behavior, observation of learning patterns, and participation in activities and tests that are suitable for each grade level and subject.

2.4 Designing an instructional model

Instructional models provide procedural frameworks and steps for preparing a basis of instruction for classrooms with a systematic production of instruction. They incorporate fundamental elements of the instructional design process including analysis of learners' needs, determining goals and objectives (Braxton, S., Bronico, K., & Looms, T., 1995). Models help to visualize the overall plan of teaching and evaluating processes, classroom management, and content planning. A model should be judged by how it mediates the designer's intention, how well it can share and distribute a work load, and how effectively it shifts focus away from itself toward the object of the design activity (Ryder, 2001). Instructional models prescribe how combinations of

instructional strategy components should be integrated to produce a course of instruction (Braxton et al., 1995).

An instructional design model is a three-phase process. In the first phase, a needs assessment is performed. This phase is followed by a design phase. In the third phase, instruction is developed and implemented. In this model, all of the phases involve a process of evaluation and revision. The Hannafin Peck design model is simple but elegant in the way in which all three phases are connected to "evaluate and revise". This may not be a model designed for a novice, but its focus on constraints in relation to quality and complexity is appealing (Hannafin, M. & Peck, K., 1988).

Rapid Prototyping Design Model is a four-level process that is intended to create instruction for lessons as opposed to entire curricula. The process stages include performing a needs analysis, constructing a prototype, utilizing the prototype to perform research and installing the final system (Tripp & Bichelmeyer's, 1990).

Bloom's (1976) Model of School Learning is an input-process-output model. It is based upon extensive analysis of research literature and Bloom's own research. Instead of the age-old thinking that there are good learners and poor learners, Bloom believed there were faster learners and slower learners. The model has three categories: student characteristics, instruction, and learning outcomes. One of the strengths of this model is that Bloom considered the role of attitudes in the instructional process, such as the subject matter, school, and attitudes towards oneself as a learner. It is also interesting that Bloom's model presented time factors as an outcome of instruction. Learning rate, which is a time factor, is important because the learning process skill has been identified as a major goal of instruction, in addition to content area achievement.

To synthesise a bilingual instructional model for Health Studies based on ELT and CLIL, the model was constructed by recruiting the components of an instructional model, on which a needs analysis was conducted beforehand. (See Figure 3)

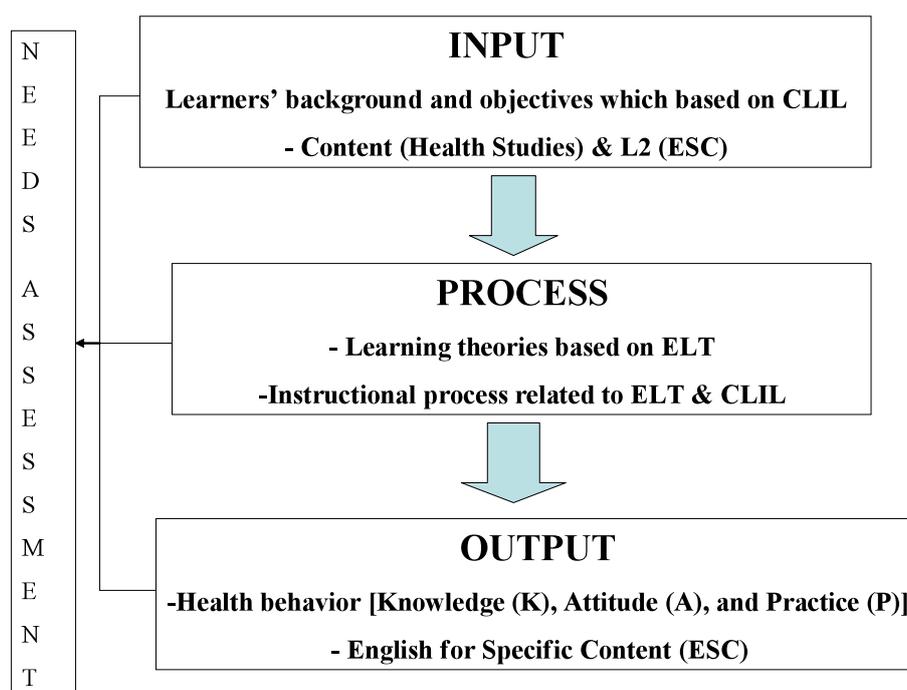


Figure 3: Study Framework for Developing HEC Model

The components of instructional models from Braxton's et al. (1995) and The Hannafin Peck (1987) was integrated into Bloom's model in order to produce a new clarified model.

- Learning theories which suggest that the effectiveness of instructional models are based on learning theories (Braxton et al., 1995).
- Needs assessments which provide goals and objectives of learning, content, learning processes, and evaluating processes (Hannafin and Peck, 1987; Tripp and Bichelmeyer, 1990).
- Input-process-output (Bloom, 1976)

This HEC model relied upon the curriculum and instructional expertise of seven qualified experts as well as their vast experience. Also, an advisor and a co-advisor, of a well-known Thai institution, assisted in guiding the design. The experts responded to questionnaires and evaluation forms concerning the model handbook, lesson plans, and evaluation instruments using the five-point Likert scale (Likert, 1931) with an overall average of 4.87. In addition, the suggestions in the open-ended parts mostly focus on the Health Studies' content and the evaluation pattern. Comments made addressed the amount of content involved and the issue of time consumption, as well as there being concerns over the evaluation pattern whereby the items in both the pre- and post-tests were not balanced with the content of the units. The suggestions were taken into consideration and alterations were made to the lesson plans to solve the time issue, and the test blueprint was reorganized to better measure the evaluation system.

Presently, the experiment is at its 11-week mark which implies that two units and a midterm examination have been covered. It has been determined that both the response from the learners' attitudes toward the learning process as well as task performances garnered positive results.

3. The new **Health Studies** module based on the **Experiential Learning Theory** and the **Content and Language Integrated Learning Approach (HEC)**

Objectives in HEC model aim to develop the learners in two areas: (1) To enhance the learners in health behavior; and, (2) To develop the ability of the learners in communicative skills focusing on English for Specific Content. The content used in HEC model is demonstrated by giving an example of a Health Studies course for learners in Grade 8. The model learning process, evaluation, and instructional steps are here described as the following parts.

3.1 HEC model content recruited the use of the Health Studies content for Grade 8 learners under the Ministry of Education of Thailand curriculum to ensure that the learners are able to cover the curriculum of Thailand at the same time as the non-bilingual programme learners. (See Table 2).

Table 2 Unit Planning for Health Studies M2 (Grade 8) for Term 1 Academic Year 2010

Lesson No.	Unit/Content	Weighting Score (%)	Number of Learning Periods	Week No.
1	Introduction	-	1	1
2	Unit 1 Learning Teen Sexuality	20	4	2-6
3	Unit 2 Sexually Transmitted Diseases & Public Health Agencies in Our Community	15	5	7-10
	Midterm Examination	10	1	11
4	Unit 3 Teen Social Lives	10	2	12-13
5	Unit 4 Teenage Emotions	10	2	14-15

6	Unit 5 Teen Risks	15	4	16-19
	Final Examination	20	1	20
	Total	100	20	

Scoring system for Term 1: scores throughout learning (formative evaluation) 80: score for final examination 20 (summative evaluation)

3.2 HEC model learning process

The model is developed and adapted using Kolb’s ELT cycle and integrated the CLIL approach with respect to the learning theories of cognition, behavior, motivation, and social within the learning process. To design the units and lesson plans, the teacher should be aware of each stage; for example, observing and reflecting the experience, conceptualizing using debriefing for the learning, and then creating a new experience.

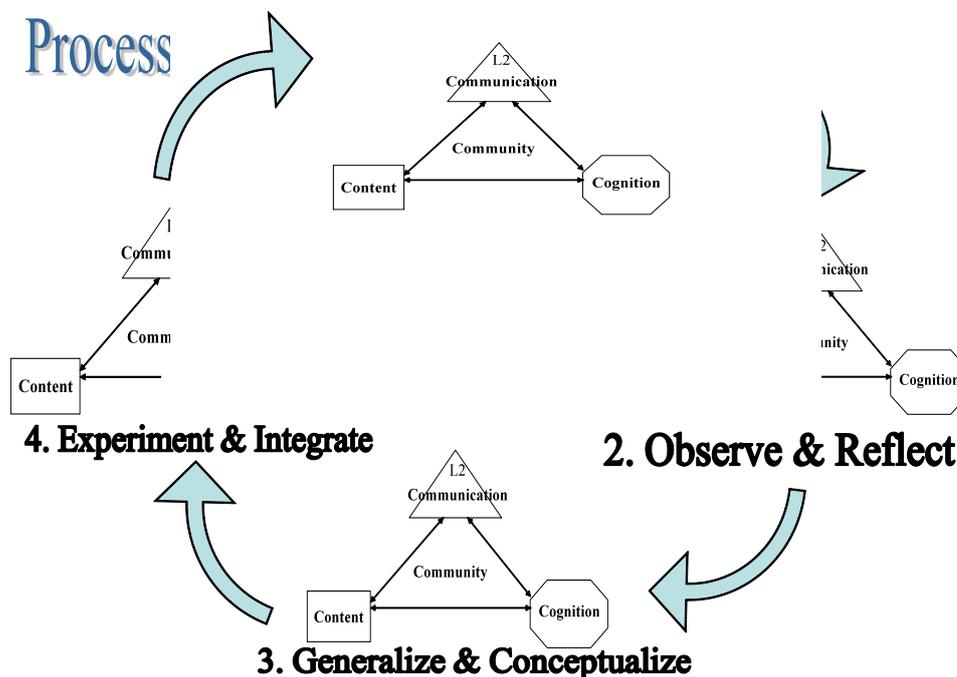


Figure 4: Learning process of HEC model

Figure 4 demonstrates a part of the model, the learning process of HEC model which is composed of four learning stages. Each learning stage integrates subject matter content (Health Studies) and communicative skills related to English for Specific Content (ESC) of the four dimensions of

CLIL approach, content, communication, community, and cognition. The four integrated ELT and CLIL are (synthesised from Kolb, 1984 and Mehisto, Marsh, & Frigols, 2008).

(1) Experience: acquiring experience by practice doing. The teacher provides activities by simulating the situation or environment which encourages the learners to learn new experiences relating to the Health Studies content in L2 (ESC). The learning processes should apply both the content of a subject matter and develop ESC skills through experiential activities. Therefore, the learners should be able to apply the learning to their real lives and be able to adapt themselves into their social community.

(2) Observe & Reflection: when the learner consciously reflects back on that experience. The teacher provides activities by simulating the experience relating to the content subject and LSC. The simulated experience should involve activities which the learners can observe and reflect upon using thinking processes individually and then discuss with others using LSC communicative skills.

(3) Generalize and Conceptualize: where the learner attempts to conceptualize a theory or model of what is observed. The teacher provides activities which learners can debrief to manage and categorize the ideas of the learning content. The learning content is related to the subject matter (Health Studies) and L2 (LSC). The LSC is focused on technical terms using communicative skills while the learners are participating in the learning process. In this stage the learners should generalize and crystallize the ideas into abstract concepts.

(4) Experiment and Integrate: where the learner is trying to plan how to test a model or theory or plan for a forthcoming experience. The teacher provides authentic activities and encourages the learners to apply and integrate the abstract concept from the third stage into the concrete by practicing doing (experiment) using Health Studies content and LSC communicative skills. The students should be able to produce a new experience by performing or presenting their new creative abstract concept into their new real life experience.

3.3 HEC model evaluation

The evaluation in HEC model focuses on two main areas which are health behavior and English for Specific Content (LSC) communicative skills. The first area, health behavior, in this context means knowledge, practice, and attitude toward health content. The second area, LEC communicative skills, means the ability to use LSC for writing, speaking, reading, and listening skills. The evaluation composes of learning measurement and assessment by planning a formative evaluation in each unit plan using both qualitative and quantitative data. For qualitative data, teachers observe learners' performance during the learning process, and for quantitative data, teachers analyze the qualitative data then transfer this data into quantitative data by constructing scale criteria. Table 2 presents an example of selected topics from the Health Studies content which shows the weighting score between the learning process, midterm, and final score. The grading scale for evaluating the learners is simple and is no different from the other subjects at the secondary school level. For example, a Grade 4 has a score range of 80-100; a Grade 3 is

from 70-79; a Grade 2 is 60-69, a Grade 1 is 50-59, and a score under 50 represents a failure of the course.

4. Implementation of the Instructional Steps in the HEC Model

The model is an ongoing experiment in a Grade 8 or Mathayom 2 bilingual programme with 47 learners studying about half of all subjects, including Health Studies, using English as a medium of learning. The experiment will take 20 weeks (one hour a week). The mixed methods of qualitative and quantitative have been used to collect the data to be analyzed. Namely, pre-test compared with post-test, task performance for each unit, questionnaires for learning attitude and semi-structured interviews will be included as part of the data to be analyzed. For preparation purposes, a guideline of the steps is shown as part of the HEC model.

Step 1: Planning and preparing, is the step that the content (Health Studies) teacher and L2 (English) teacher co-operate in planning and the selecting of the content for the learners. Then the content teacher creates lesson plans and prepares activities following the HEC model.

Step 2: Arranging and managing the learning process, is the step at which the teacher provides the learning process of the HEC model (See Figure 4). The activities may apply the use of games and simulations into the process. The important four stages of the HEC model must be included.

Step 3: Collecting and evaluating learning outcomes, is the stage where the teacher designs the measurement and assessment of the learners by using formative and summative evaluation from the HEC model. The evaluation covers knowledge, practice, attitude, and ESC communicative skills performance toward the learning objectives.

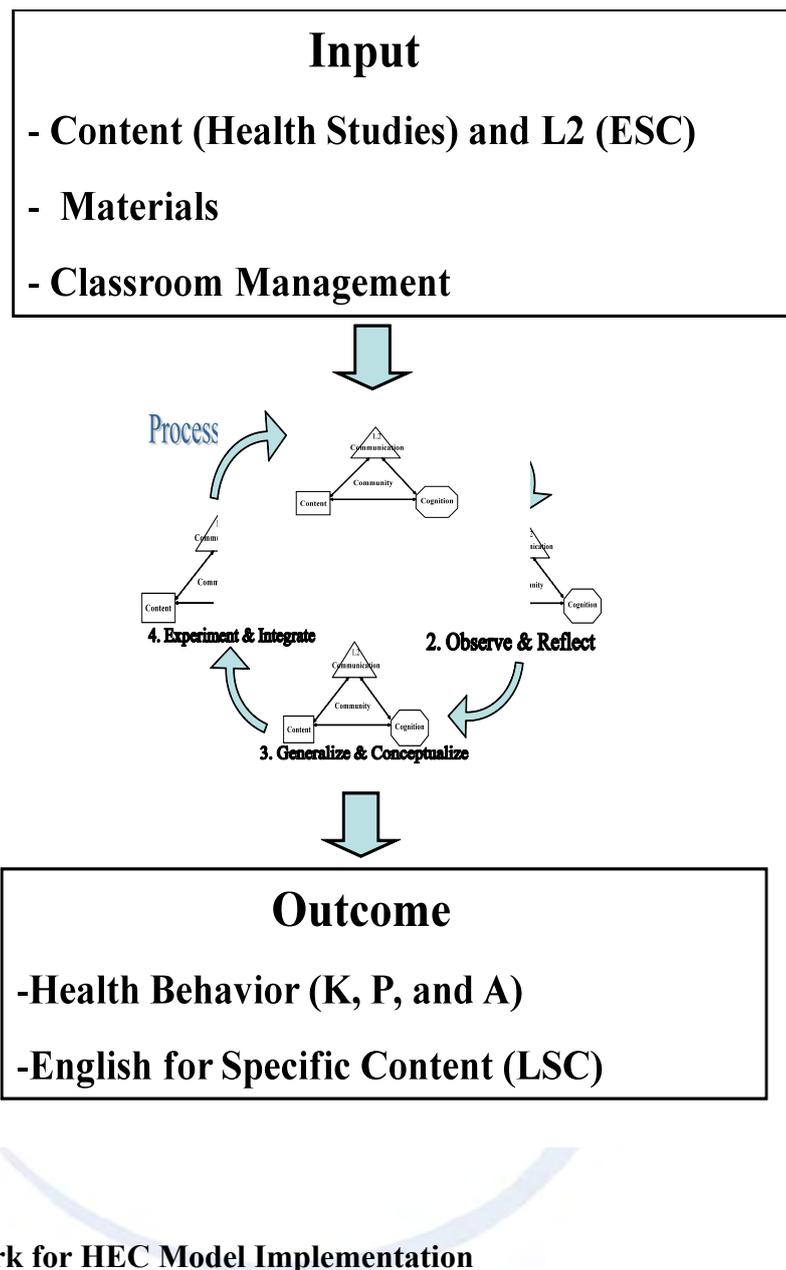


Figure 5: Framework for HEC Model Implementation

Figure 5 illustrates the framework used to implement the model into a bilingual classroom.

- Input for learners are Health Studies content and ESC communicative skills
- Process of learning in the HEC model as demonstrated in Figure 4
- Outcome of learning in the HEC model which focuses on health behavior (knowledge, practice and attitude) and ESC communicative skills performance

5. Conclusion

The purpose of this study was to construct a new Health Studies instructional model for bilingual teaching in an L2 context to benefit and fulfill the needs of learners and learning attitudes for Health Studies. The model is based on the Experiential Learning Theory (ELT) and the Content and Language Integrated Learning Approach (CLIL) by synthesizing Kolb's Learning Circle and The 4 Principles of CLIL by Mehisto, Marsh, & Frigols (2008). The reviews of learning theories based on ELT and CLIL, the components of instructional model design, as well as the nature and content of a Health Studies curriculum have been included in order to introduce the HEC model into an L1 environment in an innovative manner.

Why is the HEC model based on both the Experiential Learning Theory and the Content and Language Integrated Learning Approach? Focusing first on experiential learning, this study has reviewed the effectiveness of applying ELT into the learning process and for designing classroom activities, providing situations in which students are able to acquire and assimilate the technical terms of a particular language. It has therefore been determined that applying ELT into the HEC model seems to suit a major part of the Health Studies' learning process within a bilingual secondary classroom. With respect to the use of CLIL for this model, the idea of providing and integrating the subject matter (Health Studies) with the learning content knowledge (ESC) for the multi-purpose of learning is the intended aim of the CLIL approach. This idea seems to perfectly meet with the learning objectives of the HEC model. In other words, though ELT and CLIL equally offer effective and beneficial strengths, it has been deemed most advantageous to utilize both the Theory and the Approach to maximize the Model's potential.

It must be pointed out, however, if one is considering a design using the HEC model, users should be aware of each school's core curriculum learning standards concerning the subject matter, as well as the national educational requirements, and be prepared to facilitate all.

The future results from the HEC model experiment, which is at the half-way point of its investigation, may suggest further details once completed. In the interim, this model may be adapted and altered in a suitable way to instruct bilingual learners in other subjects. It is also hoped that this model will be beneficial in being able to solve some problems regarding a better understanding of the content knowledge as well as the learner attitudes.

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Influence of interactive white board (IWB) for cognitive load theory used in
elementary school regular-classroom and special education

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Influence of interactive white board (IWB) for cognitive load theory used in elementary school regular-classroom and special education

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1. Introduction

In this research, cognitive load theory was used to understand the nature of study. Interactive white board (IWB) has been adapting to education of elementary school. Information and communication technique were combine to find the balance of teaching and learning. The main purpose is to enhance the ability of teaching program design for teacher.

1-1. Cognitive load theory

Cognitive load theory was based on concept of human factors. This theory was widely used to discuss the nature and application of education. John Sweller presented the structure and function of cognitive load theory in 1994.[1,2] Paas, Renkl, and Sweller maintain the use of cognitive load theory in the process of cognition and teaching design and the closed relationship of teaching design and working memory load.[3]

There are three types of cognitive load, intrinsic cognitive load, extraneous cognitive load and germane cognitive load respectively. Inner and outer load are the main problem for the students those have learning difficulties. Different problem sources of disabilities need different program skill.[4,5]

The lack of Long-term memory will influence learning ability directly. Capacity of working memory includes working memory and deal efficiency. The result was direct influence by over and uniform information.[6]

Lewis and Mayer maintain that students will confuse with wrong understand in word questions.[12] These results show that teaching design combines cognitive load and base model knowledge will have best performance.

1-2. Information and communication technique

Information and communication technique (ICT) were apply to education in recent years. Bransford's research showed that there were no obviously relationship between the amount of funds and the will of teachers and the performance of

learning.[7] In this research, the influence of ICT will be particular discuss. The structure of ICT teaching environment based on IWB was showed in figure 1.[8-11]

Figure 1. IWB environment structure

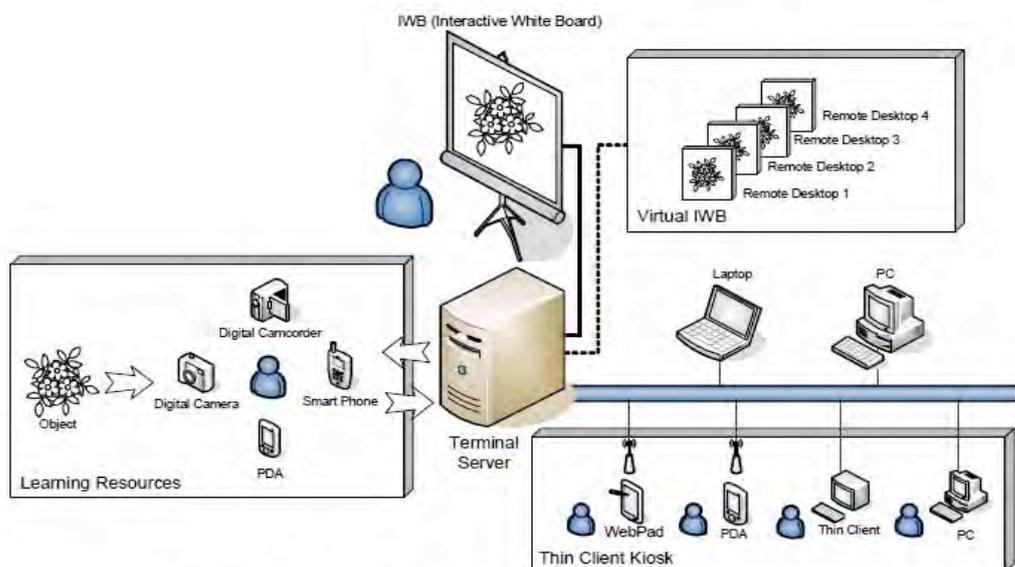


Table 1. Average and standard deviation of three teaching model

Question	IWB		OP		TP		F(2, 87)
	Average	standard deviation	Average	standard deviation	Average	standard deviation	
1	4.37	.809	4.70	.535	4.50	.509	2.113
2	4.00	.743	4.50	.731	4.57	.504	6.442**
3	4.17	1.147	4.07	.868	2.17	.986	37.582**
4	4.23	.858	4.53	.681	2.40	1.163	47.019**
5	4.10	1.094	4.40	.724	2.13	1.106	46.348**
6	4.17	1.053	4.33	.844	2.20	.961	46.140**
7	4.17	.950	4.37	.765	2.27	1.015	48.029**
8	4.03	1.098	2.37	.615	1.37	.490	89.540**
9	4.03	.890	2.30	.877	1.83	.699	59.008**
10	4.03	.928	3.87	1.042	2.07	.740	42.932**
11	4.30	.915	4.23	.774	2.23	.898	55.354**
12	4.33	.844	4.27	1.048	2.03	.765	64.356**
13	4.27	.944	4.63	.556	2.03	.765	99.783**
14	4.30	.837	4.43	.817	1.93	.868	83.905**
15	4.53	.629	4.40	.855	1.83	.834	114.408**
score	63.03	13.739	61.4	11.732	35.56	12.303	

N= 30 for all groups

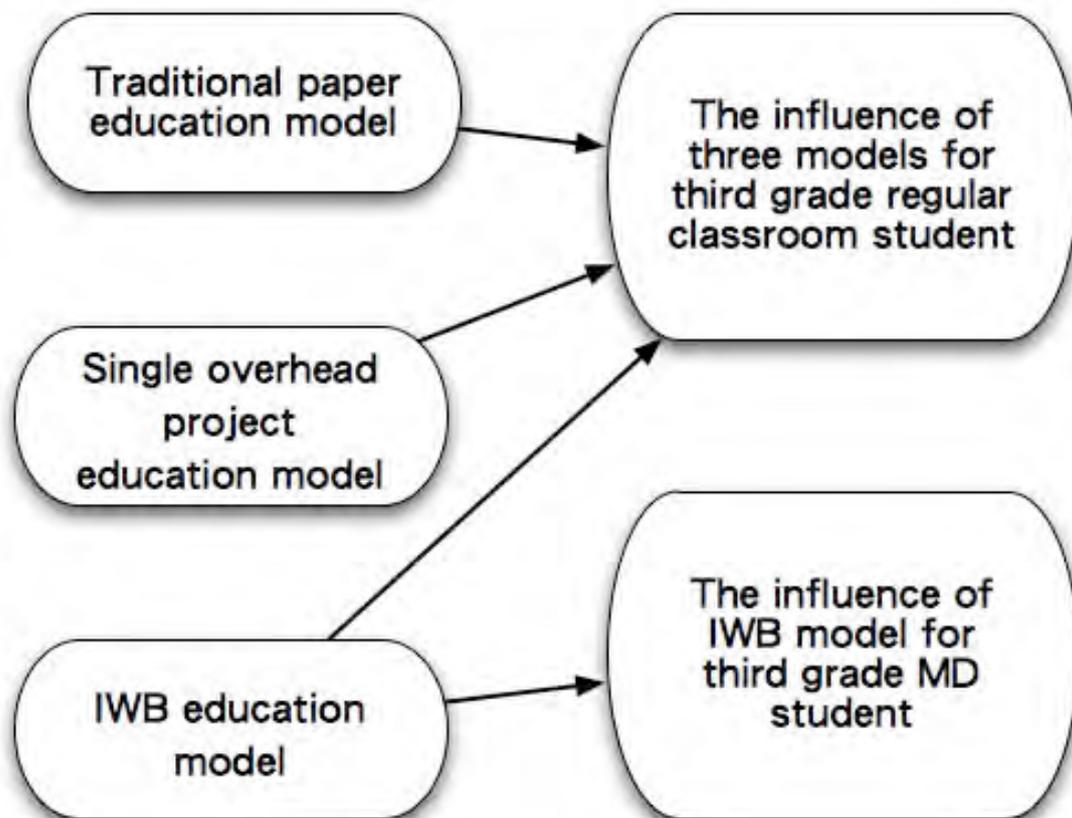
* $p < .05$, ** $p < .01$, *** $p < .001$

2. Experiments

2-1. Research structure

This research is focus on the different mathematic teaching media. Interactive white board, overhead project, traditional paper educations were used to discuss the influence of learning efficacy. Structure of research was showed in figure 2.

Figure 2. Research structure



2-2. Research participant

Participant in this article includes: 90 persons of third grade regular classroom, 6 persons of third grade mathematical difficulties. In these participants, there are 30 persons in IWB education, 30 persons in overhead project education and 30 persons in traditional education. And all 6 persons who have mathematical difficulties were in IWB education. All regular students were come form same school but different classroom. Students come from same school have same society status

2-4. Research tools

Self-made drawing book: traditional education model used copies for students, computer science was used in overhead project, and IWB used the electronic white board.

Self made questionnaire: these questionnaires were focus on the learning ability, degree of satisfaction and same direction of learning. There are 15 questionnaires and scoring in 5 degree. The contents of these questionnaires were cognitive load theory arranging anew.

Self made interview form: opinion of researcher and parent of students in math difficulties in exam.

Self made teaching daily record: records of relation information about students in the exam, includes data, subject, materials, self survey, individual responds, back coupling of same generation, special event, province thinks and equal direction degree.

3. Results and discussions

3-1. Regular students

3-1-1. Questionnaire results

The result of students of third grade with three education models was show in table 1. In exam F, questions 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15 were obvious significance. These items were comparing below and the result was showed in table 2.

Table 2. Turkey of different model

Question	Learning efficacy of different model		
	IWB \square OP \square 1 \square 2 \square	OP \square TP \square 2 \square 3 \square	TP \square IWB \square 3 \square 1 \square
2	-.500*	-.067	.567*
3	.100	1.900*	-2.000*
4	-.300	2.133*	-1.833*
5	-.300	2.267*	-1.967*
6	-.167	2.133*	-1.967*
7	-.200	2.100*	-1.900*
8	1.667*	1.000*	-2.667*
9	1.733*	.467	-2.200*
10	.167	1.800*	-1.967*
11	.067	2.000*	-2.067*
12	.067	2.233*	-2.300*
13	-.367	2.600*	-2.233*
14	-.133	2.500*	-2.367*
15	.133	2.567*	-2.700*
Total score	1.967	25.633	-27.601

* $p < .05$, ** $p < .01$, *** $p < .001$

3-1-2. Analysis

Situation of fills in answers of students in third grade showed that IWB and project have better performance in learning ability and degree of satisfaction than traditional teaching model. Software representation of IWB was better than project. There were no obviously different in other degree of direction. For overall benefit, overhear project can replace parts of IWB system.

3-2. Mathematics difficulties students

3-2-1. Questionnaire results and diary records

Generalize of questionnaire and daily record, effect of information raise sharply. For example, students feel exciting and satisfied when they record their ideas through IWB. In the other, students show high interaction and individual learning in reading and discussing self-made drawing book.

3-2-2. Interview results

Direction degrees were arranged through interview and province thinks. Process of answer questions by students can be record by software. It is easy to arrange by teacher in the future. Students are easy to be attracted by sounds and light when computer system was used. The key factor of learning of student is the guidance of teacher. No matter in design of education contents or body language. Self-confidence increase is one of the most effects in IWB. Students can be a teacher one day.

4. Conclusions

The result of this research showed that equipment limited, operate difficulties, class media, teacher style and difference of student must be concerned with IWB education.

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Fictions and Nonfictions: How do teachers use them to facilitate young children's learning and development?

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Abstract. The purpose of this study is to investigate how early childhood teachers use fictions and nonfictions to facilitate young children's learning and development. 7 teachers working in different public kindergartens in southern Taiwan participated in this study. Research data included observations, interviews, and records of classroom book collections. Data were then analyzed inductively. Preliminary findings of this work-in-progress study indicate that the participant teachers present fictions and nonfictions in different ways and for different purposes. In addition, the children in their classrooms have more access to fictions than to nonfictions.

Key Words: Informational Text, Nonfiction, Kindergarten, Children's Literature

Introduction

Children's literature plays an important role in early childhood classrooms; children's books facilitate children's emotional, social, intellectual, and linguistic development (Temple, Martinez, Yokota, & Naylor, 2002). Children's books are especially important when it comes to literacy instruction (Vacca, Vacca, Gove, Burkey, Lenhart, & McKeon, 2003). Previous studies have showed that by employing appropriate instructional strategies with children's books, such as read alouds (e.g., Duke & Kays, 1998; Palmer & Stewart, 2005), drama and play (e.g., Putnam, 1991), Directed Reading-Thinking Activity (e.g., Tompkins, 2003), literature circles (e.g., Stien & Beed, 2004), book club (e.g., Heller, 2006), and so on, children's literacy skills will be enhanced.

Children's literature includes a wide variety of genres, such as traditional literature, poetry, fantasy and science fiction, realistic fiction, historical fiction, informational books and biographies (Temple et al., 2002). Among them, fictions or narrative stories are seen as the

most accessible and meaningful form for young children to learn (Egan, 1988). On the other hand, researchers also emphasize the importance of nonfictions or informational books (e.g., Pappas, 1991). They suggest that the ability to read and write informational texts is critical (Duke, 2000). Children without this ability might encounter difficulties as they move to upper grades (Chall, Jacobs, & Baldwin, 1990). Due to the fact that texts in different genres present ideas in different ways, it has been suggested that children's ability to read and write one genre does not transfer from the competence with other genres (Donovan & Smolkin, 2002; Duke, 2000). Fictions generally include the following elements: times and places, character(s), a beginning event, a problem, attempt(s) to solve the problem, outcomes, and resolution (Vacca et al., 2003). Nonfictions on the other hand include the following commonly seen features: topic presentation, description of attributes, characteristic events, category comparison, final summary, and afterword (Pappas, 1987). Therefore, teachers should provide opportunities for children to explore different genres and help children develop the ability to read both efferently and aesthetically (Rosenblatt, 1991).

As research focused on the use of fictions and nonfictions in early childhood settings gets more and more attention in recent years in other countries, research related to this area is still needed in Taiwan. Therefore, the purpose of this paper is to present the preliminary findings of our work-in-progress study that investigates how early childhood teachers use fictions (stories) and nonfictions (informational texts) to facilitate young children's learning and development. Specific research questions include: (1) In what context and under what circumstances do teachers use fictions or/and nonfictions? (2) In what ways do teachers present fiction and nonfiction books to young children?

Methods

7 teachers (all females) working in different public kindergartens in southern Taiwan participated in this study. A description of the 7 participant teachers is outlined in Table 1.

Table 1. Description of Participant Teachers

Participant Teacher	Age	Educational Background	Years of Teaching	Children's Age level
A	34	Bachelor's Degree	12	5
B	35	Pursuing Master's Degree	11	Mixed (4 & 5)
C	38	Pursuing Master's Degree	17	5
D	34	Master's Degree	7	5
E	35	Bachelor's Degree	10	4
F	31	Bachelor's Degree	8	4
G	41	Pursuing Master's Degree	16	4

Three types of research data were collected. (1) Observations: These teachers were invited to choose two books, one fiction and the other nonfiction, and read/present these books to their students. Their presentations were videotaped and transcribed. (2) Interviews: Semi-structured

interviews with these teachers were then conducted. During the interviews, the participant teachers were asked to describe their reasons for book selections, their observations of children's responses and reactions, and their own perceptions of their use of children's literature. (3) Classroom book collections: Titles and genres of books to which children had access were also recorded.

The following steps were followed to analyze the research data: (1) Teachers' presentations and interviews were videotaped/audiotaped, transcribed verbatim, and annotated. (2) Significant meaning units were marked and extracted. (3) A list of emerged codes was created, compared and contrasted. (4) A list of emergent themes was created and listed.

Preliminary Findings

Data analysis is still ongoing. The following is a summary of our preliminary findings. (1) The participant teachers use fictions and nonfictions for different instructional purposes. The teachers tend to use fictions to teach children moral lessons or to guide children's behaviors, while nonfictions are used more often in formal thematic unit activities to provide children concrete facts or knowledge of the world. (2) The participant teachers use more calm, formal language to present nonfiction books; however, their presentations of fiction books tend to be in the form of oral language with dramatic expressions. (3) When presenting nonfiction books, the participant teachers tend to focus more on the pictures or photos. Written texts sometimes are skipped and technical vocabulary is simplified or replaced. When using fictions, teachers present both illustrations and texts, and normally the entire story plots will be introduced. (4) The participant teachers often select books that connect to children's life experiences, whether fictions or nonfictions. (5) While the participant teachers report that the books they select for children are 50% fictions and 50% nonfictions, however, the classroom book collections contain much more fictions than nonfictions.

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**IMPROVING SPEAKING ABILITY OF ENGINEERING STUDENTS AT KHON KEAN
UNIVERSITY BY USING AN ORAL PRESENTATION TASK**

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Topic of Submission

Languages Education and Applied Linguistics (ESL/TESL/TEFL)

Improving the Speaking Ability of Engineering Students at Khon Kaen University by Using an Oral Presentation Task.

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ABSTRACT

The purposes of the study were to investigate the effect of participation in oral presentation on students' speaking ability of engineering students and to investigate the students' opinions toward oral presentation.

The subjects of the study were 30 randomly selected students who were studying in fourth year, Faculty of Engineering, Khon Kaen University. This study was conducted for nine weeks in the second semester of the academic year 2009.

The methodology was focusing on enhancing students' speaking ability through the individual oral presentation tasks. The pre and post speaking tests were employed to evaluate the interview skill, and the results showed how students applied the improved skill in a different context. Other research instruments were teacher, peer feedback and students' opinion questionnaire.

The results revealed that after participating in the oral presentation course, the post-test scores were significantly higher than the scores at 0.05 level. The analysis from students' opinion questionnaire revealed that the students had a positive opinion towards the oral presentation course.

The results could be summarized that oral presentation is effective for increasing the students' speaking ability and it is recommended that the course should be further used as a tool for language classes.

Key Words: Oral presentation task, Speaking ability

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Introduction

As the most used language, English is referred to the global language, world language and international language (Graddol, 1997; Jenkins, 2006; Kachru, 1991; McKay, 2002; Modiano, 1999; Nunn, 2007). This shows that English is now important and becomes a powerful language in the world. Moreover, there are 700 million to 1 billion English speakers in all regions of the world (Crystal, 2003). In Thailand, English has been taught as a foreign language for many years since the primary school to the university levels (Ministry of Education, 1999). However, Thai students cannot perform in English well, especially in speaking skill (Aoki, 1999; Maurice, 1986). Brown (1994) stated that speaking skill is difficult for foreign language learners because it requires the ability to choose the appropriate elements in the social interactions. There are several reasons why Thai learners cannot speak well, especially for non-English major students. For example, they are too shy to speak and they are worried of making mistakes or losing face; they do not know how to speak; they tend to use their mother tongue rather than the target language and they lack opportunities to practice. Moreover, the Thai curriculum and teaching methodology are possible factors. In the 1996 academic year, the teaching of English mainly focused on reading and grammar rather than speaking (Ngogbungkla, 2007; Fungchomchoei, 2005; Saezhong, 2005; Siriphotchanakorn, 2005; Burudpakdee, 2004).

Accordingly, this results in many problems in Thailand, especially for industry. In 2006, Seagate decided to invest a new plant in Malaysia and Singapore instead of Thailand. Since the unqualified engineers available in Thailand were the main factor for their decision (Russell, 2007). This situation affects the Thai economy. In 2010, more than 14,654 engineers will be unemployed because foreign companies will invest their projects in other countries (Russell, 2007, p.13). Cochrane & O'Donoghue (2008) stated that future engineer graduates are confronted with the rise of challenging in the competitive world. In addition to engineering skills, clear English communication and excellent oral presentation skills are required to become successful engineers in globalization world (Ali & Kassim, 2006; Cochrane & O'Donoghue, 2008). Students must be able to use appropriate language to convey the message and outstanding presentation skills not only academic setting, but also at workplace setting (Elainel, 1995). For engineering students in Khon Kaen University, English is taught as an ESP (English for Specific Purposes) course. Engineering students have to study eight credits of English; English for Science and Technology I and II and Technical English for Engineering (Khon Kaen University, 2008). These subjects are provided to improve English skills of engineering students to support their future career prospect. Although they have learned English in many courses, they still have a problem in communication. The problem may be because they have limited chances to practice speaking. Moreover, they do not have confidence when they have to speak.

To develop students' competence and increase opportunities to practice in communication, task can be a good support for teachers (Nunan, 1996). Moreover, task is a movement compatible with communicative competence that supports language learning in the classroom and it will help students to interact with the real world. The popular task widely used in communicative language classroom is oral presentation (Siriphotchanakorn, 2005). Oral presentation can be used to help students to practice speaking. This is because in oral presentation process, students have to search and prepare specific information, organize the idea to make a clear presentation. Furthermore, students have to rehearse their presentation to make it accurate and fluent before giving the presentation. This should enable them to speak more effectively. It is obvious that when students give an oral presentation, it involves speaking, listening, interpreting and asking and answering

questions, which are considered a kind of communicative activity. Oral presentation also helps students construct knowledge on various topics and develop speaking and thinking step-by-step to achieve positive results (Osborn, 1994).

This study wants to promote the benefit of oral presentation when it is used in the classroom. Moreover, it will give more opportunities to engineering students to practice their English for communication. The main purposes of this study are 1) to investigate the effects of participating in oral presentation on student's speaking ability of engineering students at Khon kaen University 2) To investigate the students' opinion toward the use of oral presentation. The research questions were as follows

1. Does oral-presentation improve students' speaking ability?
2. Does oral presentation provide a positive opinion toward English language?

Literature Review

The main topics reviewed for this study are studies on English for Specific Purposes (ESP) education, needs analysis, communicative competences, communicative tasks and oral presentations as a task. Also presents and compares related research findings.

1. English for Specific Purposes (ESP)

English for Specific Purposes has been defined as an approach for language teaching which is based on the learner's reasons for learning (Hutchison & Waters, 1987). The basic question for ESP is why the learner needs to learn a foreign language. Therefore, needs can be defined by the reasons students are learning English, and those reasons can change study methods (Hutchison & Waters, 1987). Nowadays, industry is developing very fast and many foreign companies locate their new plants in Thailand. Therefore, ESP is very popular, especially at universities. Strevens (1988), for example, stated that ESP has several advantages. First, learners know what they need to learn. Content is specially designed for each group of students because they know what they need. Second, students have motivation to learn in order to achieve their specific purposes, which are different from general English needs. In addition, ESP is like an investment because students know what they need to learn before making the decision to study. However, the most important characteristics of ESP are focusing on learners' interests and motivating them so that they will be able to manage real situations in their future careers. For engineering students, they may have to communicate at work by using English language, so ESP is necessary for them.

2. Concept of needs analysis

A needs analysis reflects the student's ability to understand the linguistic features of a target situation (Hutchison & Waters, 1987). The identification of needs is the method used to explain the problems and solutions. Robinson (1991) defined *needs* as an activity, including collecting information, in order to serve the learners' study and job requirements, what the learner needs to learn and the personal purposes to their study or their job requirement. Titcomb (2000) defines needs analysis as a method of identifying and evaluating needs in a community. Engineering students around the world need to work with foreigners nowadays, not only in Australia, America and Europe, but also in Thailand. Evidence indicates that globalization influences industrial needs and global engineers must be able to communicate on cross-national

projects. For this reason, Thai engineers need to practice communicative language skills in English in order to prepare and adjust themselves to face the new century (Riemer, 2002).

3. Communicative Competence

The basic idea of communicative competence is the ability to use language suitably in a real situation and to have more than just grammatical competence in order to communicate effectively (Hymes 1972). Hymes' ideas about communicative competence affect the field of second and foreign language teaching. It can help ESL/EFL teachers promote and encourage students' communicative skills. In addition, communicative competence requires that teachers provide activities, exercises and materials that will facilitate and expedite the acquisition of English (Burudpakdee, 2004). Moreover, They stated that ESL/EFL teachers should concentrate on tasks that will support students in improving their competence in communicating and using appropriate language levels (Marton & Ramsden, 1988).

For engineering students, one serious problem is that they lack the motivation to learn English because they think English is difficult for them (Raimaturapong, 2008). Thus, it is necessary for English teachers to encourage them to learn English or to find some materials or interesting tasks in order to support their learning. Giving an oral presentation is one important task that allows an engineering student to learn and practice the kind of English that he will encounter in the new globalized millennium (Ali & Kassim, 2006).

4. Communicative Tasks

Classroom tasks are important to develop students' English speaking competence. Tasks may also be called activities, and an activity can consist of various kinds of things that the teacher assigns students to do (Nunan, 1996). The Thai Ministry of Education (1999) has stated that tasks are activities that can be used to help teachers and learners in learning English. Focusing on speaking, speaking tasks are activities that concern speakers in using language for the purpose of success in an important goal or objective in a speaking situation. Finally, tasks are any activities that a teacher assigns to students; moreover, tasks are defined as language use in language learning contexts (Sari, 2004). Nunan (1996) suggests that communicative tasks contain a goal, input, activities, setting and role. The input of tasks might be verbal or non verbal. A task is not an exercise but an activity, for the activities must relate to input. The goal of tasks is to improve students' communicative competence. Finally, the setting can be a classroom or group work outside of class. Besides, teachers should be responsible for creatively adding to role play settings by encouraging students to try to participate in classroom activities. Also important, however, is that students enjoy doing the activities in class (Nimkannon, 2006).

5. Oral presentation as a Task

Oral presentation is one kind of speech often given in a business, technical, professional or scientific environment (Mandel, 1993). On the other hand, Eggleston (2003) stated that whenever you are asked to appear in front of one or more people for the purpose of explaining, educating, convincing, or otherwise conveying information to them, you have a presentation. Nowadays, oral presentations are becoming more important in the business world. Therefore, it is necessary to provide students practice in giving oral presentations in their careers.

To understand oral presentation skills; how oral presentations help students develop their speaking abilities, it may be necessary for students to learn oral presentation skills. Hall (1996) classified presentation skills into seven elements: content, organization, non-verbal communication, visual aids, fluency, pronunciation, vocabulary and grammar. Content focuses on the interest level of information and the clarity of the key points. Organization contains the

components of introduction, thesis, supporting examples and details, and conclusion. Non-verbal [noun] relates to using eye contact and body movements. Visual aids are quite important because they can attract the audience's attention and can be created by considering the situation and content. Fluency is determined as the message is delivered by considering how the speaker uses notes or memorization. Pronunciation consists of accent, tone, and stress on key words. Vocabulary and grammar should be concise, clear and smooth.

Siriphotchanakorn concludes there are four benefits of giving oral presentations: students 1) practice English speaking, 2) collaborate in the classroom, 3) increase their confidence in speaking English in front of people and 4) practice presentation skills. McGovern (1997) states that oral presentations are a good way to let students express themselves in English and also give the teacher a chance to listen to the students. In addition, it is claimed that oral presentations promote students to practice speaking and encourage both speakers and listeners to become productive partners in the ESL/EFL classrooms (Abe, 1999). As a result, students who are both speakers and listeners can share some ideas and information before giving oral presentations. After giving oral presentations, students might be asked to discuss with, or provide comment for, their friends. This activity helps students interact with the real world, give them more chances to practice English speaking, organize ideas, and increase their self confidence. Therefore, it is likely to help them enhance their English speaking ability.

Research Methodology

The population or focus group of this research was fourth year industrial engineering students in the second semester of the 2009 academic year at Khon Kaen University, Thailand. Thirty students were randomly selected as the participants.

The design of this present study was one-group pre-test and post-test. This means the sample firstly did the pre speaking test. Then, they were participated in oral presentation course for 9 weeks. During the course, students were required to do 3 oral presentation assignments. After finishing the course, they were asked to do the post speaking test.

The research instruments of this study comprised of 1) pre- post speaking tests, 2) oral presentation assignments, 3) observation checklist, 3) peer and teacher feedbacks, 4) students' opinion, 5) oral presentation guidebook and short example video.

Research procedure and data collection

The collection of data took place during the second semester of the academic year 2009. To provide a clear illustration of the data collecting process, the research procedure is presented as figure 1. Details on the collection of the data are explained as follows.

1. First, students took the speaking pre test. In the test, students were interviewed about their personal information and topics related to their future careers. Student interviews were recorded by videotape. Two assessors marked these tests.

2. Students then took the course for three hours per week for nine weeks. In each week, the researcher taught students how to give oral presentations in various situations and also gave them key words that are often used in giving oral presentations. Students were assigned to do three oral presentation tasks on different topics according to the results of the needs analysis. The reason for using different topics was to prevent students from memorizing speech for just one topic. However, students were provided with the topics beforehand in order to prepare themselves. One session of the course was reserved for teaching reading in order to teach the students how to read, summarize and come up with the main ideas of their sources. An extra session called a "rehearsal session" was arranged so the students could practice on a stage. This helped them become aware of their problems and their mistakes. In addition, students had an hour

and a half per week to study by themselves (watching the oral presentation video and searching for information).

3. All of the students' presentations were recorded and rated by one rater and the researcher using an observation checklist. The other students also gave peer feedback to the presenter by using the peer feedback checklist. Teacher feedback was provided for students in the form of written comments.

4. The researcher set aside class time for discussion and special activities intended to point out student problems and provide opportunity for further training.

5. Students took the post test. They were interviewed on the same topic as the pre test (on personal information and their future careers).

6. Students were asked to give their views on using oral presentations to study English communication on the student opinion.



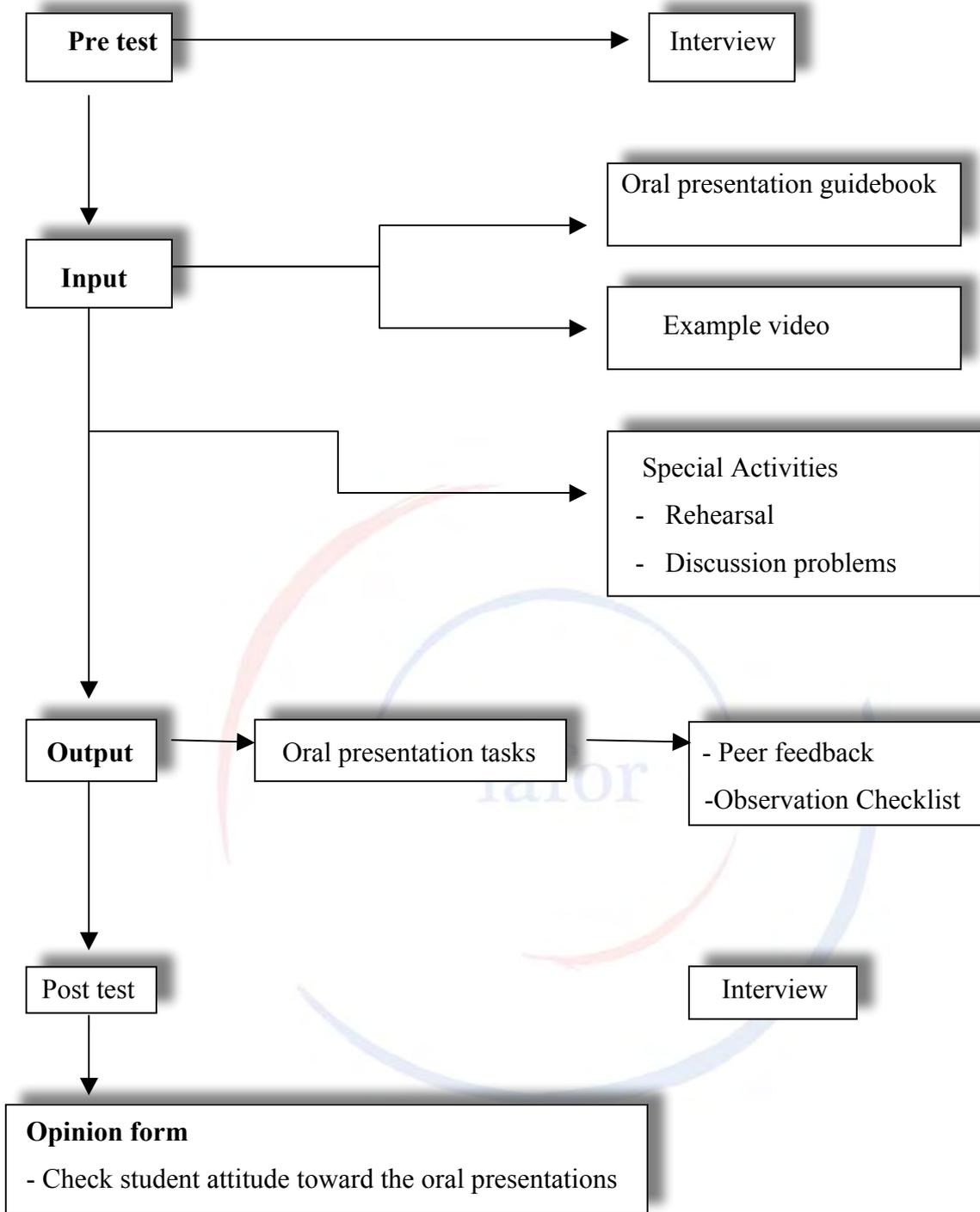


Figure 1 Research procedure

Data analysis

The data was analyzed by the various methods; it can be divided into qualitative and quantitative types. The data gained from research instruments and its statistical methods are described as table:

Table 1 data analysis

Research Instruments	Data analysis method	Result gained
1. pre and post speaking test	mean and SD and T-test	Scores determined the improvement of students' speaking ability after participating in oral presentation course.
2.The oral presentation assignments	mean and SD	Students' scores of 3 oral presentation assignments represented the students' improvement while participating through the course.
3. The students' opinion form	Mean, SD and Grouping.	Students' opinions toward the oral presentation course.
4. Teacher and Peer feedback	Mean, SD and interpreting	Students' improvement after they got some feedbacks and how students response to the feedbacks.

The result of the study

1. The result of the Pre and Post speaking tests

The objective of the interview pre and post tests was to examine the participants' communicative, or speaking and listening abilities, before and after taking the oral presentation course. Each student was interviewed for five minutes in each test. Their pre and post speaking test scores were assessed by two raters following the analytic scoring scale. The comparison was made between pre and post test. It was shown as the table below:

Table 2 The comparison between the pre-test and post-test scores

Pre-test Score (36)		Post-test Score (36)		Paired Differences		T-value	Df	p*
Mean	S.D.	Mean	S.D.	Mean	S.D.			
22.16	4.16	27.51	4.00	-5.35	2.58	-11.357	29	.000

2 tailed-test

*p<0.05

Table 2 shows the mean score of post-test ($\bar{X} = 27.51$, S.D. = 4.00) is greater than the score of the pre-test (= 22.16, S.D. = 4.16). The t-test analysis points out that the change in the mean scores is significant at $p < 0.05$. This indicates that students improved their speaking abilities after they participated in the oral presentation course. The findings gained from comparing the pre and post speaking test scores in order to examine the improvement in the students' speaking abilities, it could be generally concluded that the teaching of the oral presentation technique positively affected their speaking abilities. Because the pre and post speaking tests were of an interview type, it follows that the oral presentation technique can help students apply their speaking skills in a new circumstance.

2. The results of the oral presentations assignments between learning in oral presentation course.

There were 3 assignments during the course which aimed to determined students' progresses. These assignments were scored by two raters; the results of the assignments were analyzed as follows.

Table 3 The scores of each assignment (between test)

Statistics	assignment 1	assignment 2	assignment 3
\bar{X}	12.01	12.98	13.87
S.D.	2.62	2.24	1.88

The data from table 3 shows the data from the oral presentation assignments showed that students gradually improved their oral presentation skills from the first assignment to the last assignment. This indicated that continuously practice of oral presentations increased the students' oral presentation skills, which was an important factor in the development of their speaking abilities. An oral presentation is therefore one useful method for foreign language instructors, and they should be added to the curriculum as one type of task to promote students' English speaking skills.

In addition, the result of the pre and post speaking test and the oral presentation assignments were analyzed to examine the reliability and correlation between the raters. The results indicate that the inter-rater correlation on the pre and post speaking tests and the three oral presentation assignments were high and significant at $p < 0.05$. Moreover, the post test correlation score was higher than the pre test, emphasizing the reliability of the data on students; improvement after learning English communication through oral presentation.

3. The results from teacher and peer feedback

3.1 Teacher feedback

After collecting all of the comments for the first oral presentation assignment, reading from their script was the students' main problem. Students tended to read their scripts the whole time. Most of them seemed not to understand what they were talking about. They made very uncomfortable presentations with lots of information but without organization.

After students received their feedback, they had two weeks to correct their errors and prepare themselves for the second presentation. Students seemed to develop in some ways but there were still some mistakes. On the second oral presentation, most of the students used transition words much more effectively. They now knew when and how they could use them. Moreover, they had more preparation time than for the first oral presentation assignment. Although they still used

scripts, they did not, in general, read it the whole time. It was clear from the words they used that they understood more about their topics, and they could answer their classmates' questions quite clearly and without difficulty. They spoke with more confidence but still had some grammatical mistakes and mispronunciations. For example, students made errors like "*I will going to work in the big company*" or they missed to pronounce some final sounds in words such as "*knowledge*" and "*ignorance*". From the first oral presentation assignment to the second oral presentation assignment, students gradually reduced the frequency of their mistakes. Furthermore, students asked for more comments and suggestions on how they could make their presentations better.

Finally, on the third oral presentation assignment, the students showed their strongest improvement. The researcher, as the teacher, noticed a big change in their development between the first oral presentation assignment and the third oral presentation. The students could speak longer and they prepared better. The students presented their talks more confidently and systematically. They could give more examples and use their own experiences to support their presentations. Every student used appropriate transition words and seemed to understand the information clearly before they talked. They used more body language and gestured properly to make their presentations more attractive. The students performed well on the question and answer part of their presentations as well, inviting the audience to ask questions and responding quite well. They acted more professionally and knew how to handle unexpected situations. However, there were still some mistakes, such as with pronunciation and structure, but the incidence of these problems depended on students' baseline knowledge. Those starting with more problems needed a much longer time to solve them. Nevertheless, it was clear that the oral presentation course successfully developed the students' confidence and presentation technique.

3.2 Peer feedback

The peer feedback helped train students to take more responsibility in class. Besides practicing for their talks, students needed to listen to their friends as well. Data was collected from both the rating scale and open-ended sections of the checklists (total = 116 scores). The content of the peer feedback is summarized in the Table 4 below.

Table 4 Peer feedback results

Evaluation statement	Oral presentation Assignment 1 116 (%)	Oral presentation Assignment 2 116 (%)	Oral presentation Assignment 3 116 (%)
1. Good preparation	95.52 (82.34%)	98.24 (84.68)	105.23 (90.71%)
2. Clear pronunciation, easy to understand	95.05 (81.93%)	99.25 (85.56%)	102.52 (90.96%)
3. Good eye contacts and gestures	97.52 (84.06%)	98.14 (84.60%)	102.76 (88.58%)
4. Good media	97.88 (88.37%)	99.52 (85.79%)	103.70 (89.39%)
5. Good organization	95.47(82.30%)	99.82 (86.05%)	103.70 (89.39%)

To summarize, the peer feedback forms revealed to the presenters the opinions of the audience on their presentations. The results show that the students agreed that their peers improved in their oral presentation techniques and speaking abilities in many ways. Furthermore, they had to evaluate their classmates, so they knew what criteria were necessary for their own presentations. However, it is noticeable that even though students were trained before evaluating their peers, they still seemed to be too kind. It might take much more time to train them to give and accept critical comments. Regardless, peer feedback effectively encouraged students to do better on future presentations.

4. The result of students' opinion toward oral presentation

Table 5 Students' opinions toward oral presentation

Statements	Mean	S.D.	Interpretation
1. Oral presentations are interesting to give?	4.33	0.547	Agree
2. Oral presentations are interesting to listen?	4.00	0.643	Agree
3. Oral presentations encourage me to speak English	4.30	0.702	Agree
4. Oral presentations help me improve my English speaking abilities.	4.33	0.661	Agree
5. Oral presentations can encourage me to study English.	4.20	0.761	Agree
6. Oral presentations help me develop my grammar and vocabulary.	4.07	0.691	Agree
7. Oral presentations help me gain more confidence.	4.27	0.691	Agree
8. Oral presentations improve my critical thinking skills and help me organize my thinking better.	4.13	0.681	Agree
9. Oral presentations prepare me for studying in other subjects.	4.10	0.795	Agree
10. Oral presentations prepare me in applying for a job.	4.43	0.568	Agree
11. Oral presentations will be useful for me in my future career.	4.63	0.556	Strongly agree
Overall opinions	4.25	0.483	Agree

The results in table 5 showed that the students thought the oral presentation course was useful for improving their speaking ability and prepared them in applying for a job. The average of the students' overall opinion towards the oral presentation course was 4.25 which meant that in general students had positive views toward the use of oral presentation technique.

Additionally, the students were asked to reply the open-ended question at the end of the questionnaire. The answers from the open-ended were additional opinions on the comments, problems and suggestions on improving speaking abilities by using oral presentation. They stated

that they had more confidence and more chances to practice. They know their mistakes and how to solve them. Also they required more time to do this course.

Discussion

This discussion part is based on the two hypotheses: oral presentation enhances students' speaking ability, and students had positive opinion toward oral presentation. The discussions are presented as follows.

1. Oral presentation enhances students' speaking ability.

The first discussion focuses on the reason why students improved their speaking abilities during the course. In the oral presentation process, students needed to rehearse many times in order to make their talks accurate and fluent. This related to the studies of Levis and Grant (2003), Seazhong (2005) and Siriphotchanakorn (2005), who studied about the effect of participating in oral presentations. The studies show that when students rehearse their presentation many times, this can help them improve their presentation technique and their speaking skills. They get more chances to practice and they realize some of their mistakes before giving their presentations. This enables them to speak more effectively.

They also could listen to the comments and feedback provided by their teacher and peers. This supports the findings of Reilly (1988), Dobie (1999), King (2002), Seazhong (2005) and Cochrane & O'Donoghue (2008), which show that students gain more confidence when they get more chances to practice and rehearse in front of their teacher and peers because they realized their mistakes and learned how to solve them. Also, the findings of the present study agree with studies by Mika (2001), Ali and Kassim (2006) and Talberg (2006), which emphasized the importance of teacher and peer feedback. They argue that this feedback were the contributing factors to the improvement of student speaking ability. In this study, the teacher provided specific comments on what the students did wrong on their presentations. Students seemed to read this feedback more carefully and asked for more suggestions in order to apply them in their next presentations. Students tried to help their classmates with positive comments on the peer

feedback, and those comments seemed to encourage their classmates quite well. At the beginning of the course, the students were trained on how to evaluate their peers' presentations with critical comments but the training was short. It would have been beneficial to have more time to train them so peer feedback would be more objective and realistic. Although peer feedback was not as critical as the teacher's feedback, it gave the students a task to do while they were listening to their friends' presentations. In addition, evaluating other people's presentations made the students organize their own presentations better. They knew what criteria were used for assessing and they could see their classmates' mistakes and avoid them in their own presentations. In conclusion, the oral presentation activities provided more opportunities for students to practice and helped the students gain more confidence in speaking.

2. Students having positive opinion toward oral presentation

The results of the students' opinion survey showed that the students had positive overall opinions toward the oral presentation course at 4.25 out of 5 on the Likert-scale. This finding confirms the second question, which is similar to the results of studies in similar contexts such as Seazhong (2005) and Siriphotchanakorn (2005). These previous researchers studied the opinions of students toward giving oral presentations in speaking classes. Most importantly, they also found that students believed that oral presentations helped them improve their speaking skills.

Most of the students strongly agreed that oral presentations would be useful for their future careers. They also agreed that oral presentations could prepare them for applying for jobs. Future Thai engineering students have to face new technical problems and an increasingly competitive world that requires clear communicative abilities and presentation skills. The students' positive opinions toward oral presentations imply that this group of students realized the problems they face and that they had the confidence they needed to address these challenges after taking the course. It can be suggested to language instructors that activities like oral presentations encourage students to practice and improve their speaking competence.

The recommendations of further studies

1. Further research should include students from other faculties.

2. A variety of interesting oral presentation topics should be provided for the students to use for practice, not only about their future career but to practice in various situations. In addition, they should be encouraged to apply their ideas to other environments.

3. Further research may put more focus on specific discourse use in oral presentation Thai EFL students.



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Course Learning Outcome Based Evaluation of Teaching and Students Assessment (CLObETSA) System

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Abstract

The success of a course taught in an academic institution require effective learning outcome assessment with a vital process, well documented results, and improvement in the delivery as well as contents of a course after analyzing the course learning outcome results. This paper presents a simple and easy to use system that facilitates instructors to record and analyze the course learning outcome results. The course assessment committees also benefit from the system proposed in analyzing the results and suggesting the improvement in a course and get a more accurate insight of the student level of competency achieved in a course learning outcome.

Keywords: Assessment Plan, Evidence Collection, Evidence Analysis, Reporting Results

1. Introduction

The direct assessment measures in conjunction with other indirect measure provide a strong base for assessing various CLOs and overall objective of a particular course. Direct assessment method is, however, the most important and key element in demonstrating a satisfactory (or otherwise) performance level in meeting and achieving the requirements of each learning outcome of the course. Classically, the assessment is the collection and interpretation of information about what, how much, and how well students are learning [1]. The assessment process is an essential part of a typical instructional model encompassing various critical steps; plan → teach → assess → analyze → improve and it refers to various tasks/processes enabling various stake holders to make informed decisions for making students' learning experience more interesting and valuable.

The right information at a right time by the right people to the right people guarantees the success of any organization. The academic institutions are not the exception. As instructors, our experience shows that, due to one reason or the other, the required assessment data for various courses offered in a particular semester is either not complete late or not documented properly in accordance with the policies and procedures laid down by individual colleges or departments. The success of the instructional model depends on accurate and timely availability of the assessment data compiled by course instructors to the designated assessment committees of the colleges/departments who are entrusted with the responsibility of suggesting various strategies and improvements actions in order to meet stated course and program outcomes which ultimately help an academic institution in achieving its declared institutional mission and goals.

ABET EC2000 [2], states that the institution must have an efficient assessment process to insure that each program objective/outcome of an academic program is successfully met. There must be a proper system in place for documenting an ongoing evaluation and closing the loop by communicating a suitable feedback for implanting required improvement actions, where appropriate. The individual courses of a program are an integral part of the program as

success or failure of each course eventually determines the overall success of a particular program outcome. This fact necessitates a well planned and systematic assessment and evaluation process at the course level. Particularly, the assessment of advanced courses (especially capstone, senior project, internship, etc.) can have a significant role in measuring the degree of achievement of various program outcomes in accordance with pre-defined curriculum matrix and standards. The course assessment data/results guides all stake holders (instructors, academic advisors, educational managers, and internal/external assessors) about how the course was taught and assessed, what kind of difficulties students had faced, and how this information might be useful improve the contents as well as the delivery of that course.

This paper describes a model system CLObETSA to carry out above mentioned course assessment activities timely, efficiently, and effectively. The system also helps academic institutions in establishing a culture of assessment by providing an “easy to use” MS Excel tool for instructors responsible for teaching various courses of the program.

We are confident that the proper and timely implementations of this system by the course instructors will not only minimize their efforts and time for maintaining the assessment record of students but will also provide an efficient method for keeping a track of individual achievement of their students. This system will also provide tangible quantitative evidence that would facilitate instructors in suggesting desired improvements/corrective actions for future offerings of the course.

The system architecture and the details of each module are described in Section 2 of this paper. Section 3 discusses various aspects that are necessary for closing the loop. The conclusion and future work is presented in Section 4.

2. System Architecture

Detailed system architecture of the CLObETSA is shown in Figure 1. This system comprises of four major modules which are listed below.

- a) Assessment Plan Module
- b) Instruction and Evidence Collection Module
- c) Evidence Analysis Module, and
- d) Reporting Results Module

The CLObETSA system has been successfully implemented on a programming course taught as a part of Bachelor of Science in Computer Science and Engineering (CSE) program offered at the College of Engineering and Applied Sciences of Al Ghurair University (AGU), Dubai. AGU is a reputed university of United Arab Emirates (UAE) and its programs are accredited by the Ministry of Higher Education and Scientific Research, UAE. The system has been implemented using a prototype MS Excel based tool. This system shall be later upgraded using appropriate web-based technologies. A number of other templates were also used while implementing the CLObETSA system which are also discussed and presented in the following sections.

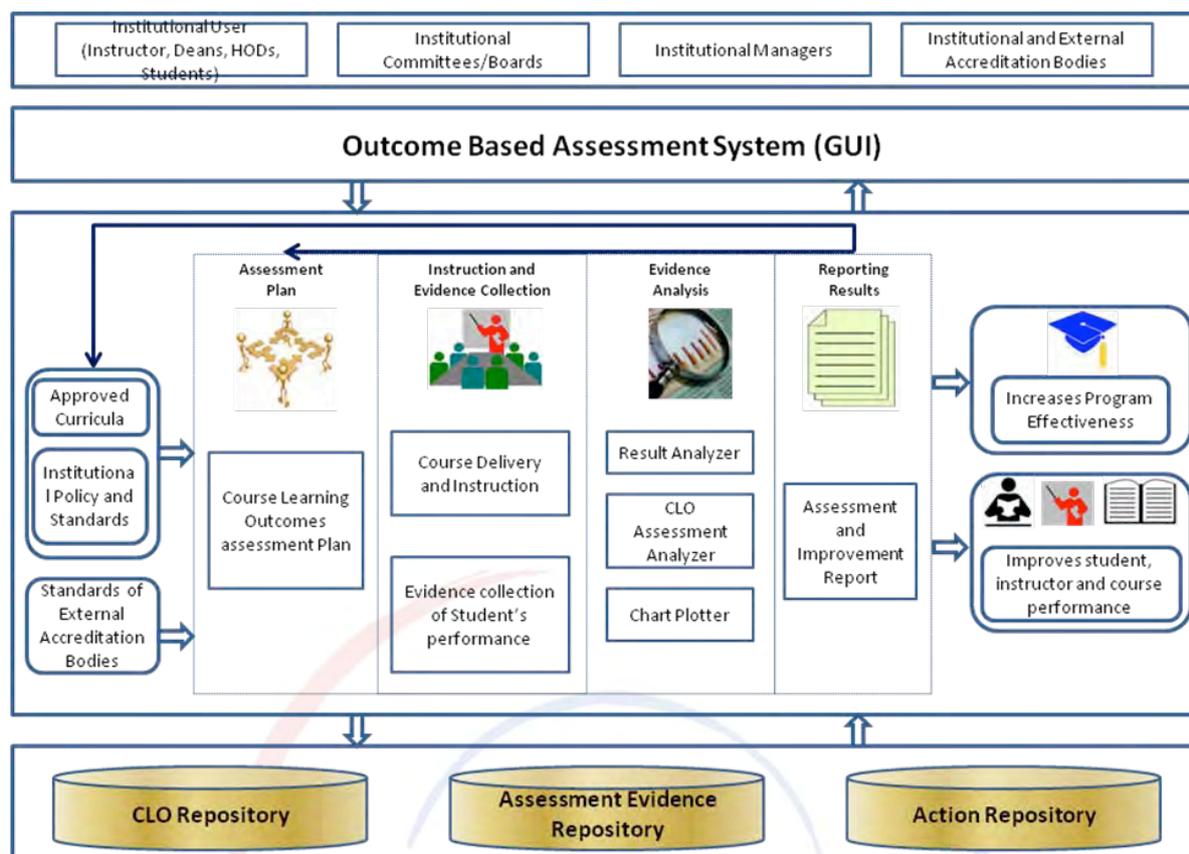


Figure 1: CLObETSA System Architecture

2.1. Assessment Plan Module

To carry out a meaningful and effective assessment, planning is the first major step that helps in identifying and employing appropriate assessment methods to quantify the success of a particular outcome/objective. In the academic context, a course syllabus is the first document that provides a strong base for preparing a course assessment plan as it contains vital information about the course design, delivery and assessment. This document also serves as an understanding or a contract between student, instructor and academic institution. A model course syllabus typically presents a framework outlining the course goals/outcomes along with the relevant information about various strategies for achieving these goals/outcomes [6]. At AGU, each syllabus is prepared using a standard template. The course instructors are required to provide all necessary details regarding course description, course learning outcomes, course content, assessment methods, and all related activities that are necessary for achieving stated course learning outcomes. The syllabus also contains an assessment matrix linking CLOs with various assessment methods. Each instructor is assumed to be competent enough in developing appropriate CLOs covering the entire syllabus while considering the desired levels course and program goals using Bloom's Taxonomy [3]. Once the course learning outcomes are specified, their assessment becomes straight forward [4, 5].

The assessment plan module consists of two standard templates that allow the instructors to develop the syllabus of a course along with a detailed course assessment plan. The main purpose of these templates is to standardize the documentation and data collection process in one format that would consequently make the whole exercise of data analysis and evaluation lot easier and efficient. Few selected portions of the template indicating the course

assessment plan for a “Introduction to Programming (ENG 204)” course is shown in Figure 2.

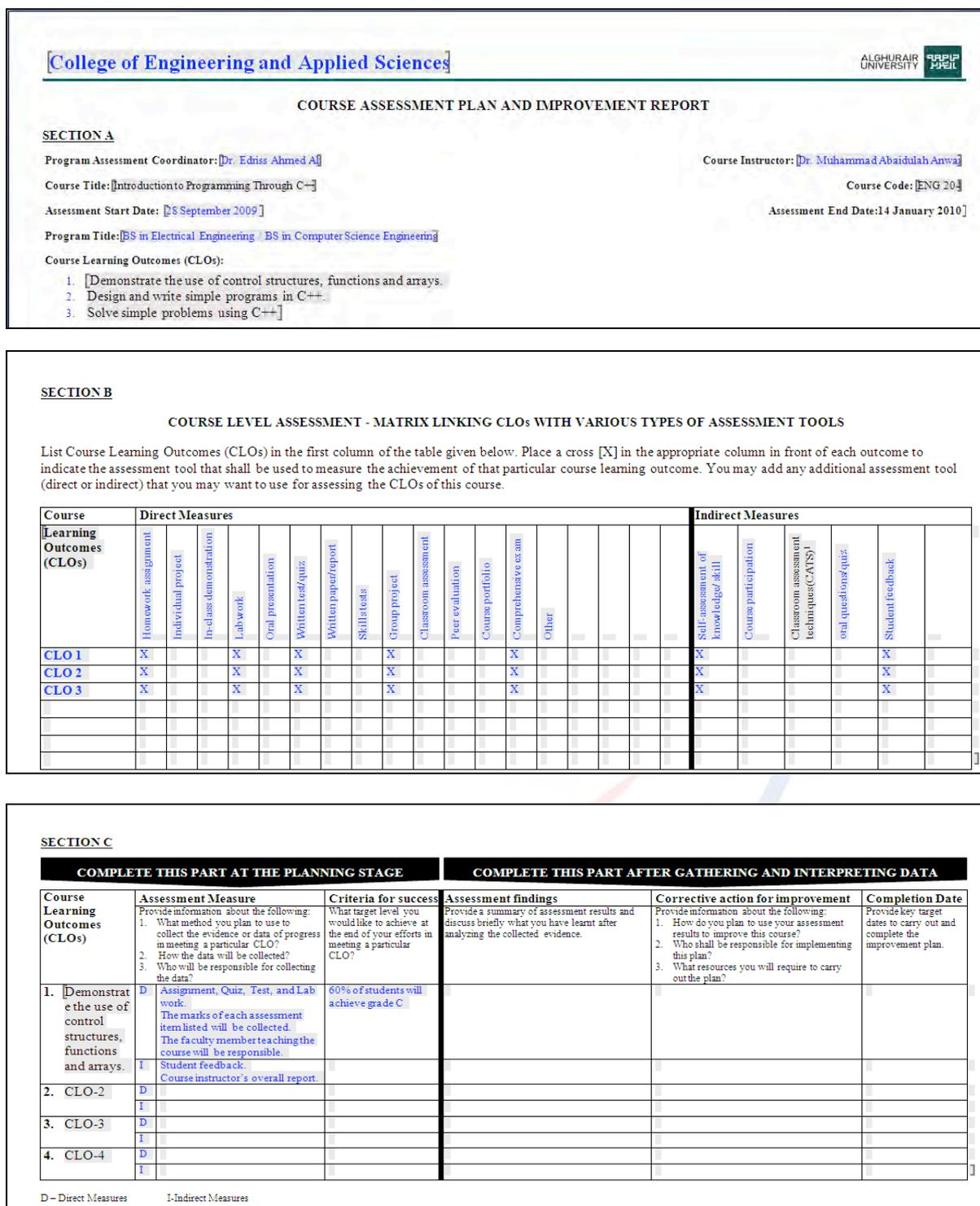


Figure 2: Course Assessment and Improvement Template

This template is used to design and document a comprehensive course assessment plan using a variety of direct and indirect methods. As shown, the assessment plan template comprises of three sections; Section A documents the basic information about the course and its CLOs whereas Section B presents a matrix linking CLOs with various direct and indirect assessment methods. Section C consists of two parts. First part that contains information

about the assessment measures and the success criteria is filled during the planning stage of course assessment. The second part of Section C is filled after gathering and interpreting the evidence as it provides an opportunity for the course instructor to record the results of the assessment and how these results will be used for introducing changes to improve future course offerings. The success criteria or benchmark set at the planning stage of the course assessment are compared with the results obtained from the CLObETSA and accordingly the appropriate improvement actions are suggested. This part of section C is filled after the teaching and assessment of a course is completed.

The template also allows the faculty to document their course assessment plan using both direct and indirect assessment methods. The direct assessment method is used to measure the degree of each student's achievement in a particular course learning outcomes/objective once the student has completed the course. These direct methods may include classical as well as non-classical methods [6]. At the planning stage of the course the instructor is required to set the success criteria for every CLO of the course that would serve as a benchmark for comparing the assessment results obtained at the completion of the course. Typically the success criteria are set in terms of two numbers (i) average class achievement level (e.g. 70% marks or grade C) and (ii) a percentage of the students exceeding the pre-set achievement level (e.g. 60% of the students are expected to achieve 70% marks or higher or 60% of the students are expected to achieve grade C or higher). Similar success criteria are set for each CLO of the course. The CLObETSA employs the standard assessment process that requires each instructor of the course to:

- a. Develop an assessment instrument (assignment, test, project, case study etc.) consisting of certain questions/tasks which are designed to assess either one or a combination of CLOs of the course.
- b. Map assessment instrument questions/tasks to CLOs based on the assessment plan recorded in Section B of the template.
- c. Evaluate and mark the assessment instrument and enter each student's marks for every question/task into the designated worksheets of the CLObETSA system.

2.2. Instruction and Evidence Collection Module

The second module of the CLObETSA system is called "Instruction and Evidence Collection" which facilitates the course instructor to document the course assessment plan and to keep a track of marks obtained by each student in every assessment instrument. The back-end of the system provides a complete linkage of the course information with the course assessment plan and thus the instructor does not have to re-type the course information on every sheet of the MS Excel Book time and again. This module uses a separate sheet for each CLO of the course to record/document the assessment data of each student for various assessment instruments used in the course.

AT AGU the assessment instruments are generally divided into two categories; (i) continuous assessment (assignment, project, quiz, case study, essay, laboratory work, major tests, etc.) and (ii) final examination. An image of the MS Excel Sheet illustrating the "CLO Assessment Plan" for the course ENG 204 is shown in Figure 3. This sheet shows various assessment instruments administered for this course along with the marks and their appropriate linkage with each CLO.

ALGHURAIR UNIVERSITY		COURSE LEARNING OUTCOME ASSESSMENT PLAN				Program Title		Bachelor of Science in Computer Science Engineering			
RPPIP		Introduction To Programming				College/Department		College of Engineering and Applied Sciences			
Instructor (Section 1)		Instructor (Section 3)		Instructor (Section 4)		Course Coordinator		College Dean/HOD			
Dr. Mohamad Abaidullah						Dr. Yousif Abdalla					
CONTINUOUS ASSESSMENT	Assignment, Project, Case Study, Quiz, Essay etc.	Type	Marks	CLO1	CLO2	CLO3					
		A-1	20	5	15	0					
		A-2	40	10	10	20					
		Q-1	10	7	3	0					
		Q-2	20	12	4	4					
	% Weight		20	7.56	7.11	5.33					
	Lab Work	Final Lab	15	6	4	5					
		% Weight		10	4.00	2.67	3.33				
		Test/Examination	40	10	20	10					
	Final Exam		FE	100	35	35	30				
% Weight		40	14.00	14.00	12.00						
TOTAL			100	33.06	35.03	31.92					

Figure 3: Assessment Plan Worksheet

The method of entering the data for one assessment instrument, for example, “Final Examination (FE)” is explained in the following paragraph.

The total marks for this instrument are 100 and these are entered in Marks column. The allocated percentage weight for the final examination is set at 40%. This instrument had 10 questions and was designed to test all three CLOs of the course. The total marks of the questions that were meant to assess CLO-1, CLO-2, and CLO-3 were 35, 35, and 30 respectively. These values were entered under the columns CLO-1, CLO-2, and CLO3. The formulae are set to compute the percentage of each assessment instrument in different CLOs.

ALGHURAIR UNIVERSITY		ASSESSMENT DATA		CLO1		Instructor (Section 1)		Instructor (Section 2)		Instructor (Section 3)		Instructor (Section 4)		Course Coordinator	
RPPIP		Introduction To Programming		Bachelor of Science in Computer Science Engineering		College/Department		College of Engineering and Applied Sciences		Dean/HOD		Dr. Yousif Abdalla		ENG 204	
ASSESSMENT DATA (COURSE LEARNING OUTCOME 1)															
Sr. No.	Section Number	Student ID	Assignment, Project, Case Study, Quiz, Essay etc.				Lab Work				Test/Examination			Final Exam	Total
			A-1	A-2	Q-1	Q-2	%	Final Lab	%	Test-1	Test-2	%			
16	E	0562001	4.0	7.0	4.0	6.0	12.4	4.0	6.7	4.0	4.0	12.0	23.5	26.9	57.9
18	E	064291012	4.0	0.0	5.5	3.0	7.4	6.0	10.0	3.0	6.0	13.5	25.0	28.6	59.4
20	E	064291071	4.0	7.0	4.0	7.0	12.9	3.0	5.0	6.0	6.0	18.0	18.5	18.9	54.8
24	E	064292082			2.5		1.5		0.0			0.0	17.0	19.4	20.9
8	E	0671002	5.0	7.0	4.5	7.0	13.8	5.0	8.3	6.0	8.0	21.0	24.5	28.0	71.2
3	E	074192022	5.0	10.0	6.5	9.0	17.9	6.0	10.0	6.0	8.0	21.0	30.5	34.9	83.8
2	E	074192048	5.0	7.5	4.5	10.0	15.9	6.0	10.0	9.0	4.0	19.5	35.0	40.0	85.4
9	E	0742213224	5.0	10.0	5.0	8.0	16.5	5.0	8.3	4.5	8.0	18.8	22.5	25.7	69.3

Figure 4: CLO Assessment Data Recording Worksheet

The instructor entered the marks obtained by each student in every assessment instrument administered in the course at the designated CLO assessment data recording sheet. The MS Excel Book allows as many worksheets as the number of CLOs entered for a course in the assessment plan. A portion of the image of MS Sheet illustrating the “Course Assessment Data recorded for the CLO 1 of the course ENG 204 is shown in Figure 4. The method of entering the data for one assessment instrument say Final Examination (FE) is explained below:

Total marks for this instrument were 100 and the corresponding allocated weight for the CLO-1 was 35. The instructor entered marks obtained by the first student in the questions

relating to the CLO-1 that were 23.5 as shown under “Final Exam” column, i.e., this student received 23.5 marks in questions that were designed to assess CLO-1 of the course. Similar data was entered for the marks obtained by this student in questions relating to other CLOs of the course in sheets designated for entering the data for CLO-2 and CLO-3. These sheets are not shown here due to the limitation of space. The formulae are set in the MS Workbook to compute the percentage contributions of various assessment instruments in achieving each CLO of the course.

2.3. Evidence Analysis

Once the evidence is collected and recorded, the analysis of the course assessment becomes straight forward. The instructor is just required to enter the assessment data of the course into the evidence collector worksheet. The remaining part of analysis is done automatically through linked worksheets with in-built formulae in accordance with the standard policies of the institution. Triangulation is an important feature of effective assessment [11]. The more tools used to assess a specific course learning outcome, the greater the likelihood that assessment will be both, valid and reliable. Therefore, both direct as well as indirect assessment tools are used for assessment.

The instructor designs an assessment item consisting of a certain number of questions to assess selected course topics and consequently the course learning outcomes. The instructor uses the Bloom’s Taxonomy guidelines [3] while preparing such assessment item. An articulation matrix, or any other method, is used to map the assessment questions to the CLOs. There are three components in this module; (i) Result Analyzer, (ii) CLO Assessment Analyzer, and (iii) Chart Plotter.

2.3.1. Result Analyzer

The marks recorded in individual CLO worksheets are linked with the result analyzer worksheet. The result analyzer computes the overall result of each student based on his achievements in every assessment instruments (assignment, quiz, lab work, project, case study, final examination etc.) administered in the class. Another worksheet is used to analyze and compute the achievement levels of each and every student in all CLOs of the course. The corresponding images of these worksheets are shown in Figure 5 and Figure 6, respectively.

The grade analyzer is an important part of this module. The grade analyzer worksheet provides the overall performance and analysis of the grades of all students in each class (or section, if the course was taught in more than one section). The MS Workbook allows the instructor to view the entire analysis both in table and bar chart formats. This worksheet provides a complete statistics for each section that consists of grade distribution, average marks, standard deviation, and the computed value of the course performance. Figure 7 presents a view of the grade analyzer worksheet and the generated bar graph for the course.

ALGHURAIR UNIVERSITY		OUTCOME ASSESSMENT ANALYSIS										Instructor (Section 1)		Instructor (Section 2)		Instructor (Section 3)		Instructor (Section 4)		Course Coordinator			
		Dr. Mohamed Abaidullah Anwar																		Dr. Yousif Abdalla			
		Bachelor of Science in Computer Science Engineering										College/Department		College of Engineering and Applied		Dean/HOD							
		Introduction To Programming										Credit Hours		3		2		Course Code		ENG 204			
No	Section	Student ID	CONTINUOUS ASSESMENT										Final Exam		Total	Adjusted Total	Letter Grade						
			Assignment, Project, Case Study, Quiz, Essay etc.					Lab Work					Test/Examination										
			A-1	A-2	Q-1	Q-2		%	Final Lab		%	Test	Test	%				FE	%				
20	40	10	20		10	40	40	30	100	40		100	40										
16	E	0562001	19	32	5.5	10					14.8	9		6.0	23	15		14.3	45	18.0	53.0	53.0	D+
18	E	064291012	19	0	7	7					7.3	9		6.0	17	36		19.9	34	13.6	46.8	46.8	D
20	E	064291071	19	28	5.5	7					13.2	5		3.3	21	6		10.1	28	11.0	37.7	37.7	F
24	E	064292082	0	0	4	0					0.9	0		0.0	0	0		0.0	20	7.8	8.7	8.7	F
8	E	0671002	20	28	6.5	10					14.3	14		9.3	29	16		16.9	59	23.6	64.1	64.1	C+
3	E	074192022	20	40	8	17					18.9	15		10.0	29	30		22.1	90	35.8	86.8	86.8	B+
2	E	074192048	20	30	6.5	16					16.1	14		9.3	38	34		27.0	88	35.2	87.6	87.6	A
9	E	074221322	20	40	8	12					17.8	5		3.3	21	30		18.9	51	20.4	60.4	60.4	C
19	E	074221322	19	28	3	10					13.3	5		3.3	19	24		15.9	30	11.8	44.4	44.4	D
6	E	074222322	20	40	7.5	13					17.9	11		7.0	28	34		23.3	65	26.0	74.1	74.1	B
17	E	074222322	19	28	9	11.5					15.0	0		0.0	28	19		17.4	50	19.8	52.2	52.2	D+
7	E	074222323	19	40	7	11.5					17.2	9		6.0	32	21		19.7	58	23.0	65.9	65.9	C+
5	E	074292010	20	32	7	15					16.4	10		6.7	29	30		22.1	73	29.0	74.2	74.2	B

Figure 5: Result Analysis Worksheet

OUTCOME ASSESSMENT DATA AND ANALYSIS																							
CLO1	Adjusted	Success Level	CLO2	Adjusted	Success Level	CLO3	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	Adjusted	Success Level	
100			100			100			100			100			100			100			100		
57.9	57.9	D	51.2	51.2	D	41.3	41.3	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
58.4	58.4	D	51.6	51.6	D	23.0	23.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
54.8	54.8	D	29.7	29.7	F	31.3	31.3	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
20.9	20.9	F	3.8	3.8	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
71.2	71.2	C	62.8	62.8	D	60.2	60.2	D	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
83.8	83.8	B	91.1	91.1	B	85.0	85.0	B	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
85.4	85.4	B	86.4	86.4	B	88.5	88.5	B	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
69.3	69.3	C	53.0	53.0	D	57.7	57.7	D	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
55.2	55.2	D	37.8	37.8	F	36.7	36.7	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F
82.7	82.7	B	63.2	63.2	D	75.2	75.2	C	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F	0.0	0.0	F

Figure 6: CLO Assessment Analysis Worksheet

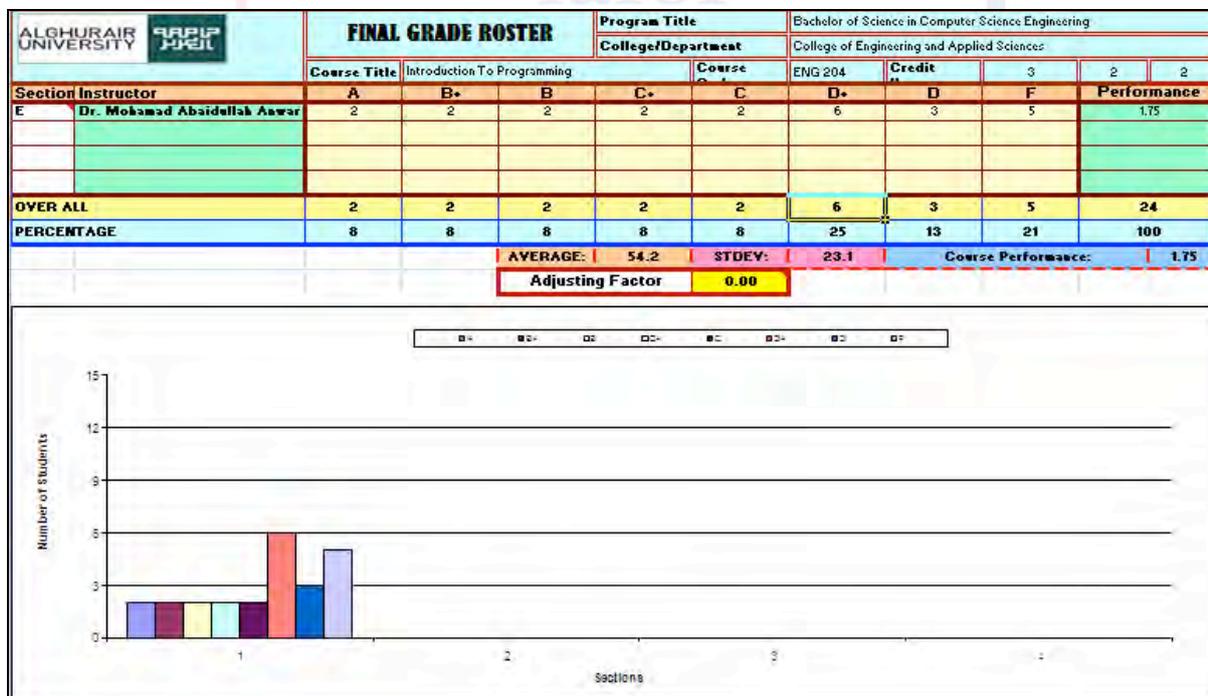


Figure 7: Grades Analysis Worksheet

2.3.2. CLO Assessment Analyzer

This module is a central part of the system as it provides the vital statistics about the achievement levels of various CLOs of the course. The achievement levels are categorized

from level 0 (below 50%) through level 1 (50% - 60%) level 2 (60% - 70%) to level 5 (90% - 100%). The achievement levels of students in each CLO of a course are computed in counts and percentages which are then used to generate graphs. The success criterion set at the planning stage of the course assessment for each CLO is compared with the results obtained in the CLOS Assessment Analyzer and appropriate decisions are suggested for course improvements. An image of the CLO assessment analyzer worksheet is shown in Figure 8.

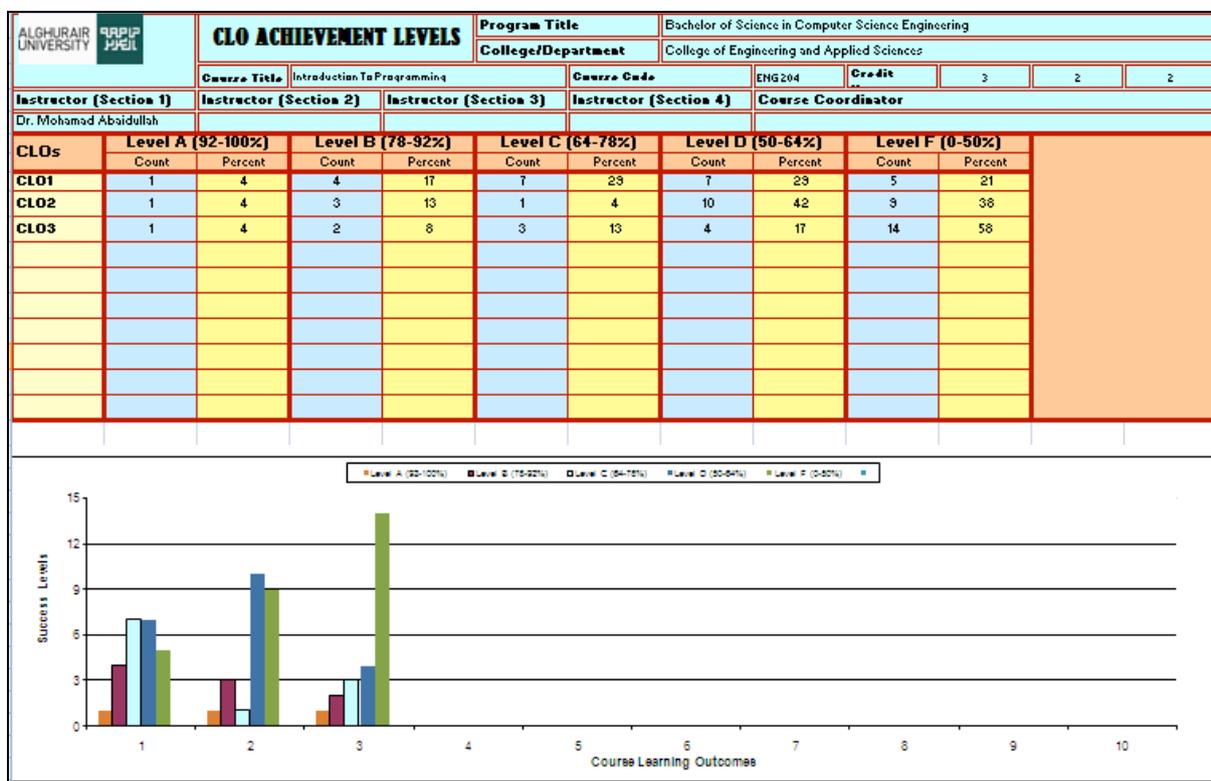


Figure 8: CLO Assessment Analysis Worksheet

3. Closing the Loop

Closing the Loop is the final step of the course assessment process. It allows course instructors to review and utilize the assessment results by suggesting changes that might be necessary to improve the quality and standard of future offerings the course with an aim of enhancing the overall effectiveness of the course. This is done by completing the designated part of the “Course Assessment and Improvement Template” (Section C of the Figure 2). The instructors must address the following three important areas;

- a) Assessment findings: Instructors provide a summary of assessment results and discuss briefly what instructors have learnt after gathering and interpreting the assessment data for each CLO.
- b) Corrective action for improvement: Instructors provide information about :
 - i) How do they plan to use the assessment results to improve the course?
 - ii) Who shall be responsible for implementing the plan?
 - iii) What resources will be required to carry out the plan?
- c) Completion date: Instructors provides key target dates to carry out and complete the suggested improvement plan.

4. Conclusion

We presented a simple and efficient system to plan and implement the process of assessing various CLOs of a course taught in an academic program. We have demonstrated that it is user-friendly and easy-to-use system. Various templates designed as a part of this system have been found to be very effective in documenting and recording the assessment data in a standardized format that makes the collection and interpretation of assessment evidence as well as the process of closing the loop much more effective and efficient. The system was designed and implemented using MS Excel Workbook as a prototype tool that will be further refined and upgraded to a web-based system using advanced tools and technologies available in the field.

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EFL and Maternal Involvement in the Suffering of Korea

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EFL and Maternal Involvement in the Suffering of Korea

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Introduction

In modern societies, there is no doubt that social origin and characteristics of parental socioeconomic status are associated with the educational success of their offspring. This consensus has led to an abundance of educational research world wide exploring the topic of social reproduction or the impact of parental participation, including in Korea. In fact, over the last few decades Korean parents' involvement in their children's education is strikingly noticeable, even in light of their deeply rooted culturally grounded enthusiasm for education. English as a Foreign Language (EFL) education, in particular, is marked by a frantic competition. Korean mothers are posited in the middle of the rhetoric between education and success, vilified frequently for their excessive action, while at the same time, recipients of social sympathy. Various studies have been actively produced on this issue from feminist, sociological, and anthropological perspectives in the educational research area during the last decade (Abelmann, 2003; Cho, 2004; Chung, 2010). Despite high academic interest in this matter, it can be suggested that human suffering inherited within the Korean educational frenzy has been less paid attention to. In this paper, Korean mothers' involvement in their children's education is explored through textual interpretation, drawing out the historical and culturally specific sociological, semiotic, and critical sensibilities of the Korean educational situation. Using the social science process of *bricolage* (Levi-Strauss, 1974), the study draws on semantic elements in electronic and print media for the gathering of 'texts' that are interpreted hermeneutically to reveal the multidimensional ways that mothers' involvement in EFL practices contributes to the more generalized problems in Korean education. The study is projected as a work of social and cultural healing and hence attempts to articulate ways in which both motherhood and education might be re-thought in contemporary Korea.

Textual Interpretative Approach

This study is hermeneutic in character as its research method relies on textual interpretation. As Ricoeur (1981) defines hermeneutics as "the theory of the operations of understanding in their relation to the interpretation of texts" (p. 53), hermeneutics is the reading, the interpretation, of messages and texts under the assumption that human beings experience the world through language. Gadamer (2004) believes that understanding comes from interpretations embedded in our linguistic and cultural traditions, which contribute to our inherent prejudices. According to both Gadamer (2004) and Ricoeur

(1976, 1981), to understand what the text says is to be engaged in a conversation with a text, bringing researcher's prejudices into play – a dialogue that encompasses our understanding of the matter at issue, including our self-understanding. A central task of textual interpretation in this study, therefore, is to understand how meaning/prejudice is formed within the complexity of the Korean EFL context and to acknowledge that meaning is always conditioned by hermeneutic tradition in a form of language within historically specific social and cultural settings.

In this study research texts, defined by Ricoeur (1981) as “any discourse fixed by writing” (p. 145), were gathered from the pre-existing and emancipated from the face-to-face or direct reciprocal oral communication. Selection of texts has been likened to the process of *bricolage*, coined by Lévi-Strauss (1974). The French term, “*bricoleur*” refers to the kind of practices that are performed by a handy-man with materials and tools that are at hand by appropriating pre-existing materials which are available and ready to use (Schneiderman, 2002). Various texts that strike as interesting have been used for processes of sense-making and looking for other relevant texts which enable interpretive activities to move back and forth between the specific and the general of the Korean EFL educational context.

EFL Education in Korea

English language education began in Korea in the 1880's with Christian missionary schools (Kang, 2007), agents of Western imperial powers. In this context, obviously, Koreans' interest in English was not entirely coincidental nor simply a romantic curiosity. The symbolic power of English was crucial during the transition from pre-capitalism to capitalism which marked Korea's very abrupt move toward globalized capitalism. As Kang (2007) noted, not a small number of public figures reached important positions by utilizing their English skills throughout the period of upheaval from the 1900s to the 1960s. The family wealth accumulated by these individuals and their high status, in particular, inspired Koreans toward new modern values, which Lee (1999) describes as individual liberty, equality, reasonableness and material wealth. Since that time, as Kang (2007) and other scholars (Yoon, 2007; Park, 2007) argue, English has been taken as an important means of success in life in Korean society and a signifier of personal competence, in the severe competitive battle for entrance into both college and eventually the job market.

In addition to the legacy of colonial factors during the process of modernization of the state, the catalyst in the chemistry between Koreans' status-consciousness and parents' enthusiastic involvement in children's education have always been government policies on a combination of economic growth and education. Successive governments' active adoption of strident neoliberal agendas since the 90's, particularly, has aggravated the incoherence of policies in the regular school system (Shim & Park, 2008; Shin, 2007) alongside the emergence of the rhetoric of globalization as government propaganda,

which ignited a frantic dash to English education, cynically termed as *young-o yol pung* (English fever), *young-o gwang pung* (English gale), *young-o byoung* (English disease).

This tricky situation pushed parents away from regular school programs and into the private tutoring market. Parents' concerns have become heavier and their demand for private tutoring is no longer regarded as an option, but rather it is now considered a parental duty to provide children with such essential requirements for survival in kindergarten to grade 12, and also in higher education programs. Even unborn children are signed up for prenatal English class (*taegyo-young o*). Within this climate, the English tutoring market has grown massively in response to increasing demand from anxious parents, thereby taking advantage of Koreans' deep rooted tradition of educational zeal (Cho, 2008; Nah, Tae & Jang, 2007). As Lee (1999) laments, without doubt "[e]ach family has a deep conviction that their children should get the best education regardless of their ability to support their education" (p. 191). In contrast to those parents who provide their children with English tutoring as an essential requirement for survival, not a small number of middle- and upper middle class parents support their children, with a different vision, mostly of prestigious schools around the world, hiring private tutors to prepare for the SAT (Scholastic Assessment Test) and college consultants to help prepare the right application portfolio for admission. As a result, the number of children sent abroad to study English has increased in the last decade, and new transnational families have emerged, the so called, 'wild geese' (*girogy*) families.

According to the *New York Times* (Onishi, 2008), Koreans make up the largest group of foreign students in the United States and the second largest in New Zealand after Chinese students. Yet, unlike other foreign students, South Koreans tend to go overseas starting in elementary school — in the belief that they will absorb English more easily at that age. The wild geese families have shifted Korean familial culture:

"The phenomenon is the first time that South Korean parents' famous focus on education has split wives from husbands and children from fathers. It has also upended traditional migration patterns by which men went overseas temporarily while their wives and children stayed home, straining marriages and the Confucian ideal of the traditional Korean family.....Now, there are also "eagle fathers," who visit their families several times a year because they have the time and money. Those with neither, who are stuck in South Korea, are known as "penguin fathers."

This transnational shift was followed by a rapid increase in educational expenditures after the Korean national bankruptcy, also known as the IMF crisis, in 1997, a product of the complexity of the global economic age. A report from the Bank of Korea estimates that 8.2% of average household expenditures has been spent on children's education in 2009, compared to 2.6% in the U.S., 2.2% in Japan, 1.4% in the U.K during the year of 2007, and 0.8% in France, 0.9% in Germany in 2008 (Kim, 2010). Finally here we see how capitalism, under the guise of globalization, is a primary root of Korean EFL issues, and that EFL issues including the Koreans' educational enthusiasm need to be examined in a more multidimensional way, such as questioning the notion of success in life (Sorenson,

1994). In the next section, the relationship between education and success in the Korean mind will be discussed in more detail.

Historical Root of Education and Success

The cultural roots of Korean educational enthusiasm stem from the inseparable linkage between education and success which can be traced back to Korean family culture and pre-capitalist social structure. The biggest influence came from Confucianism, adapted as state orthodoxy by the Choson Dynasty (1391-1910) (Lett, 1998; Kim, 2008). Even up until today, certain aspects of Confucianism have persisted most strongly in the predominantly urban capitalist society of contemporary Korea: the “traditional emphasis on social stability and hierarchy... have continued to structure important aspects of work, gender relations, and family life” (Kim and Finch, 2002, p. 122). The civil service examination and occupational division of the Choson Dynasty are archetypal cases of the legacy of the relationship between education and success. For Lett (1998), the civil service examination (*gwago sihum*) was a sign of educational success and an ideological link between family and state. By passing the civil service exams, a man (literally only male) obtains a government position. The hierarchical characteristic of the Confucian perspective of social organization also divides occupational status into four groups. The lowest class of occupational discrimination was renamed manual labor, *sam di* (three Ds: Dirty, Difficult, Dangerous), in the 80s and 90s, and is currently occupied by migrant workers from mainly South Asia and China. The impact of contemporary *sam di* has been to create such a significant income gap between high school and college graduates that competition for education has increased.

I strongly agree with Lett’s (1998) endeavor to attribute Koreans’ current deep rooted disdain and avoidance of manual labor to the legacy of Choson’s elite, and its influence on the rapid rise of the urban middle class and upper class of the 1990s in Korea. Therefore, it seems necessary that the inter-relation between class formation and education alongside income inequality has to embrace a range of issues such as construction of Korean motherhood (Kim, 2009; Nah Tae & Jang, 2007; Cho, 2004; Kim, 2004), marriage culture (Kendall, 1996), housing (Yoon, 1996) and consumption patterns (Nelson, 2001). In the next section of the paper, details of maternal practice will further reveal the complexity of this issue.

Maternal Practice as Social Classification

Social Reproduction

Yoon (2007) referred to English as ‘a colony in our mind’ in his work. The post-war history administrated by the U.S. government was followed by the Korean elite group, who mainly studied in U.S. universities. This historical fact alone has positioned English as a power *per se*. Children’s education has been prioritized in the everyday life of Korean mothers (Park, 2007; Kim, 2004; Cho, 2004; Cho, 2008; Kim, 2001). The

mastery of English has especially become an essential ingredient for survival and success (Yoon, 2007; Kang, 2007). This means, drawing on Bourdieu's (1984) theory of capital, English is considered as cultural capital in Korean society and, as such, is believed to promote social mobility. From a sociological perspective, this situation also could be viewed as a matter of structure and agency, related to the question, "What is the world made of?". Drawing on Bourdieu's (1977) concept of 'practice', Korean mothers' action/reaction can be called a 'practice' because it communicates meaning through language (discursive to be identified), images (visual in terms of semiotic representation), and bodily movements (embodied and internalized) in the Korean EFL educational context. Maternal practice in the Korean EFL context is a reciprocal process - a tension between agency and structure - and a joining process in social reproduction by producing cultural capital. Although mothers' supporting their children's education is taken for granted as a universally accepted parental responsibility in any society, the excessiveness of Korean mothers' involvement in children's education should be understood as an economic practice in the culturally and historically specific context. To produce cultural capital (e.g. English language skills and knowledge), an economic exchange (e.g. paying for tutoring, sending children abroad, working part time jobs to pay for tutoring) sets in motion a fierce competition, a series of uses, some symbolic, some fungible for other capital, that are practiced in a concrete reality in contemporary Korea. This calls into the question the relevance of the class concept which seems to be inseparable from the relation between education, success and reproduction.

Korean columnist, Kim (2010) writes that he has a strong sense of *deja vu* about the caste system of the Choson Dynasty when he looks at today's Korea. The column laments that the history of Choson's caste system is being repeated in contemporary Korean society, this time an individual's life is not determined by a slave paper but by the status of the university from which his/her diploma was obtained. Kim's (2008) critique of Korea's academic clique, *hakbeol*, is a contemporary social malady: universities have been arranged in rank order from the top to the bottom and only a handful of top ranked institutions has power in a 'winner-takes-all game'. This is just as Bourdieu (1984) described: "[a]cademic capital is in fact the guaranteed product of the combined effects of cultural transmission by the family and cultural transmission by the school" (p. 23).

Bourdieu's conceptualization of the interrelation between education and social reproduction seems valid when it is applied to the social structure of the Choson Dynasty. Although social differentiation and affiliation were framed by Choson's hereditary caste system, indispensable determinants of reproduction of the system were, as Bourdieu (1977) illustrated, principles of the generation and structuring of practices and representations "which can be objectively "regulated" and "regular" without in any way being the product of obedience to rules, objectively adapted to their goals without presupposing a conscious aiming at ends or an express mastery of the operation necessary to attain them" (p. 72). Based on the intergenerational transmission of cultural capital, Bourdieu's theory of social reproduction and cultural capital class stratification lies in the conceptualization that the culture of the dominant class is transmitted and rewarded by

the educational system. Social structure of the Choson dynasty was reproduced successfully for generations by means of reproducing ruling class subjects and accommodating them to the given structures of cultural capital through Confucian curricula, as a symbolic violence.

Women used to be the group who were assigned most both explicitly and implicitly to develop particular culture and class meaning. Their social (home) and pedagogical (school) contexts were limited to inside the home so that male dominance of the society could be perpetuated in the structure of patriarchy. The outcome of women's education was assessed semiotically in the representation of their way of walking, speech patterns, dress, and behavior. Bourdieu's (1977, 1984) refers to this as *habitus*, which in Korea eventually lead to a form of social exchange, a marriage. The concept of *habitus* can also be a tool to explain why younger and younger children are directed toward EFL education in Korea. Hiller and Rooksby (2005) interpret Bourdieu's concept of *habitus* as "a way of knowing the world, a set of divisions of space and time, of people and things, which structure social practice" (p. 284). From Bourdieu's (1984) theory of reproduction, it could be suggested that Korean mothers who participate in children's education can be seen as social agents who navigate and accommodate themselves to relatively new forms of Korean capitalist social structure so that they become "the social agents whom the sociologist classifies as producers not only of classifiable acts but also of acts of classification which are themselves classified" (p. 467).

Institutionalized Motherhood

Reay (1995) described fathers as 'a majority of silence' in her qualitative study on parental involvement in children's education. While the texts on parental involvement are "frequently written in terms of neutral, context-free parents" (p. 337), the research revealed that most of the activities were carried out by women. The case of the Korean mothers' educational practice is more complex than that of British mothers in Reay's research. Korean mothers are a fully recognized group in the society, yet, their practice is assessed by means of reward, punishment, and frequently, encouragement. Mothers' practice in children's education in contemporary Korea is associated with the ideology of the so-called *hyonmo yangcho* (a wise mother and good wife), the ideology of a 'Confucian woman' (Koh, 2008). Today, under capitalism the representation of 'wise' and 'good' women has been transformed into the practice of 'the capable' and 'the entrepreneurial'. Good mothers in contemporary Korean society have to possess material resources and know-how to support their children's success by trading higher quality of educational products. Two articles published by news media agents confirm this reality.

In March, 2010, a thirty four year old woman was arrested for shoplifting at a bookstore in Busan in Korea (Oh, 2010). She said to the police "I didn't mean to steal it. But it happened before I realized. My family is having bad times but I wanted my children to learn English badly." The stolen item was a DVD set of children's English lesson. The original intention of the mother came from the desire to be a 'good' mother for her

children's education. More on-line comments on the news article revealed sympathy and criticism of the polarization of Korea's social structure.

Another article published by *The New York Times* was entitled 'For English Studies, Koreans Say Goodbye to Dad' (Onishi, 2008). Remarks of a wild goose mother reveal her eagerness and determination to school her children in a foreign country without any hesitation:

"We [my husband and I *emphasized by the author*] talked about coming here for two years before we finally did it," said Kim Soo-in, 39, who landed here 16 months ago with her two sons. "It was never a question of whether to do it, but when. We knew we had to do it at some point."

The wild goose family phenomenon reflects the complexity of the Korean EFL educational context as a pivotal point of cultural shift, emerged after national bankruptcy as known as 'IMF Crisis' (1997). The article presents the wild goose mother's belief that English fluency would increase their children's chances of gaining admission to selective secondary schools in South Korea and ultimately to a leading university in Seoul. Hermeneutic interpretation of these articles seeks to understand the experience of the mothers and elements of reality underneath the texts. In so doing, we can expose hidden power imbalances and challenge the status quo. Furthermore, we can not afford to neglect the economic benefits to lead English-speaking countries of this Asian influx.

Meanwhile, from a sociological perspective, wild geese mothers make an effort to produce cultural capital, taking their young children to the habitus of English speaking culture and nurturing them. In doing so, children's English skill are expected to reach the linguistic competence "an unconscious mastery of the instruments of appropriation which derives from slow familiarization...which, like an art of living, cannot be transmitted solely by percept or prescription" (Bourdieu, 1984, p. 66). The reality is that these mothers are rewarded as being capable and entrepreneurial. In terms of maternal practice in children's education as a capitalist accommodation in contemporary Korea, the intensity of involvement with a wide range of social members accompanied with an imperative condition can be possibly understood as two strands: first, that of a historical contemplation in terms of a traditional concept of maternal, and second, that of a development process of Korea as a capitalist society.

Cho's (1991) 'uterine family' is a plausible starting point for the reason why many Korean women still agree with the ideology of *hyonmo yangcho*. In the Choson Dynasty, the most important virtue of Korean women was the absolute obedience to patriarchal control which was masked as filial piety. Women of the society were compensated for their being docile, allowed some degree of power of control over a limited area of the family which consisted of children, daughters in law, and servants – the "Others" in the community. Cho (1991) terms this compensation as a uterine family. In historical narratives of movies, novels, and many other forms, it is often shown that an elderly

woman in a family runs her own family, and her authority is symbolized with a bunch of keys to the rice storage shed.

Second, the legacy of this custom has been transformed into a wife's role in the financial management of the modern family, eventually, the biggest group of consumers since the free market system was activated in Korea. The negotiation system as a form of uterine family was a kind of junction point between pre-capitalist society and capitalism of Korean women's positioning as the largest consumer within the unpaid labor class. The compensated financial authority of women is often mistaken as a position of liberation while Korea was achieving economic success because Korean women's educational opportunities increased despite their marginalized position in the job market. In *Yonhap News'* reported analysis of an OECD report on the employment rate of women in 2007 (Im, 2010), the employment rate of women with post secondary school diplomas was identified as the lowest among OECD members. According to an article in the *Washington Post*, "[t]here is a 30 percent employment gap between men and women [in Korea], the fourth-largest gap in the world. Even if women choose to stay on the job, they have no guarantees of career advancement Women in South Korea make 38 percent less money than men, the largest gender gap in the developed world" (Harden, 2010). In this broader context we see that Korean women's economic practice entails mainly consuming, which signifies their social status; family management, buying a home, and purchasing educational products become natural class determinants. Inspired by Hartman (1981), it could be suggested that Korean women's situated position in the family is a locus of gender, class and political struggle in the patriarchal and capitalist nature of the relationship that shapes family life.

The intriguing title of the article published by the *Wall Street Journal*, "South Korea Becomes Fertile Spot for Luxury - Survey Respondents Express Little Guilt about Splurges, Appreciate Craftsmanship" (Ramstad, 2010), suggests a close interconnection between Korean women's consumption patterns and status consciousness. The survey by McKinsey & Co. focused on people who have purchased luxury goods, found that such products appeal more to South Koreans shoppers than to those in other countries. Nelson (2001) suggests that Korean women's consumption behavior reflects its unique combination of resilient cultural tradition and sudden material wealth, how Korean traditional non-monetary values as social status intersect with the peculiarities of housewives' consumption patterns. Nelson's (2001) study also points out that Korean middle- and upper middle-class housewives not only engage in consumption of fancy imports and children's private tutoring but also practice a conscientious style of book-keeping that includes non-monetary entries on the ledger, such as social status-oriented indicators, e.g., age, class, gender, and residential area. It is not incidental that the demography of women in the marketing of private tutoring and the luxury goods in Korea is overlapping in the housing market as well. A report from the Korean Teachers & Education Workers' Union (Chung, 2010) revealed that housing price and parental educational attainment are closely related with students' achievement of the College Scholastic Ability Test for the 2010 school year: the question, "Where do you live?" implies "Which school are you sending your child to?" (Choi et al, 2010).

Suffering

One of the impetus in this educational frenzy is a fear of entrapment in the cycle of social reproduction in contemporary Korean society. There is no longer a myth of dragons from a village brook (successful persons from working class families) in Korea. The fear is so powerful and contagious that most parents and children become insensitive to suffering, a phenomenon which no human being deserves in terms of education. In an episode of investigative reporting, nine year old elementary school children who were interviewed confess to the reporter (KBS, 2010):

“I wanted to die. I have too much homework to do from school and many different *hagwon* [tutoring school]. But I can’t think about it because my mother would be very sad if she knows this.”

“I have wanted to die whenever I thought about too much stuff that should be done.”

“My mom looks like a witch when she beats me when I don’t finish homework. Yes, she is a vicious witch!”

One of the psychological manifestations of this report is that children are often diagnosed with hair-pulling disorder (Trichotillomania), the result of pressure of a large amount of work around school and *hagwon* and tightly designed *hagwon* schedules. In an interview Son, a pediatric psychiatrist, explains that “These stressed kids pull their hair out. Sometimes, some of them even eat them and it is identified in the excretion process.” A mother of a grade-one daughter tells the reporter about those cases which are seen frequently around her:

“Most of those mothers whose children have hair loss from a repetitive self-pulling of hair hush up. They never even mention that their children are under stress. To see those kids breaks my heart. I also sometimes ask myself why I should force my grade-one child to go to so many different *hagwon* after school.... But are there any other alternatives for us? This is our undeniable reality [in Korea].”

Endless Korean teen suicides related to academic achievement makes the whole society heartless (Park, 2010), and the news that all four members of a Korean wild goose family apparently committed suicide over financial and psychological difficulties in May, 2010, doesn’t surprise the society any more (Tan and Masters, 2010). Lee and Larson’s (1996, 2000) studies examine psychological distress and physical symptoms including the higher rates of clinical depression, as experienced by adolescents while enduring highly demanding examination stress. And those symptoms are widely termed in Korea as *ipsi jiok* (exam hell), *sam-dang-sa-lak* (If you sleep four hours a day, you will fail the entrance exam but three hour sleep will make you succeed), *yaja* (Students and teachers stay in school until late night even after the regular timetable), *ipsi byung* (entrance exam disease), *go sam byung* (high school senior disease). Koreans’ unhappiness over the financial and psychological costs of education is so widespread and, often, cited as a reason for the country’s low birthrate, which, at 1.15 in 2009, is one of the world’s lowest” (Onishi, 2008; Kwok, 2010). These are all indicators of social suffering in Korea.

Human suffering is associated with life conditions and often social suffering is shaped by powerful social forces. (Kleinman & Kleinman, 1996) Suffering is also said “to comprise feelings of depression, anxiety, guilt, humiliation, boredom and distress.” (Wilkinson, 2005, p. 16-17) Wilkinson’s definition continues: “[p]eople are held under the yoke of material deprivation, with the perpetuation of social injustice, and from the denial of their civil liberties” (p. 17). According to these views, we might say that Koreans are suffering from educating and being educated.

Ironically, Bourdieu’s critics claim his theory to be static and locked into an unchanging endless cycle, continually reproducing itself (Harker, 1984). A common thread in both this criticism and the fear of Korean mothers is that there is no room for human agency in a frozen-looking structure. Human suffering which is obviously inherited in such a frantic educational reality seems to be quite closely related to human agency, that is, a practice. It seems meaningful to think about Kim Yeseul who put up a *deajabo* (a hand-written poster), titled as “Today, I leave university, actually I deny it” in the campus of the Korea University on March the 11th 2010 (Kim, J-H, 2010).

“...I have been running the [pre-drawn] track for the last 25 years. Although I made it to enter one of the prestigious universities in Korea, I feel something is wrong... Today, there is no more ‘great learning’ in universities; they have already been degraded to the status of subcontractors of large companies.”

Harker (1984) advocates Bourdieu’s intention, asserting that if practice is a dialectical production, then social change “would involve a disruption of the habitus’ controlled perception of historical circumstances (the destruction of false consciousness, the overthrow of a ruling hegemony), and a refocussing on a new set of principles, (a ‘true’ consciousness, a counter-hegemonic transformation)” (p. 121)

In the hermeneutic sense, an interpreter or Heidegger’s (1962) Being-in-the-World is subject to the way in which an object has already been understood in the tradition where the interpreter belongs. Being a part of the Korean EFL educational imperative is too difficult for any individual to withstand. In other words, in this reality it is too overwhelming for an individual to have the freedom to make a decision for his or her own happiness. As a result, members of the community are not able to care about one another and instead forget their interdependency within everyday life. When we think about the painful truth of human suffering of today’s youth and adolescence, the current situation of Korean education might be Koreans’ temporal and spatial response to the process of global capitalism and it might be interpreted as a failure of historical understanding. The sufferings of parents and teachers in terms of educating their children appear to be another hermeneutic failure. Smith (2003) suggests that the mission of the hermeneutic scholar, which all of us might want to try to understand, is to answer the question of “what makes life Life ...not playing with words; this is asking for the

conditions under which it is possible for us to say that we are alive...and that living seems worthwhile, not just something to be endured until its putative end.” (p. 85)

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Cover Page

Title

Integration of Values into Primary Curriculum of Social Studies and Islamic Studies in Bangladesh

Topic

Curriculum and Pedagogy

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Integration of Values into Primary Curriculum of Social Studies and Islamic Studies in Bangladesh

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Abstract: Drawing on the best practices of three internationally recognised values education and character education programs- Living Values Education Program (LVEP), Character Education Partnership (CEP), and the Australian Federal Government's Values Education initiatives-this study analyses the curriculum documents for two subjects in Bangladesh primary education, namely the curriculum and textbooks for Social Studies and Islamic Studies . The analysis aims to provide insights into: 1) What values are incorporated, how are these values defined, and what descriptions and visual features are used for representing these values; 2) What personal and social skills are emphasised; 3) The extent to which the content, learning exercises, and the classroom activities a) link to the needs and real-life experiences of the children; b) enhance children's natural interest, curiosity, and attention; c) develop higher-order cognitive skills; d) provide opportunities to explore values of their own and others, and to enact the values. This article will also provide implications for the curriculum developers, textbook writers and the subject teachers in of social studies and Islamic studies.

Introduction

Countries across the globe are increasingly adopting programs in schools to foster the values and good character of students. An effective values and character-development approach promotes the knowledge of core values, an awareness about values, and the enactment of values in personal and social lives. Values should be articulated explicitly in the school curriculum. An engaging and meaningful values education curriculum encourages all students to express their opinions freely, involve their real-life experiences and genuine interests, and empower the students by nurturing the whole-child.

The constructs described above are included in the concept 'Holistic Education', the essence of which is that education should involve both the heart and mind of learners, relate the learning to "human experience" and develop the ability to "think reflectively, imagine, dream, create, intuit, and emote"(Johnson, 2010, p. xix). Four essential criteria of Holistic Education, as suggested by Ron Miller (1991, as cited in Johnson, 2010) are (a) developing the learner as a whole person, (b) creating a conducive learning environment supported by an equal relationship between and within students and adults, instead of a relationship based on power and authority; (c) Linking the curriculum to the life experiences of learners; and (d) building the judgment and reasoning ability to critically examine and define values in cultural, social, and political contexts.

This article seeks to explore the extent to which primary education in Bangladesh supports the concepts of holistic education in developing values in children. It first discusses the best practices of three programs in the field of values education, and then analyses the Bangladeshi curriculum documents. The remainder of this article is organised under the following headings: Discussion of Three Programs, Effective Teaching-Learning Strategies for Values Education, Analysis of Bangladeshi Curriculum Documents, Results and Discussion, Implications for Curriculum and Textbook Developers, and Conclusion.

Discussion of Three Programs

This section will describe the guiding principles and key components of three programs which support the concept of holistic education. The three programs include one character education program in the US, the Character Education Partnership (CEP); one international values education program, the Living Values Educational Program (LVEP); and the Australian Federal Government's Values Education initiatives, which will be referred to as Values Education in Australian Schools (VEAS) from this point onward. This section will describe those guiding principles and key components of these programs which support the concept of holistic education mentioned earlier.

Introduction to the Programs

Since its inception in 1993, the CEP has been pioneering the character education movement in the USA (Character Education Partnership, 2008), and is guided by the Eleven Principles of Effective Character Education (Lickona, Schaps, & Lewis, 2007). LVEP is a specially developed values education program, which was founded in 1996 with help from UNICEF and the Brahma Kumaris. It is now spread over about 80 countries (LVEP, n.d.). Finally, in Australia, the Federal Government's emphasis on values education was officially established in 2003 with the publication of the report, the Values Education Study (Lovat & Toomey, 2007). Later in 2005, the National Framework for Values Education in Australian Schools (DEST, 2005a) came into effect. The framework serves as the basis for all values endeavours in Australian schools, providing the vision and the guiding principles of an effective values education program.

Best Practices in these Programs

Developing the whole-person. An effective character-development approach, according to the guiding principles of CEP, promotes the knowledge of, awareness of (feelings and love for values), and the enactment of values in personal and social lives (Lickona, et al., 2007). Similarly, LVEP considers the potential of education in nourishing three aspects of human character: "thinking, feeling, valuing". Growing as a whole person requires the emotional, intellectual, spiritual, and physical development and LVEP cares for these four dimensions of learning (LVEP, 2009, p. 3). Likewise, VEAS recognises one of the good practices of values education as being the development of student agency, a concept which is based on "the premise that schooling educates for the whole child and must necessarily engage a student's heart, mind and actions" (DEEWR, 2008, p. 40).

Teaching-learning environment. The three programs are all based on the premise that relationships in school should be scaffolded by a sense of respect and care, providing a safe and supportive school environment for students so they develop social, as well as, self-management skills, and feel safe and secure in exploring their own values, in acting out these

values, and in developing capacity to take responsibility for local, national and global issues (DEST, 2005a; Lickona, et al., 2007; Shea & Murphy, 2007).

Meaningful and challenging curriculum. Teachers should pay attention to the inherent skills, ability, and interests of individual students, and develop and implement diversified teaching strategies that best address student needs. Moreover, the school curriculum should increase student interest and involvement highlighting their real-life experiences, ensure active participation of all students, and support academic competence by developing “thinking habits” (curiosity, critical thinking etc.), “work-related habits” (hard-work, determination etc.) and “social habits” (cooperation, responsibility, honesty etc.) (Character Education Partnership, 2008, p. 10; DEEWR, 2008; Lickona, et al., 2007)

Values and related skills in various contexts. CEP follows the principle that core human values such as honesty, trustworthiness, care, compassion, fairness and justice help children grow as good human beings and moral citizens, while performance values such as critical thinking, diligence, perseverance and commitment to work enable children to enact the core values and achieve the best in their academic and professional life (Character Education Partnership, 2008; Lickona, 1996; Lickona, et al., 2007). LVEP nurtures self-reflective ability by bringing learners in contact with twelve universal values selected for the program (Hawkes, 2007; Shea & Murphy, 2007). VEAS strives to develop students’ personal and social skills, judgements and planning ability, civics and citizenship understanding and skills, understanding of their relation to the school and wider community, and a sense of confidence, achievement and self-esteem (DEST, 2005b).

Effective Teaching-Learning Strategies for Values Education

Values-centred pedagogies place students at the centre of all activities, teach values explicitly, respect all students, and create a positive environment for student voices to be heard (DEEWR, 2008). These pedagogies provide room for communicating feelings and thoughts about values, and acting out these values by practical and meaningful actions. Most importantly, the pedagogies foster the ability of students to relate what they learn to their real life experiences (DEEWR, 2008).

Children learn moral and citizenship values in schools from four sources: direct instruction, participation in action, critical reflection and observation (Halstead & Pike, 2006). The first three of these are directly related to the explicit teaching of values.

Direct instruction. Values can be taught through “systematic and explicit” instructional strategies such as *discussion, problem solving, co-operative learning*, and the portraying of virtues through *real life stories or fictions* (Halstead & Pike, 2006, p. 141). Values should not be imposed on learners, rather they should be discussed (Zajda, 2009). Teachers need to ensure that students are expressing themselves honestly and openly and not just conforming to what teachers might perceive as ‘correct’ responses (Halstead & Pike, 2006).

Participation in guided action. Arthur and Wright (2001, as cited in Halstead & Pike, 2006) describe three different ways that students can develop their understanding of values through “experiential learning”. These include: (a) “simulations”, such as “mock

elections” and “mock trials”; (b) “involvement in school activities”, such as developing school and classroom rules, debating school policies in the School Council, and engaging in Peer Mediation; and (c) “extra-curricular involvement” in Community Service Projects. Through *extra-curricular activities* and Service Learning, it is possible to develop essential citizenship skills, such as co-operation, respect, conflict-resolution, leadership, and a sense of responsibility to the wider community (Gage, 2004).

Critical reflection. Johnson (2010) defines thinking skill as “a cognitive process broken down into a set of explicit steps which are then used to guide thinking” (p. 140). Critical thinking includes the methods of and attitudes towards “problem solving, decision making, inquiry, or higher-order thinking” (Bataineh & Alazzi, 2009, p. 55). Inferring, comparing and contrasting, analysing, support-a-statement activities, decision making (originality, cost and benefits, reach solution), ordering, and evaluation/critique are critical thinking skills (Johnson, 2010).

Critical thinking skills that are necessary to be able to reflect on one’s own action include:

... the ability to interpret, analyse and evaluate ideas and arguments, to recognize false assumptions and conclusions, to assess the validity of generalizations, to distinguish between relevant and irrelevant information, to see through bias and propaganda, to use evidence impartially, to assess the strengths and weaknesses of an argument, and to draw justifiable conclusions. (Halstead & Pike, 2006, p. 150)

Classroom provisions like Circle Time and Philosophy for Children, at primary level, and debates, discussions, and activities for rational decision-making and reflection, at secondary level, are aimed at having students think critically and reflect on their beliefs, values and experiences. For example, when participating in Circle Time activities, all students get an equal opportunity to give voice to their feelings and ideas, and thus learn to: respect others’ opinions; develop qualities like co-operation, empathy and care; and together form a shared culture in the classroom (Halstead & Pike, 2006). School assemblies, sports activities, community councils to work with local government, student leadership programs, classroom and school decision-making, buddy programmes, peer mediation, student fundraising activities, let the students apply values in meaningful contexts (DEST, 2005b).

Analysis of Bangladeshi Curriculum Documents

The compulsory primary education in Bangladesh extends over a five-year period for children aged between 6 and 10, and mandates “the physical, mental, social, spiritual, moral, human and aesthetic development of the children” (NCTB, n.d.-a). The latest education policy, the National Education Policy 2009, endorses that the main purpose of education is to build mindful, rational and moral citizens who have respect for their own and other religions, and are open-minded, tolerant of other’s opinion, secular, patriot and productive (MOE, 2009).

Values in Key Learning Areas

There are fifty terminal competencies in primary education in Bangladesh, which the children are expected to acquire in the five-year period (NCTB, n.d.-b). These competencies are further organised into the subject-wise Essential Learning Continua (ELC) of the six subjects

taught in primary level (NCTB, n.d.-c). There are some competencies that necessitate the development of various values in children. The key learning areas to which the competencies are linked are Environment Studies (Society) [also referred to as Social Studies] and Religious Studies (Islam, Hinduism, Buddhism or Christianity).

Documents for Analysis

In this study, the curriculum and textbooks of Social Studies (SS) and Islamic Studies (IS), developed and distributed centrally by the National Curriculum and Textbook Board (NCTB), Bangladesh, have been analysed. **Islamic Studies** is chosen because majority of the total population are Muslims. Textbooks are for Grade 3, 4, and 5 as there are no SS and IS textbooks for Grade 1 and 2. All materials were translated from Bengali to English before analysis.

Analysis was carried out using the **generic literary approach** (Brown & Brown, 2010) in which the author reads the text, identifies the key ideas and presents analysis of the findings with examples from the text.

Results and Discussion

Aim of Curriculum

The **SS** curriculum aims to develop awareness among children of the environment surrounding them, and make them active members of that environment. The educational philosophy emphasised in the curriculum of **IS** is that if we develop belief or faith in Islam and follow the teachings of the Quran (the Holy Book) and the Hadith (sayings of Prophet Muhammad), we will be able to build our character and contribute to developing a peaceful society. This curriculum makes children familiar with the Islamic teachings on the virtues and values of human life.

Terminal Competencies

Sixteen TCs are linked to the curriculum of **SS**. In a broader sense, the concepts that the TCs cover are listed below:

Table 1

Terminal Competencies in Social Studies Curriculum

Key Concepts	Description
Equity, tolerance, inclusion, and democratic living	Respecting diversities; living peacefully in a society with all; adherence to democratic rules and regulations
Rights, duties and responsibilities	Knowledge, understanding, and exercise of fundamental human rights; awareness of rights, duties and responsibilities in personal, social, school, and civic lives; active participation in family,

	school, and society services
Personal, moral and social qualities	Achieving qualities such as righteousness, responsibility, discipline, civility, punctuality, and coexisting with others
Environment, its pollution and protection	Elements of environment; factors causing its pollution; effects of pollution; awareness of environmental protection and conservation
National identity	Knowledge of and respect towards national history, heritage, and culture; knowledge of geography of Bangladesh
Spirit of Liberation War, patriotism, and nationalism	Knowledge of national symbols, anthem, map, and flag; history and background of Liberation War; inspiration of patriotism, nationalism, and solidarity
Social and national resources	Knowledge of social and national resources and their wise use and conservation
Population problem in Bangladesh	Knowledge of the factors causing population growth; effects of population growth on fundamental rights, environment, and the state
Manual labour	Developing interest in manual labour and respect towards manual labourers
Introduction to other cultures	Knowledge of and respect towards other cultures; Cultures of Asia, Europe, Africa, India, Myanmar, Japan, and Malaysia as case-studies
Universalism, international relations and world peace	Universal solidarity, cooperation, understanding and establishment of world peace

For most of these concepts the content is presented in a single textbook chapter.

The SS curriculum is usually a combination of content taken from history, geography, and civics and is aimed at developing students to become good citizens (Brophy & Alleman, 2009). This is also the case in Bangladesh primary education. The problem, however, is that when a curriculum includes numerous topics as content goals, i.e. has an emphasis on breadth, it runs the risk of following a very shallow approach at the expense of depth. It is often the case that social studies teachers rely largely on textbooks, and most of the time the textbooks provide a broad but shallow information range, covering disconnected topics without a central focus on any particular big theme (Brophy & Alleman, 2009). As a result students often leave school without a deep understanding of the issues or any lasting effect on their citizenship identity. Bangladeshi SS curriculum and textbooks are not free from this problem. It has not been possible to give a big picture of any concept. Children gain “miles wide but inch deep” knowledge on everything. They are not mastering useful skills for their lives, neither are they acquiring deep understanding of the curriculum content.

In the curriculum of primary IS, one of the five terminal competencies is about building ‘Akhlaq’ or character. Students are expected to learn about and follow the religious teachings that entail character formation. Grade 3 students learn the significance of obeying parents,

behaving well with classmates and guests, exchanging greetings, being compassionate to living creatures, telling the truth and serving humankind, and are expected to act accordingly.

Grade 4 students learn to understand what 'character' is and be motivated to develop these ideal characteristics. They learn about the importance of obeying and respecting parents, teachers, elders, and being affectionate to juniors. Also included are responsibilities to neighbours; patience; the merits of being truthful and keeping promises; and the demerits of being greedy, wasteful, and spiteful. The Islamic teachings encourage children to practise good habits and avoid bad habits.

Grade 5 students learn to comprehend the meaning of 'Akhlaq' (good character) and build their character in the light of Islamic education. This includes being able to understand and communicate the meaning of honesty, forgiveness, mercy, and care to parents and living creatures. Students learn about the significance of patriotism, and how to love and serve the country. There is teaching on the merits of helping, performing and encouraging good deeds and preventing wrong doing.

General Format and Language of Textbooks

While SS materials are aimed to develop civic and citizenship values, IS curriculum mostly emphasises private or moral values. IS textbooks convey the message that every action of Muslims will be judged in the Hereafter; one should follow the teachings of Quran and Hadith to satisfy Allah and to create a peaceful world.

Textbooks are divided into distinct chapters with a section for exercises at the end of the chapter. All textbooks are written in first person (we). For example, "We will take care of these [roads] and will maintain cleanliness to live a healthy and pleasant life" (NCTB, 2003b, p. 4). There are very few exceptions to this. For instance, in the IS-3 (IS-Grade 3) book, a scenario presented in the section "Behaving Well with Classmates" is as follows:

Ashik is your classmate. He could not come to school. He is not feeling well because of fever. He is suffering from headache. You will visit him. You will wipe out his body and rub his head. You will give him support. (NCTB, 2003a, p. 39)

Everything is presented as merely a model of what the students can do, but no guidelines are provided as to how the learners can do these things practically. Moreover, the tone of the content is sometimes authoritative. Students are left with very little scope for realising the necessity of making moral judgements or the process of doing this. Instead, the content prescribes an ideal form of how children should think, behave or act in their personal or social lives.

For example, at the end of an SS-3 book chapter, a list of *promises* that "we" [the students] will make to prevent environmental pollution is provided (p. 5). There is almost no room for

learners to think about or ask questions like "Why would I do that?" or "What if I do not do that?" In the same book, children learn about school rules in the chapter "Discipline in Family and School" in this way:

Everyday we will come to school in time. We will bring things like book, notebook, pencil, eraser etc. Will attend assembly regularly. Will follow teachers' advice. Will behave well with classmates and others. Will eat lunch on time and play. Will return to classroom after bell rings. Will take part in annual cultural program, sports, and other events. Will keep the classroom and school yard beautiful and clean. Will come out in order when the school ring bells, then will go home." (NCTB, 2003b, p. 25)

In this example, the children are not asked to formulate ideas from their daily experience regarding what they do or should do, but are merely provided with a prescribed list, reminiscent of strict military discipline.

Social studies books do not include any stories, either fictional or real-life. The only exception to this, found in the third grade book, is a story about electing the class-captain. The Islamic studies books, however, contain a number of stories from the lives of Prophets and saints of Islam.

For both the subjects, there is no mention of content goals, terminal competencies or expected outcomes in the book chapters. Although references are made to the content learned in previous grades, links to other key learning areas are not provided in any of the textbook chapters. Moreover, the key ideas and terms in the chapters are rarely elaborated.

Disconnected and Superficial Content

The textbooks present several disconnected and shallow ideas without actually referring to how the students can relate what they have learnt to their lives. For example, in SS-3 book a chapter includes content on the various roles we take in society, and information on different religions and religious customs. It is not clear how just by knowing about customs and festivals of four religions, students will be able to develop respect for religious diversity.

The same chapter includes some discussion on people of differing gender, age, occupation and nationality. There are some promises that the students need to make to maintain religious harmony in society. Students also learn that they need to respect all people, irrespective of economic conditions, be caring and passionate to domestic workers, respect and help all, irrespective of nationality and religion. In conclusion it is said that *world peace* can be established in this way. This single chapter contains materials on many diverse and complex concepts with almost no opportunities provided for students to discuss or explore these topics in greater detail.

Another example of the textbooks relying only on words to teach values is evident in a SS-3 book chapter, where content related to respect towards manual labour is provided. After describing the significance of keeping the house and surroundings clean and tidy, and the children's role in doing this, an introduction to manual labourers and various professions in Bangladesh is given. In the later part of the chapter the book says, "We will not fear any work. We will not hate any occupation. We will love to work by ourselves" (p. 58). Children come to know,

There is a necessity of having manual labourers and different groups of professional in our society. We depend on them to fulfill our needs. We will respect all manual labourers and professionals. We will also respect all sorts of work. (NCTB, 2003b, p. 62).

Children are encouraged to repeat 'promises' instead of examining how they can reflect the values in their own lives. Moreover, the content related to some crucial terminal competencies (such as 'human rights' in the SS-3 book) is presented in a very limited way.

Values are not Defined Explicitly

The textbooks do not provide learning activities which allow students to investigate the nature of values, the significance of a particular value in life, and the way the presence or absence of values can affect the feelings of others. Values are sometimes mentioned as part of the discussion on big issues, but are not treated as being important in their own right. In addition, there are almost no activities for children to explore and share their values, and commit moral actions as part of the curriculum. Thus, there is little motivation provided that might encourage children to practice these values independently in their lives. The content on values does not provide opportunities for students to reflect on their own behaviour and consider the ways in which their actions do or do not represent the values. Following are some examples of narrow representations of values.

The chapter 'Social Virtues' in SS-4 textbook (NCTB, 2004b) says, "We will follow the rules of society. We will achieve moral and social virtues like justice, dutifulness, good conduct, punctuality, and coexisting with others". There is, however, no definition of these qualities.

The only instance of defining values or virtues is found in SS-5 textbook: "To behave well with others is called good manner" and "Doing activities in time is punctuality" (NCTB, 2005, p. 18). In the discussion of social qualities, children are first told to create and attend social and school clubs and organisations since "the basis of the clubs and organisations are unity, collectiveness, cooperation etc." They are then encouraged to follow the principles of "truthfulness, justice, dutifulness, discipline, civility, good conduct, tolerance, compassion, punctuality etc." since "these are our social qualities" (p. 21). The above qualities are, however, not defined.

Moreover, there is very little focus on values and skills that children need to develop for success in their personal, academic, and professional life. The ways to achieve skills like conflict resolution, decision making, problem solving, goal setting, and controlling one's own emotions are also not mentioned in the textbooks.

Limited Opportunities for Moral Action and Service Learning

The books describe the ways children can act responsibly with regard to their family, school, local community, and the nation. For example, in the SS-4 textbook students are encouraged to take part in school activities, such as growing gardens and making fences to protect those, and building school library. It is suggested that "...we will also build libraries in our home, neighbourhood, and our local community" (p. 2).

The same book tells elsewhere:

We will ask for opinion of all in the community. We will make decisions about keeping the community clean and tidy. We will select a place for garbage disposal based on the opinion of majority. We can take various steps to maintain the law and order of the community. (p. 108)

In the SS-5 textbook, students are encouraged to organise a "Plant Fare" or activities for "Social Forestation" in their local community (p. 5). They can also help the community members become self-dependent by arranging special events, in cooperation with the department of agriculture and other non-government organisations, to provide the members with information and materials for growing fruits and vegetables. Other suggested activities are taking part in garbage collection, waste disposal, and pest control, as well as repairing houses, bridges and other buildings after any natural calamity.

The students learn from textbooks that the way to be involved in such activities is joining scouts or girl guides and school clubs. However, there are no suggestions for ways in which service learning in the community can be implemented through school-based activities if there are no such clubs in a school. It seems that the majority of activities depicted in the textbooks are beyond what could be achieved within the school context and so opportunities for fostering student agency in the broader community appear to be very limited.

Activities in Curriculum and Textbooks

The SS curriculum suggests that a wide range of creative and interesting teaching-learning strategies, such as excursions, visual aids, narratives, stories, and personal encounters with events, be used so that information exchange and interactive learning experiences help develop children's knowledge, self-motivation and sense of responsibility towards the social and natural environments. But, the chapter-wise planned activities given in the curriculum are mostly listing (i.e., "write in notebook") tasks. The only exceptions to this listing task are the observation of days of children's and human rights, teacher observation of student attitude and behaviour with regard to the value 'respect', election of the class captain, collecting neighbour's name and a short description, and preparing at home two short questions related to culture.

In the SS books the main type of student activity is making entries in given lists or tables, which are, in almost all cases, situated immediately below a paragraph containing the factual information. Students are asked to list information that they found in the passage above the table. There is almost no scope for children to think beyond the given content. Some

exceptions to this literal level fact-finding exercise, however, were detected, and these were in the fifth-grade book. In the first instance, the students are requested to think about necessary developmental activities in their local community and list these in the given table. They are informed that the lists produced by all may have similarities and differences depending on the needs of the respective community. This activity appears to provide a chance for students to learn how to compare and contrast different sources of information. However, immediately after this learning exercise, a list of major developmental activities that may be required for communities is provided, thus, once again prescribing the ‘right’ answer and limiting the student opportunities to construct their own understanding. The other exceptional cases are listing five rules that any club, society or organisation may have; observing the condition of environment of home and surroundings and listing three properties; listing three qualities of a leader known to the learner; listing possible causes of pollution from students’ “own experience”; thinking about and listing additional [to the given content] ways of environment conservation; and finding ways to upgrade the social status of women.

Other than listing, the only activity found in the textbooks is a Mind Map exercise in the SS-5 textbook. A circle is drawn with the words “Causes of Environmental Pollution” written at the centre and twelve lines diverging from it. One of the lines is labeled “leaving garbage anywhere”. A mind map is usually used to extract background knowledge on a topic and can serve as a starting point for further inquiry; the ideas are organised into categories and interconnected by links (Budd, 2004; NSW, 2006). However, this Mind Map activity is not asking the children to brainstorm or add anything new to the given content. The passage above the diagram includes all possible causes of environmental pollution, and therefore this Mind Map is just another form of listing activity found throughout the books.

Making entries to lists and tables is also the major suggested activity in the **IS Curriculum**. There were only a few isolated cases where other activities were suggested:

- Group Discussion: About truthfulness, keeping away from greed
- Role play: Guest and host
- Writing and illustrating morals of a story in notebook
- Storytelling: One student will read the story written in book and others will listen

Although suggested in curriculum, the IS books do not include any student activities, except only one case where seven planned activities were listed at the end of the IS-4 textbook chapter “Akhlāq” (NCTB, 2004a). Six of those activities are, however, listing, and the information required for the lists is provided in the text.

Exercises in Textbooks

In the textbooks, the exercise section includes questions of these types: filling in the blanks, identifying true/false statements, matching, multiple choice questions, and answering short and narrative questions. There are no reflective or thought-generating questions in the exercises. Answers to the questions are given in the chapter. It seems that the aim is only to test the student’s ability of fact-finding from the chapter passages. For example, the following matching exercise (p. 67) in the SS-3 textbook copies statements as they are inside the chapter:

Table 2

Example of a Matching Exercise

Column A	Column B
a. Relations of captain to us	Respect
b. What will we show to elder's opinion	Responsibility of captain
c. To maintain class discipline	Democratic attitude
d. To Collect opinion of majority is	Classmate
	Cooperation

In a SS-4 textbook chapter, titled “Our responsibilities in family and school”, the statements (p. 4) for filling in the blanks are:

- a. We --- in school. (study)
- b. We will not --- anything on the school buildings or walls. (write)
- c. We will build --- in school. (library)
- d. We will read books of the library and will put the books ---. (at right places)
- e. Girls aged between six and ten form --- in the school. (‘Flock of Yellow Birds’)

These sentences in the exercise are also copied word-by-word from the chapter. For the understanding of readers of this article, answers are given inside parentheses.

In general the answers to the questions in True/False and Multiple Choice exercises are almost self-evident and require little thinking or evaluation. This kind of task requires the lower-level thinking processes of retrieving and restating concrete ‘facts’ and does not engage higher-level thinking processes such as evaluation or analysis. Children are also not given opportunities to consider or discuss the effects and consequences of presence or absence of values on themselves and others.

Implications for Curriculum and Textbook Developers

The connections that a curriculum should make with learners are Intrapersonal and Interpersonal (Johnson, 2010). Intrapersonal connection means fostering one’s own intelligence and emotion, utilising inherent qualities like reflectivity, creativity and imagination, and attending to personal needs and interests. Conversely, interpersonal connections include understanding the nature of humanity and the dynamics of interpersonal relationships, feeling and showing empathy for others, and developing the necessary skills to communicate and coexist with others in society (Johnson, 2010).

The document analysis shows that the primary curriculum materials in Bangladesh make little effort to establish these sorts of connections. Although the curricula of both subjects recommend taking into account the natural curiosity and investigative mind of young learners, as well as their age-specific capacity and need for learning, the textbook content does not reflect this recommendation.

The textbooks provide mainly ‘lower-level’ skills such as retrieving and restating facts and lack diversity in teaching-learning strategies. It is possible that teachers supplement their

lessons with sources and activities other than those provided in the textbooks, and endeavour to engage students in more active and meaningful learning (Brophy & Alleman, 2009). A range of student-centred and constructive learning activities that could augment the teaching of values in Bangladeshi primary schools were described in the **Effective Teaching-Learning Strategies for Values Education** section of this article. Some other useful strategies for teaching values are: Analysing Values (identifying and analysing facts to be able to recognise varying values positions), Clarifying Values (exploring and sharing own values and understanding those of others when the teacher deliberately raises a question regarding values), Consequence Charts (brainstorming on the possible consequences of an action or a decision), Decision-Making (choosing from multiple options by analysing and evaluating the possible choices), and Moral Dilemmas (finding a reasonable solution to a real or imaginary conflicting situation) (NSW, 2006).

Conclusion

It can be concluded that the primary curriculum materials in Bangladesh provided almost no opportunities for learners to discuss, reflect on and practice the values. Moreover, the given materials and recommended teaching practices are generally didactic and prescriptive in nature and do not foster the higher-order cognitive skills that would assist students to analyse and internalise the values. This analysis indicates that, in general, the primary curriculum materials do not adhere to the principles and practices of holistic education recommended by the proponents of character and values education programs.

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ICT Tools in Schools with Constructivism for Learning Anytime and Anywhere

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Abstract

This paper is a study of adopting constructivism in making sense of learning to look at how the use of technology is integrated in Singapore schools to engage students in learning to think and to learn anytime and anywhere. The impact of globalization has led to the implementation of technology use in many schools for learning. The ‘globalized classroom’ refers to the 21st century learning environment with the change in the education curriculum towards student-centred learning with ICT, or learning with the information and communication technologies in schools. Learning technologies have led to unprecedented access to vast repositories of information, with ease of access to a myriad of learning resources. Although the current debate is whether ICT is good for students, I think it is crucial to look at understanding how the learning process can be improved with the varied uses of ICT to facilitate effective and meaningful learning with our technologically savvy students instead. This paper is to bring the discourse to a more active level of leveraging on the technological advances for teaching and learning. The framework will focus on the 4 roles of ICT as a tool in learning anytime and anywhere in relation to social constructivism to enhance the learning process. The 4 categories of ICT tools for:

1. Information
2. Situating
3. Construction
4. Communication

Introduction

Singapore has done remarkably well and has risen from being just a “little red dot” in the 1960s to a global city and a developed nation in the 21st century with the use of technology in the education system during the years when globalization as a process has affected the world. More and more schools in Singapore, with the support of the Ministry of Education (MOE) are pushing the frontiers of learning by harnessing IT as an essential tool in teaching and learning through the implementation of the education policy; Masterplans for ICT in education since 1997 (www.moe.edu.sg). One of the important impacts of globalization on education has been the transition of strategies adopted by the government’s response to the globalised economy with the emphasis and use of Information and Communication Technologies (ICT) in teaching and learning in Singapore schools. MOE has started online portal for primary, secondary and tertiary students to facilitate learning and teaching. Students also access the Internet or World Wide Web to make use of the appropriate ICT tools for knowledge, discussion, evaluation, communication and presentation.

According to Singapore’s Senior Minister Goh Chok Tong’s APEC Education opening speech, he emphasized that “education can no longer be built upon purely domestic foundations.” He said that “Globalization is here to stay” and he talked about “how successful our respective societies can cope with globalization” will depend on “how our educational systems respond to it”. He recommended the use of computers to “make learning fun” and allow “pupils access to a vast pool of valuable resources the world over”. With a world that is rapidly changing, the Senior Minister wants our young to:

“reach out to the world, understand the complexities and the potential of globalization, and live and compete in the global village. Education must arm them with the tools to succeed in this new world. This new world will comprise the New Economy and the Old Economy. Computers and IT literacy are therefore as important as the traditional alphabets, books and logic learning.” (MOE, 2000)

Thus, knowing to read and write is no longer seen as adequate in the context of the 21st technology-based society. The students have to be inculcated into more in-depth knowledge of learning technologies for learning. Thus young Singaporean students are encouraged to “speak the language of Science and Technology” to communicate with their peers worldwide and use it to advance themselves and Singapore and consequently a system that has all computers and IT training for educators and teachers in Singapore in a large scale (MOE, 2000)

What is learning anytime and anywhere? According to Smith (2002), to meet the challenges and opportunities of the 21st century IT based information age and to reap the benefits of the opportunities presented by globalization, the new system of education and learning has to support the teachers and students to break the boundaries of time and space; for learning that transcends boundaries (Smith, 2002). Learning anytime and anywhere with interactive whiteboards in class, use of computers within and beyond the school, emerging technologies such as emails, Skype, module blogs, discussion forums, blogging, chat, YouTube, social networking and the use of mobile phones create this new system of ubiquitous knowledge. Thus, education and learning should apply a wide range of online activities for

communication, for knowledge, for higher-order thinking and evaluation that aid the teacher and students beyond the classroom and towards a student-centred learning to enhance the learning process (Douch, 2009).

With the coming of the global era, new connections are being electronically forged from the concepts of “global village” and “networked communities” and are gaining prominence in learning design. The new reality is that the old traditional rote learning is fast becoming obsolete due to the pressures of technologies on the role and purpose of learning. The traditional classroom may be replaced by “virtual” communities of learning as new forms of delivery are devised and the purpose of learning is tested against the demands of the digital age. The use of educational learning technologies has also led to unprecedented access to vast repositories of information and ease of access to high quality teaching and learning resources for learning anytime and anywhere (Khine & Fisher, 1999). But, how can the use of ICT tools improve the learning process for students and how can students be able to derive knowledge from the vast disorganized information?

Learning styles are varied amongst students and are never a “one size fits all” theory and neither is teaching about purely delivering content. As such a model cannot embrace all the complexities of learning (Khine & Fisher, 1999). It is essential to be aware of different learning and teaching strategies within the framework of learning theories. To establish effective pedagogical practice for teaching and learning with the new technologies, I draw upon the constructivist paradigm which emphasizes on how students make sense of learning. The work of the cognitive constructivist theorists and of the socially oriented constructivists Lev Vygotsky whose learning paradigm emphasizes on the construction of knowledge through the historical and social context. Vygotsky (1978), argued that knowledge is formed and thinking happens through the exchange and shared notions with others (Vygotsky, 1978). The work of the cognitive constructivist theories has had considerable influence on current pedagogical practices and how learning occurs.

1. Social Constructivism and Learning

The constructive paradigm as advocated by Piaget (1981) and Bruner (1990) stresses that information that gets into the mind has to be constructed by the individual through knowledge discovery with emphasis on how a student constructs knowledge. Learning takes place when the student can construct knowledge and apply its meanings to new situations. Vygotsky (1978) emphasizes activity, person-in activity and on mediation through social cultural tools such as language, writing and numbers for examples, in his concept of cognitive situated learning. Central to Vygotsky’s (1978) theory of cognitive development is the notion of a “zone of proximal development” or ZPD in which is the zone of the “distance between the actual development level of a child as determined by independent problem solving and the level of potential development as determined through problem-solving under guidance or in collaboration with capable peers” (Vygotsky, 1978). Basically, Vygotsky seeks to explain the role and importance of social context for learning and students’ cognitive development which is based on the students’ ability to learn how to use social tools such as computers and culturally-based tools such as language and numbering systems through interactions with other students and teachers who socialize the students in their learning (Vygotsky, 1978).

Thus, the ZPD provides key implications for teachers as Vygotsky’s ZPD encourages social context for learning and needs to be associated with activities that involve applying learned knowledge in the real world tasks within a meaningful cultural context as well as the need for the student to internalize knowledge and skills before using these knowledge and skills

during social interaction. Additionally, Duffy and Cunningham (1996) emphasized that success in the zone of proximal development theory requires good support for learning or what they term as scaffolding or affordances of the environment which allows for learning in the real world context and in student being assimilated into the cultural context and history of the individual student.

The use of ICTs can be effective only when it is grounded in the theoretical foundations of the learning sciences. There is a need to ensure that students are exposed to real life authentic situations in the world to enhance learning and to lend itself to meaningful use of learning technologies within schools in Singapore. The emergence of the web and related learning technologies makes it both desirable and viable to not only access and manage information than previously thought, but to transcend to a learning process of sharing, communicating, analyzing and evaluating information with the learning community anytime and anywhere. There are various types of ICT-based tools available to help students to think, to learn, to collaborate and to communicate with their peers, their teachers and even the professionals for learning whilst providing some insight into the future of learning of the borderless society. Emerging technologies and adoption of these learning technologies has allowed teachers and students to locate information, to access information at a greater breadth and depth for learning and for communication purposes beyond the four walls of the classrooms.

2. The 4 Categories of ICT tools for Learning

Many educators believe that the most important goal of education is for students to learn how to reflect on and diagnose their own performance. According to Schon (1987), students should be encouraged to become “reflective practitioners” while Salomon, (1998) argues that instead of letting computers simulate human intelligence, human should instead be made to simulate the computer’s unique computing capability and to be able to use it a cognitive tool (Salomon, 1988). Therefore, students should be self-regulated learners responsible for setting their own goals, determining their own strategies and monitoring their own learning. Besides that, students should be using the ICT tools to retrieve information from the internet to find the solution to the problem or the task at hand, to constructing data after analysis of relevant information and in presentation of the information with the help of the ICT tools for learning to be effective.

For self-motivated and individualized learning at the students’ own pace, at anytime and anyplace, ICT tools can be used to help students in their work, that is, as productivity tools like word processing software, spreadsheets, computer-aided design (CAD) tools and graphics packages. ICT tools can also be employed as intellectual partners that enhance and instil in the student's ability to think. Searching the web may provide students with different perspectives or information but it has to be used in connection with ICT tools that facilitate critical thinking and higher order learning. Accordance to Jonassen (2000), the role of ICT tools should be changed from that of technology-as-teacher to technology-as-partner in the learning process (Jonassen, 2000). Therefore, ICT tools facilitate thinking and knowledge construction when students learn by doing and when student are conversing, collaborating with others, and discussing, arguing and building consensus among members of a community, and supporting discourse among the knowledge-building communities. When students are reflecting and articulating what they have learnt, these ICT tools are engaging and supporting students’ internal negotiations and meaning making thus constructing personal representations of meaning, and supporting mindful thinking. (Jonassen et al., 1999).

Depending on the intended instructional purposes, ICT can play various roles to facilitate the learning process of learning anytime, anywhere. The 4 categories of ICT tools for:

1. Information (for visual, audio, and text information)
2. Situating (students can experience the context through simulation games and virtual reality)
3. Construction (evaluating and constructing knowledge, through web authoring)
4. Communication (synchronous and asynchronous like emails and online conference)

(Chen, Hsu & Hung, 2000)

2.1 Use of ICT as Informative Tools

The use of ICT tools as informative tools is to foster learning and knowledge acquisition that transcends the physical boundaries of the classroom in Singapore. But what exactly are informative tools in the educational context? And “How is it possible to derive knowledge from the vast store of disorganized data and information?”

Informative tools are computer applications that provide huge amounts of information in the form of text, sound, graphics or video and examples of informative tools include resources available on the World Wide Web and multimedia dictionaries or encyclopedias and does not require much reasoning or processing of thinking for information except that it is an access to vast depositories of data and information (Chen, Hsu & Hung, 2000). Oliver and Hannafin (2000) investigated the use of ICT tools to manage and manipulate internet-based resources by 12 middle school students. The main objective was to find out how internet resource tools were used, from searching for data to the presentation of the data and resources collected. The tools were proposed to support higher order thinking about hypermedia resources to help students frame and solve open-ended problems. Higher order thinking referred to efforts in processing and understanding information through analysis, reasoning, organizing, synthesizing and evaluating for the above case. It was found that tools alone were inadequate to help students manage hypermedia information for solving open-ended problems. Students used more lower ordered functions such as collecting information than higher order tools; analyzing or reasoning (Oliver & Hannafin, 2000). In accordance with the constructivism theory, students will benefit from ICT tools for information when they hypothesize, analyze, reason with and evaluate about the problems with peers, the teachers and the learning community to make sense of the knowledge. The combination of scaffolding and tool support may help student to develop more advanced epistemological beliefs and to ultimately apply tools more strategically toward understanding and resolving complex, open-ended problems (Oliver & Hannafin, 2000).

Thus, informative tools to search for information may be helpful but they are not adequate on its own. However, if students also make use of strategic or modelling tools to solving problems using higher order thinking skills for evaluation, organization and analysis of information will students be able to benefit more and gain from this informative aspect of the ICT tools. In addition, teachers can play a crucial role in facilitating the learning of students by scaffolding the curriculum, giving a broad outline and limiting the extent of ICT used

purely as informative tools for students. Teachers can select the appropriate technology and teaching pedagogy that is most effective for analyzing and thinking about domain knowledge to elicit effective learning for students. Students who make use of technologies such as podcasting, blogs, discussion forums, YouTube, social networking sites and the use of the internet are already exposed to ubiquitous information and are now more connected to one another anytime and anywhere and to the world more than ever before. Archived lectures or lessons in audio and video, for example through podcasting and other archived course material are easily accessible for learning at nearly anytime and at any place. Students can even watch and get details of the latest human genome or the live webcams of various places thousands of kilometres away (Douch, 2009). Therefore, to leverage on the ICT tools for information, educators have to take note that assigning our students to use the technology for information is not a passive one-size fits all pedagogy but we strongly need to encourage students to analyze, appropriately scan and think about the authentic and relevance of the domain knowledge, be more engaged when they are collaborating, reflecting and in learning anytime, anywhere in the constructivist paradigm.

Use of ICT tools for information and knowledge is one of the advantages and benefits of technology to engage students in learning that transcends boundaries anytime but using it alone for information is definitely inadequate to enhance learning as students do need to incorporate the construction, and communication with the learning community to leverage on the full potential usage of ICT to improve the learning process.

2.2 Use of ICT as Constructive Tools

The use of ICT as constructive tools refers to the general purpose of using the computer software for manipulating of information, for constructing students' own knowledge and to visualize the ideas for students' own understanding. Students are able to produce a product with these tools for a specific instructional purpose. One example of ICT as constructive tool is web authoring applications where students can create their own web pages to communicate their thoughts and opinions to others anytime and anywhere.

Jonassen and Carr (2000) discussed learning using technology from a constructivist perspective. They stated that computers could be used as mindtools to construct meaningful learning and to facilitate learning of higher order thinking skills. Mindtools refer to computer applications such as spreadsheets, databases, modelling tools and hypermedia authoring tools that allow students to present and reflect on what they have learnt using different representational formalisms (Jonassen and Carr, 2000). Mindtools engages students in higher thinking skills such as evaluating, analyzing, synthesizing, elaborating, designing, and problem-solving and in decision making skills. Thus, besides the role of ICT as constructive tools it is also a mind-extending cognitive tool as well; thus students who are actively involved in the construction of their own knowledge with the help of the ICT tools learnt the most (Jonassen and Carr, 2000). According to Jonassen (2,000), ICT tools such as the above mentioned modelling tools allow students to show how ideas are dynamically related as dynamic relationships are causal. Knowing the causes of events or conditions would help students to predict them although it may be impossible to prevent them but to try to avoid or minimize harmful effects. Spreadsheets, expert systems shells and simulation systems are examples of software tools for representing dynamic relationships. Spreadsheet construction and use involve a variety of mental processes that require learners to use existing rules, generate new rules describing relationships and organize information with the emphasis on identifying relationships and translating those relationships in terms of higher order rules (or

macros). When users develop spreadsheets to describe knowledge domains, they will be thinking deeply (Jonassen & Carr, 2000).

With the wide array of information available and to make meaningful selection, interpretation and organization of information, students who use these database construction is making the best use of technology to improve their learning process. Database construction is an analytical task that calls on a variety of critical, creative and complex thinking skills and students will have to decide what information should be included and how to organize the information and objects, their attributes and their relationships have to be carefully considered when building a data model. The students will then have to look for the information to be captured in the database. The searching and sorting of the database required to answer queries can generate a variety of comparisons and contrasts based on which fields are selected for searching and sorting. Intellectually these processes require the organization and integration of a domain of knowledge. There are software tools available for drawing semantic networks or concept maps (Jonassen, 2000).

Additionally, the use of semantic organization software known as semantic networks/maps which are diagrams showing concepts and their interrelationships, also assist students by representing the knowledge structures that students have stored in their minds (Jonassen et al., 1993). These maps are used by students to represent what they know or are learning as networks of concepts. In fact semantic network software is visualization tools for externalizing or representing mental semantic network of schemas (ideas) as concept maps. When students construct concept maps to represent their understanding of a knowledge domain, they reconceptualise the knowledge domain by continuously using new propositions to elaborate and refine the concepts that they already partially know which contributes to learning.

2.3 Use of ICT as Situating Tools

Situating tools are the computer applications in which the students are in an environment where they may experience the actual scenario and happenings of the context at hand. Examples of such scenarios of context include simulation, games and virtual reality. Hogle (1996) examined the use of computer games to increase students' interest and motivation in learning as well as to enhance higher order thinking. He said that simulation and games might improve several kinds of cognitive learning strategies including organizational strategies when students pay attention, self evaluate and encourage themselves in the process of learning through simulation and games. Hogle (1996) stated that games and simulation encourages memory strategies such as grouping, imaginary and in structure review and compensatory strategies such as guessing the meaning intelligently (Hogle, 1996). To Hogle (1996), successful play required extensive critical thinking and problem solving skills but he noted that the educational benefits of the games depended very much on the intended aim and objective of the game and the context in which it is used (Hogle, 1996). In addition, software tools also known as "expert system shells" are available for use which allow people to build their own expert systems and as building experts systems requires students to synthesize knowledge by making explicit their own reasoning, thereby improving retention, transfer and problem solving ability of the users for interpreting knowledge (Jonassen et al., 1993). Thus, when students are able to leverage on these software tools, it is indeed eliciting student-centred learning mirroring the constructivism theory that knowledge is formed and thinking happens through the exchange and shared notions with others and helping in students'

retention and understanding and in application of knowledge appropriately. The use of ICT as situating tools does assist students in their process of learning meaningfully and effectively anytime and within the school compound or at anywhere. ICT tools need to be used for different functions and the next section of ICT as communicative tools for learning is effective especially when it is used for constructing and sharing knowledge with others for learning anytime and anywhere in the constructivist paradigm.

2.4 Use of ICT as Communicative Tools

Through the use of ICT as communicative tools, it allows students to be engaged in learning anytime, anywhere and with any devices. Communicative tools refer to the computer applications that mediate communication between students and teachers or between students and peers at anytime, anywhere and with any devices without physical boundaries. Emails, electronic bulletin boards, chats, teleconferencing and electronic whiteboards are examples of ICT being used as communicative tools. The interactive or communicative element engages students towards an epistemic usage of text. Wells (1990) defined such epistemic engagement with written text as “tentative and provisional attempt on the part of the writer to capture his or her current understanding as the writer or some other reader interrogates the text in order to interpret its meaning” (Wells, 1990, pp. 369-405). Thus, when students defined the topic as important followed with posing and solving problems and theorizing about the context are in fact involved in higher order thinking skills such as analyzing, synthesizing and in interpretation and evaluation of information and knowledge (Wells, 1990).

Students who use emails and Skype, or constructing own websites by uploading their data through blogs, videos and reviews of products for discussion and communication are actually interacting with one another asynchronously or synchronously through these technologies. Synchronous activities such as presentations, video conferencing, quizzes and group discussions; all of which can facilitate the teacher-student interaction or student and students either at the same location or even a different location from learning to teaching between the learner and the facilitator or among other students. Synchronous conferences are made possible when two or more computers are connected to each other to communicate with each other in real time. Synchronous conferences support networked learning communities consisting of teachers and students communicating with other teachers, students and experts who help to enhance both teaching and learning.

Global network technology can provide students with the platform to develop their social, communication and collaboration skill through participating in online discussions. With exposure to greater diversity in perspectives through participation in global discourse, the students' outlook will become less parochial and worldlier. However, for live discussion to be productive, students must be focused in their conversation, like planning a project, debating an issue or resolving a problem with real and relevant contexts for more meaningful learning. They will be more intellectually focused when they collaborate to create or construct an artefact like a report, a multimedia presentation or providing solutions to a problem. It is important for the success of synchronous conferences to pose interesting, engaging questions, problems or assignments for students to resolve in synchronous discussions. If the topic of discussion involves higher order thinking, synchronous conferencing may well support critical, creative and complex thinking (Jonassen, 2000).

Asynchronous communication is different from synchronous conferencing primarily in the level of reflective and constructive thinking that it allows. Harasim (1990) found that students

see themselves as reflecting more while engaged in computer conferencing than when engaged in face-to-face or telephone conversations. Students are analyzing more when they have time to consider and construct responses. Computer conferencing supports social negotiation of ideas about content that is being studied, as well as the collaborative construction of new knowledge. As groups of thinking individuals provide different perspectives and interpretations, debate, argue and compromise on the meanings of ideas and concepts, they are indeed deeply engaged in knowledge construction. The use of asynchronous and synchronous conferencing does engage students in critical, collaborative and self-regulated thinking in the students' learning process.

3. Towards a New perspective on Learning

With careful planning, ICT-based teaching and learning can be effective. Students learn with these ICT tools and from collaboration with other students. These are all the common activities of the IT savvy youths of today and these "digital" young are attracted to these technologies, as today, they are actively communicating, collaborating and learning together. Active and engaged learning allow students to be involved and interested in their own learning path which gives them a sense of ownership and motivation in their learning. Based on the social constructivist theory, when students are sharing and constructing meaningful learning with their peers, the educators and the collaborative community of learners through the use of technology, they are learning effectively and meaningfully. Thus, educators need to provide the appropriate scaffolding and support through the learning environment to facilitate this collaborative and authentic socially-constructive approach. We should also harness that ICT-fascination for the educational benefits of our students. In so doing, we are also preparing the workforce of the future, who will have to be creative and critical thinkers; flexible individuals adaptable to change and becoming life-long learners in this innovative and science/technology economy (O'shea M.P, 1999). We have to realize that the 21st century society instructional paradigm has shifted from the traditional rote-learning information providing concept to student-centred learning with self-discovery on the part of the students adopting learning technologies for meaningful learning. The learning paradigm is that of individualized, engaged learning with higher-order thinking skills that encompass analytical, evaluative skills of learning for life-long learning with the use of ICT tools (Jonassen, 2000). Integrating technology into the learning process means that educators need to maximize the use of technology in situations where students are engaged in the learning process.

We should ensure that the ICT tools, its software programmes and the teachers' instructional approaches function in unison as a bridge between the knowledge to be learned, and the students need to learn. New technologies are changing not only what students learn, but also how they learn. Curricula must align with the demands of the digital age by focusing less on knowing facts and more on strategies for learning. The teacher serves as a facilitator and not as the sole provider of information. Access to education should not be confined to schools, colleges and universities. Learning opportunities resides in homes, community centres, art galleries, museums and workplaces. It should be more about the choice in how the students prefer to learn. Advocate "learning to learn" that encourages students to learn in a best way that best matches their individual characteristics and needs. However, most researches to date suggests that ICT-based teaching and learning are not always more effective than traditional teaching and learning practices. It is essential to be aware of the need to develop a complex matrix of integrated learning tools and teaching strategies within the framework of learning theories, pedagogical practices and evaluation techniques. Then it is possible to achieve an enhanced learning outcome in technologically driven society.

Future learning environments should be inherently flexible to facilitate support for the divergent needs of current, past and future generations. There is a need to identify the varying learner behaviours, interpersonal communication skills, and preferred learning styles. There needs to be full interplay between ICT tools, communication, and cognitive development and behaviour. It is argued that learning in the future should aim to support the lifelong learning of all individuals through the intelligent software and teachers and students' self-directed learning environments characterized by flexible, ubiquitous, mobile delivery at anytime and anyplace.

Conclusion

This paper has enabled a discussion of a theoretical framework of constructivism in making sense of learning and how ICT is used to engage students in learning to think and to learn anytime, anywhere in the globalized world. It is inherently clear that ICT tools can be a very powerful tool to explore the potentials of maximizing students' learning. Integrating technology into the learning process means that educators need to maximize the ICT tools for active and engaged learning. Active and engaged learning allow students to be involved and interested in their own learning path which provides ownership and motivation in their learning. Currently, students are sharing and constructing meaningful learning with their peers, the educators and the collaborative community of learners through the use of ICT. Thus, educators need to provide the appropriate scaffolding and support through the learning environment to facilitate this collaborative and authentic socially-constructive approach.

Today's youth are very IT savvy and have become accustomed to a world in which they can search for, download and share digital music on the internet. Their creativity and desire for innovative thinking is paving the way for more innovative uses for technologies and what is now needed are the hardware and software solutions that will permit students to seek out and creating new knowledge through the current web 2.0 applications or in the virtual world such as "Second life".

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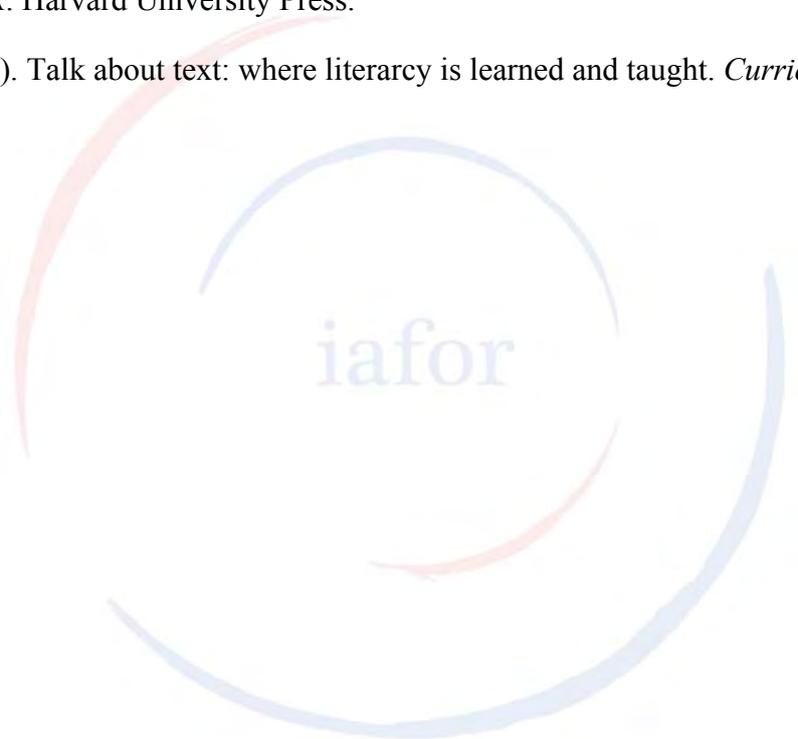
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A 1-day Situational Learning/Tour in MCU/a University: Perceived Effects on English Learning

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Abstract

This study investigated how elementary school students and teachers perceived the effects of a one-day English situated learning/tour in Ming Chuan University (MCU) on students' English learning, based on a survey research study conducted in Taoyuan in Fall, 2008. Situated learning refers to the concept that "learning and doing are inseparable and that learning is a process of enculturation" (Hendricks, 2001, p.302). Lave and Wenger (1991) have pointed out that learning would be more effective if learners are able to interact or operate real tasks with their peers in a context/culture-embedded learning environment. In order to meet the purpose of the study, a total of 273 elementary school students and 13 teachers from the region surveyed responded to the questionnaire. Results of the study showed that the majority of the students and teachers hold a positive attitude toward the effects of situated instruction on students' English learning. The participating teachers pointed out that students were motivated to use English to express themselves and interact with peers and teachers in the situated learning environment. Most teachers believed that the situated classrooms gave students the opportunity to use English and improve their English ability. Similar responses found from students' feedback showed that the majority of them enjoyed the situated instruction and gained more confidence in speaking English. Students responded that they were less afraid to speak English and more willing to speak English after the one-day English tour experience. They also thought their English ability in speaking, reading, listening and writing were improved after participating in the one-day English tour.

Keywords: situated learning, one day tour, English village, beliefs/perceptions

Introduction

In Taiwan, English learning occurs mostly inside traditional classroom settings which are often characterized as test-driven, teacher-centered, and structure-based. The focus of English instruction is on the learning and drilling of linguistic structure and vocabulary to help students attain better grades and pass examinations. Students seldom have the opportunity to produce or use the language inside classroom settings. And since the major languages used in Taiwan are Mandarin and Taiwanese, Taiwanese students who learn English as a second/foreign language also find it unnecessary to use the target language outside of classroom settings. Thus, many students have claimed that they are afraid to speak English

and failed to use the language after years of English study (Hsieh, 1995).

In order to improve this situation, many Taiwanese parents send their children to private language institutes or study tours overseas in the hope that their children can pick up the target language more easily and successfully if they are immersed in the environment. Many have come to believe that if one wants to learn English well, one needs to spend money to go abroad for English learning. Similar problems also occurred in Korea. According to Trottier (2008), over 25,911 young children in Korea were sent overseas to study in the year of 2007. In order to reduce the numbers of students being sent abroad to study English, the Korean government have worked on developing English Villages that simulate real communities in the English-speaking countries. *Paju Camp*, which opened on April 3, 2006, is one example that illustrates this kind of situated learning environment. “The objective of English Village is to provide the public...with opportunities to put everyday English into practice and improve their language skills” (Gyeonggi English Villages, 2006). Students who come to the English Village are expected to use English and *only* English to communicate their needs in authentic-like settings (e.g., hotels, restaurants, etc.). Within the real-world like settings, students learn how to use the target language while observing others tackle with tasks (e.g., how to order a meal) and problems that might happen in native-speaking countries.

The English learning environment and education system in Taiwan is similar to that in Korea; thus, many have thought of transferring the English Village experience from Korea into Taiwan (Chen, 2006). The Taoyuan County government, for example, has devoted much time and effort in developing similar situated learning settings to offer students context-embedded learning environments. So far, the Taoyuan government has set up three International English Villages, including Chung Li Village, Wun Chang Village, and Happy English Village (Taoyuan English Village, 2006). Each English Village is consist of a range of different simulated settings, such as airport, restaurant, hotel, and etc, to immerse students in contexts similar to real life situations.

A newly developed addition to the already established English Villages in Taoyuan County is the one-day English tour in Ming Chuan University (MCU), Taoyuan campus. The one-day English tour started from September 29 targeted its population mainly on elementary school students in Taoyuan County. Students come in to experience a one day English tour in a series of simulated settings. During their stay, they experience six situated settings, including 1) exploring American History; 2) on the airplane and immigration; 3) hotel check-in; 4) eating and food in the USA; 5) museum tour; 6) English-your passport to the World. Then at the end of the day, the students are brought to classrooms by their teaching

assistants and are asked to give a mini speech on what they learned and saw during the English tour.

In contrast to the traditional English classrooms, this kind of English Villages and English tours are “characterised by a more progressive, humanistic pedagogy which recognises the importance of promoting the sociocultural, developmental process of L2 learning as opposed to its mere outcomes” (Trottier, 2008, p. 74). It adopts “situational classroom teaching”, which according to Tsay (2008) is “the teaching that occurs in some simulated classrooms. The settings in the classrooms are made to look like the real, first-hand environments, such as airport customs, a cafeteria, etc.” (p.174). Tarone (1995) suggested that it is necessary for L2 teachers to provide learners as much exposure to authentic language learning interaction context as possible, and the target language interaction should be more than teacher-student communication, student-student interaction is also required for the students. Thus, to make language learning effective, immersion classroom curricula should “help students approximate functional competence in a wider range of settings (social as well as academic), and increase peer-peer interactions in the target language (Dahl, 1997, p.4). Lave and Wenger (1991) have also pointed out that learning would be more effective in context-embedded situations when learners are aware of it and are able to interact or operate real tasks with their peers in the situations. Furthermore, it has been proven that when the culture of the target language is integrated into the language learning process, there is a great chance that student could enjoy the language learning more (Genc & Bada, 2005).

The core concept that underlies the English Village is revolved around situated learning theory. Situated learning theory, also refers to as cognitive apprenticeship, community practice or legitimate peripheral participation argues that learning occurs in culture embedded contexts. Current theories of situated learning (e.g., Lave & Wegner, 1991; Vygotsky, 1978, Brown, Collins, & Duguid, 1989, etc.) suggest that the activity of learning is not an individual endeavor but rather the interaction and collaboration with others within a community. As Saloman (1993) pointed out, “knowledge is socially constructed through collaborative efforts to achieve shared objectives in cultural surroundings...” (p.3). It is considered as the “process of enculturation” (Brown, et al, 1989) in which we adopt “the norms, skills, beliefs, language and attitudes of a particular community” (Woolfolk, 2007, p,348). The theory shares the view with Vygotsky’s socioculture theory which asserts that learning should be embedded in particular settings or “a specific community of practice” (Woolfolk, 2007, p347). In the words of Vygotsky’s (1978), cognitive development happens through the interaction with more experienced and capable individuals (experts) in the zone of proximal development (ZPD). Through scaffolding and support from others, the novice learners are able to learn and internalize the knowledge and experience obtained from the experts. The process of moving from a novice learner to an expert learner is referred to as the process of culture transmission.

A similar concept developed by Lave & Wegner (1991) is called legitimate peripheral participation which asserts “that the mastery of knowledge and practice requires newcomers to move toward full participation in the sociocultural practices of a community” (p.29). It is a process in which a novice learner becomes more acquainted with the tasks, values, culture and language of a community.

The concept of situated learning clearly distinguishes itself from that which supports traditional learning theories (Hendrick, 2001). Wegner (1998) pointed out that learning in traditional settings is often assumed as having a “beginning and an end” and “that it is best separated from the rest of our activities” and “is the result of teaching”. Lave & Wegner (1991) argues that traditional classroom settings take out and abstract the context in which knowledge should be co-constructed through interpersonal interaction. In most traditional classroom settings, “children are taught concepts outside of their specific uses to increase general learning so that broad transfer to many situations can occur” (Hendricks, 2001, p. 302). One example given by Brown, et al (1989) is the rote memorization of vocabulary. In other words, formal schooling assumes that we learn about “what” (facts) and are expected to be able to transfer and generalize the “what” into the knowledge of “how” when given the situation. Nevertheless, many who hold the position that learning should not be decontextualized believe that when learning occurs outside of its context, it *cannot* be transferred and generalized to real world situations. It is, as a matter of fact, bounded to the context in which knowledge is learned. For Lave and Wegner (1991), in a situated learning environment, nothing should be fixed or deliberate since in real-life situations, we never play by script, either. Thus, within a situated learning environment, teachers are no longer the organizers who are in charge of curriculum planning and sequencing. They should, instead, become facilitators who create a supportive learning environment that encourages individuals’ cognitive development.

The concept of situated learning has been applied in different learning fields, including the field of second language acquisition (SLA). One area of research in SLA is CALL (computer-assisted language learning) (Swain & Deters, 2007). Zhau (1996), for example, explored the use of the World Wide Web in SLA within the framework of situated learning. Kumar, Anjaneyulu & Gupte (1997) presented a situated learning based CALL system named VIDYA which employs a number of CALL principles that includes the mastery learning in the situated learning context, student modeling of language constructs, dynamic courseware presentation, and a generic courseware evaluation technique. Jones, Squires and Hicks (2008), also incorporated the concept of situated learning by using a 3D online learning environment to achieve the following purposes: 1) to enable students to use the targeted language in context-embedded settings; 2) to create an environment in which students are allowed as much input as possible; 3) to be able to incorporate the culture of the targeted language; 4) to

give teachers the necessary tools for helping students to develop their language ability; 5) to provide a system/program that is flexible and accommodate to teachers' teaching needs. The study showed that students participated in the study did improve their spoken language skills within the authentic and situated 3D interactive learning environment. While a constructive viewpoint has taken a stand and been integrated/applied into the field of SLA (Swaine & Deters, 2007), little studies have been done to find out the effects of situated learning on language learning. Therefore, the purpose of the study is to investigate how students and teachers who participated in the one-day English situated learning/tour in Ming Chuan University (MCU) perceived the effects of situated instruction on students' English learning. Specifically, the research questions asked were:

1. How do students perceive the effects of one-day English tour on their English learning?
2. How do teachers perceive the effects of one-day English tour on students' English learning?

Method

The study utilized survey research design. The purpose of the survey design is, "to provide a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population" (Creswell, 2003, p. 153). By conducting survey research and using multistage probability sampling, the researcher infers the results to the population of Taiwanese students and teachers in the elementary schools. The sample population for the research study included mainly elementary school students and teachers who participated in the one-day English tour in Ming-Chuan University, Taoyuan Campus in Taiwan during Fall, 2008. A total of 273 elementary school students and 13 teachers from the region surveyed responded to the questionnaire.

Two questionnaires were designed in order to fulfill the purpose of the study. One was aimed for students to find out their perceptions of the effects of one-day English tour on their English learning. The survey contains 10, 6-point likert scale questions, ranging from 6 (strongly agree) to 1 (strongly disagree). The questionnaire for teachers is a self-designed open-ended questionnaire that contains two questions asking teachers their perception regarding the effects they think one-day English tour might have on students general English learning ability.

Data collection was conducted by the researchers and the teaching assistants who participated in the one-day English tour. Participants were asked to fill in the surveys at the end of each English tour. The data were collected through cluster and random sampling during the semester. The nature of the study was explained to the subjects, and their cooperation was asked. The subjects were reminded that honest responses are preferred, and no right or wrong answers existed. Participants were also assured that their responses would be kept completely confidential.

SPSS 12.0 was used for the quantitative data coding and analysis. For qualitative data (i.e., the open-ended questions), the researches did a general overview of the information collected, looking for common themes. Established patterns among the themes revealed generalizations that emerged from the data sets.

Results

Research Question 1: Students' perceptions

Table 1 shows students' perception toward the effects of one-day English tour on their English ability. Results indicated that most students hold a positive attitude toward the effects of one-day English tour on their overall English ability ($M=4.61$ $SD=1.03$, $\mu=3.5$, $t=17.86^*$, $p<0.05$). They thought the one-day English tour is beneficial to their English learning. They also reported of having gained more confident in speaking English, and were less afraid as well as more willing to speak English after participating in the one-day English tour. When asked if they thought the one-day English tour had an effect on their English ability. The majority of them also hold a positive attitude and responded that they believed their English ability in speaking, listening, reading and writing improved.

Table 1 Students' perception toward the effects of one-day English tour on their English ability (n=273)

Item	Mean	SD	μ	one sample t value
1	4.41	1.18	3.5	12.76*
2	4.71	1.19	3.5	16.76*
3	4.80	1.17	3.5	18.34*
4	4.83	3.28	3.5	6.73*
5	4.74	1.19	3.5	17.28*
6	4.16	1.36	3.5	8.09*
7	4.51	1.24	3.5	13.46*
8	4.94	1.15	3.5	20.70*
9	4.62	1.17	3.5	15.80*
10	4.44	1.29	3.5	12.00*
Total	4.61	1.03	3.5	17.86*

Note 1: * $p < .05$

Note 2: SD= Standard Deviation; μ =Hypothetical Mean

Note 3: Likert- type response scale ranging from "6=strongly agree; 5= agree; 4=somewhat agree; 3=somewhat disagree; 2= disagree; 1=strongly disagree"

Research Question 2: Teachers' perceptions

This study also contained an open-ended questionnaire aimed for teachers. The purpose was to have a better understanding of how the teachers perceived the effects of one day English

tour on students' English learning. The question asked was, "In your opinion, do you think students' English ability can be improved by attending one-day English tour? Why or why not?" A total of 13 teachers wrote down their opinions. Among the 13 responses, 8 teachers responded positively toward the effects of one-day English tour on students' English learning. From their observation, they thought the one-day English tour helped to improve students' English ability in a general sense.

A few findings were generated from their responses. First of all, the majority of them indicated that the one-day English tour provided an English environment for students to actually use the target language. As one teacher pointed out, "*students' English ability can be improved from immersing in an English environment*". Following this comment, another teacher stated that,

Yes. I think it helped. Students need to try to express themselves "on their own" in different settings. Through guidance and modeling from the teachers, students' communication skills will definitely improve.

Second, some teachers also pointed out that students are less afraid and more willing to speak English during the activities. One teacher illustrated this point by stating that "*students are more willing to speak English because they are encouraged to use the language in each setting*". Third, the participants indicated out that the one-day English tour is new and interesting to students; thus, students' motivation can be increased and will be more motivated to learn English. As one teacher put it,

students' English ability will improve by participating in this kind of activity because the curriculum design itself is fun and interesting. It can increase students' learning motivation. Plus, the lessons are taught by foreign teachers and this is new and novel to many students.

Finally, a few teachers also pointed out that the tour helped to increase students' vocabulary.

The one-day English helped students to learn many vocabulary words they can use in their daily lives. It also helped to review the vocabulary words students learned in the past. It is a great English learning activity.

Nevertheless, there were 5 teachers who weren't certain of the effects of the one-day English tour. Although they agreed that it can increase students' interests in learning English and give them a wider perspective of different cultures, they were not sure if students' English ability can be improved within one day. As one teacher puts it, "*Students are more willing to talk, but*

it's hard to estimate their improvement in English just in one day". Another teacher supported this view by adding, "one day is probably not enough if we want to see improvements in students' English ability. Perhaps a longer period of time would be more beneficial".

Discussion

Based on the results above, the majority of students and teachers perceived the effects of one-day English tour with a positive attitude. A few common findings were generated as follows. First of all, the one-day English tour created an English environment that is beneficial for students' English learning. According to Park & Oxford (1998), English village program is proven to be a very efficient way to achieve an English immersion learning environment for the learners. It provides numerous opportunities for students to use the target language. In Wighting, Nisbet and Tindall's study (2005) of an English camp in China, they also concluded that a number of opportunities of using conversational English in meaningful context and authentic situations are provided, and students are highly motivated to speak English with native speakers. Moreover, they revealed that the students actually benefited from the instructional methods used in the English camp. The Chinese teachers that participated in the camp also indicated that they learned new teaching methods in the camp as well.

Secondly, students showed more confidence in speaking English. This is probably due to the fact that situated learning environments are different from formal classroom situations in which communication is less likely to occur and errors/mistakes are not valued. As Park and Oxford (1998) concluded after their investigation of the 5-week summer intensive program in a Korean institute, the strength of this kind of program was "its effectiveness in overcoming fear of communication and promoting self-confidence in speaking (p.111)". And when students feel they are in a safe and protected environment with their familiar peers, they would feel less nervous about practicing the target language (Senior, 1997).

The third important finding in this study is that one-day English tour helped to improve students' English ability. The finding in this study supports Tsay's study in 2008. In Tsay's (2008) study, she found that although the one-day study tour only lasted one day for the students, this kind of English immersion program still successfully improved the participants' English in speaking and listening. Participants' ability of learning of specific vocabulary was also improved, and their interest in learning English was enhanced.

Last but not the least, it is also found that the one-day tour helped to increase students' interest in learning English. Students showed great interests, preference, and high value in learning English in the meaning context with real authentic English interaction with native speakers. It provides learners a challenging and authentic English learning communication opportunity that helped maintain their interests in English learning. As indicated in many

studies (e.g., Woolfolk, 2007; Ren, 2007), it is critically important for educators to keep students' interest in learning.

Conclusion and recommendation

This research project was set out to investigate how students and teachers participated in the one-day English situated learning/tour in Ming Chuan University (MCU) perceived the effects of situated instruction on students' English learning

Form practical contribution, it is hoped that by providing a cope of how students and teachers perceive situated learning, educators in related fields might have a better understanding of the nature of one-day English tour and modify their instruction based the research results. The findings of this study could provide insights to teachers and serve as a foundation for various educational programs that aim to help their learners become successful in learning the target language.

After careful review of previous literature, it is found that although there has been much discussion and research on situated learning and SLA, very little empirical research is done on the effects of situated learning on second language learning. Consequently, it is hoped that the results of this current research project would add to the body of knowledge in the field.

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An Exploration of African Students in Malaysia

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Abstract

The exploratory study is an attempt to understand the reasons that prompted African students to study in Malaysia, the challenges encountered and the coping strategies used. The research on such topics among international students is well documented but studies on international students in Malaysia are scarce. The sample included 155 African students studying in two private higher education institutions in Malaysia. A questionnaire was administered. The results indicate that most of the students chose to study in Malaysia because English is used as the medium of instruction. The challenges they face include developing friendships with Malaysian students. Keeping in touch with family and friends back in their home country is the highest ranked coping strategy.

Introduction

The impact of globalization and internationalization on higher education has created a market for the active recruitment of international students, especially in Asia. According to a report by UNESCO Institute of Statistics (2009) or UNESCO-UIS, the number of students pursuing tertiary education has increased five-fold over a period of 37 years. The enrollment of 28.6 million in 1970 grew to 152.5 million in 2007. More specifically, this growth has been active in East Asia and the Pacific where a twelve-fold increase has been recorded. Malaysia is one such country that has contributed to this growth through the privatization of its higher education and the recruitment of international students. She is listed as one of the three emerging contenders in the development of student mobility across the globe (Verbik and Lasanowski, 2007).

The country's multi-racial and multi-cultural background attracts students from different countries in Asia such as Indonesia, India, Vietnam, China, and Myanmar. In addition, the options for different programs, especially in undergraduate education have made Malaysia an attraction to students because they are able to transfer to other countries such as Australia, New Zealand, the United Kingdom, and the United States because of the twinning agreements between countries (Yoshino, 2010).

Sirat (2008) pointed out that Malaysia became a preferred destination for higher education for Middle-East students after the September 11 tragedy. Stricter visa regulations that followed deterred international students from studying in the United States. Conversely, students from different Sub-Saharan nations have been enrolling in private higher education institutions in Malaysia because it is easier to obtain a student visa to study in Malaysia as compared to the United States. Consequently, there is a broader diversity spectrum of student population in higher education institutions in Malaysia.

One of the challenging tasks for most higher education institutions in Malaysia with the increase of cultures and cultural groups is to ensure that the international students

cope well with the adjustment to the host country and the learning environment. Studies related to the factors that attract international students to countries such as the United States, the United Kingdom and Australia and their adjustments are widely documented (Ramburuth and Tani, 2007). However, similar studies related to international students in Asian institutions of higher education are limited. Specifically, studies on international students in Malaysian higher education institutions are equally limited.

Hence, this exploratory study is an attempt to investigate the possible factors that influenced African students' decision to enroll in private higher education institutions in Malaysia and the challenges of coping with living and studying in the country's cross-cultural environment. Specially, the foci is on identifying the reasons these students chose Malaysia as a destination for higher education, the challenges they face studying in this country, and their ability to adjust and or thrive in their host country as well as the new learning environment. The research questions are:

1. What are the factors that attracted African students to Malaysia?
2. What are the challenges faced by African students in Malaysia?
3. How do African students cope with living and studying in Malaysia?

The limitations for this study include the sample of African students enrolled in only two private higher education institutions. Hence, generalizations of the results may not be viable. However, it is important that this topic of study is further explored because it has implications for international student recruiting, understanding African learners, and teaching and learning in the classroom.

For the purpose of this research, the definition of an internationally mobile person is adapted from the UNESCO-UIS' (2009) description, which states, "The UIS defines internationally mobile students as those who study in a foreign country of which they are not a permanent resident." (p. 35).

International Students in Malaysia

Currently, students across the globe have more options for higher education, especially with the marked increased of countries that are keen to develop its ability to compete as an education provider internationally. There is a 53% increase of mobile students globally since 1993 (UNESCO-UIS, 2009). Sugimura (2009) described an emerging flow heading to countries in the Association of Southeast Asian Nations (ASEAN) region. This mobility includes students from the Middle East and African countries. The former's influx may be attributed to the impact of the September 11 attack on the United States while the latter group's presence may have resulted as an outcome of the cooperation between African and Asian nations (Sirat, 2008; Sugimura, 2009).

The enrollment of international students in Malaysia has increased steadily over the past decade with the country's aim to enroll 100,000 by 2010. The National Center for Higher Education Research Malaysia (NCHERM, 2009) reported that a total of 70,426 international students were enrolled in institutions of higher education in 2008. Approximately 71.9% of this population was studying in private higher education institutions while 28.1% were students at the public institutions. In addition, this

recent report identified the representation of countries among these students according to enrollment number. From 2003 to 2005, students from mainland China were the biggest group with Indonesian students being the second biggest. However, this changed in 2006 with Indonesian students being the largest group while students from China have become the second largest. Students from Bangladesh and Pakistan were the third and fourth largest groups from 2003 to 2006. This trend changed in 2007 where Iran and Nigeria replaced these two countries in the Indian Continent. The latter group represents the majority of African students in Malaysia.

African Students in Malaysia

African students' are the most mobile international students (Mulumba, Obaje, Kobedi & Kishun, 2008). According to Maringe and Carter (2007), it is estimated that one out of 15 foreign students in the United Kingdom (UK) is an African. Their study is one of the few that investigated the possible reasons these students decided to study in the UK and their experiences as international students. The results indicated that there were more push than pull factors that encouraged this mobility, which include economic and political reasons as well as the lack of higher education opportunities in the home country. The main pull factors include the recognition and prestige of obtaining UK qualifications. Recommendation of friends was an influential factor for African students who chose to study in the UK for the first time. The concerns among the students who chose to study in the UK include the financial demands and the inability to pay for their studies.

The research literature on African students' decision to study in Malaysia as well as their experience living and studying in this country is scarce. Unfortunately, there are unfavorable newspaper reports about African students' criminal activities and other social problems.

Methodology

A questionnaire survey was developed to seek certain information related to the three research questions for this study. Several statements linked to the three research questions were designed to inquire more detailed information. Convenience sampling was the primary method employed to obtain participants as the two private higher education institutions enroll quite a substantial number of African students.

An email was sent to the respective lecturers who had African students in their classes to obtain permission to administer the survey for one institution. An informant was identified to help administer the survey to African students in another institution. A total of 155 completed surveys were tabulated using SPSS 16 to determine the frequency and percentage of responses to each statement. The answers were ranked according to the highest frequency and percentage of the combined "strongly agree" and "agree" responses.

Table 1: Demographic characteristics

Country	Frequency	Percent
Nigeria	73	47.1
Eritrea	3	1.9
Kenya	11	7.1
Uganda	15	9.7
Botswana	26	16.8
Cameroon	4	2.6
Sudan	7	4.5
Tanzania	10	6.5
Mauritius	1	0.6
Somalia	1	0.6
Zimbabwe	4	2.6
Total	155	100.0

Table 1 shows the diversity of African countries represented among the participants, which are mostly from the Sub-Saharan region. This indicates the high mobility of students from this region. The largest representation from this sample is the Nigerian students who comprised 47.1% of the students surveyed. The second largest is from Botswana.

Results and Discussion

It is interesting to note that more than half of the students surveyed chose to study in Malaysia because its programs are conducted in English and the possibility of transferring to a native English speaking country is another factor that is highly rated. Another interesting factor is the availability of recruiting agents in the respective African countries or regions.

Forty-six percent of the students indicated that agents in their home countries recommended Malaysia as a higher education destination. The weaker factors are the recommendation of friends and also the multiracial context of Malaysia as indicated by the respective 31.0 and 34.8 percentages.

Yoshino (2008) pointed out that English as a medium of instruction in Malaysia offers international students an alternative “English speaking” country for higher education. Most of the English medium programs are offered by private higher education institutions. In addition, many of these institutions have dedicated marketing departments that recruit nationally and internationally. These factors may have contributed to the higher enrollment of international students.

Table 2: Factors for choosing Malaysia

	Frequency	Percent	Ranking
The tuition fee in Malaysia is affordable	56	36.2	8
The medium of instruction (teaching) is English	89	57.4	1
The multiracial context of Malaysia	54	34.8	9
The tropical weather	59	38.0	7
The recommendation of friends already studying in Malaysia	48	31.0	10
The recommendation by agents in own home country	72	46.4	3
The possibility of transferring to another country such as Australia, the US, and the UK	80	51.7	2
Malaysia is a relatively safe country	69	44.5	4
The education fairs that promoted Malaysia	67	43.2	5
My family encouraged me to study in Malaysia	61	36.4	6

The “transferability” factor indicates that Malaysia may be perceived by international students as a transit country where completing an undergraduate degree is not a priority. The availability of numerous franchise programs with Australia and the United Kingdom in Malaysia provides another option for international students who would like to pursue such a curriculum.

The data for the section pertaining to the challenges of studying and living in Malaysia investigated the students’ in-class and out-of-class experiences. The first ranked item describes a high level of agreement, 70.9%, among the African students that it is easy to develop friendships with international students from other countries as compared to Malaysian students, which is indicated by a low level of 10.9% agreement. More often than not most international students go through a certain period of adjustment and transition while studying abroad. Similar experiences of having to cope in a new environment and adjusting to a new culture may create a sense of group acceptance because they are facing the same challenges in and out of the classroom. Conversely, the data indicate that developing a relationship with Malaysian students is an arduous task. This implies that Malaysian students may be perceived as being indifferent to or intolerant of other cultures.

Table 3: Challenges of living in Malaysia

	Frequency	Percent	Ranking
It is easy to make friends among Malaysians	17	10.9	10
It is easy to make friends among other international students	110	70.9	1
It is easy to understand the lecturers	48	31.0	5
It is easy to search for accommodation	42	27.1	8
The orientation sessions provided useful information	77	49.6	4
It was challenging to work in groups for group projects	83	53.5	3
It was difficult to work on individual assignments	43	27.8	7
Most students find it difficult to understand the African accent	44	28.4	6
It was difficult to adjust to the local food	84	54.2	2
It was difficult to buy groceries and other basic necessities	26	16.8	9

More than half of the African students agreed or strongly agreed that it is difficult to adjust to the local food. Approximately 54% of the students stated that it is difficult to work in groups, which is a normal challenge because individual behaviors may become a communication barrier. This challenge is amplified when cross-cultural issues and concerns are not systematically addressed as part of the classroom learning experience.

The most important coping mechanism for these students is making sure that they are in touch with their family and friends back home. Approximately 83% of the students either agreed or strongly agreed that this helps them to cope with the challenges of living and studying in Malaysia. The second ranked item is the academic focus where 76.8% of the students indicated that this is important. Completing their studies and doing well is one of the primary objectives of sojourning to Malaysia. Hence, keeping in touch with lecturers is ranked 4th as a priority coping strategy with 72.2% of the African students either agreeing or strongly agreeing to it.

The lowest ranked item, 56.7%, which indicates the possibility of initiating friendships with Malaysian students, is consistent with the African students' opinion that making friends with the former is a formidable task. This is an area that requires some thought about diversity in the classroom and is a very important issue to address because the world has become increasingly borderless as the mobility of individuals become more fluid.

Table 4: Coping Strategies

	Frequency	Percent	Ranking
Having fellow Africans on campus helps new African students to adjust to the new environment	114	73.5	3
Initiating friendships with Malaysian students will help new African students to adjust to the new environment	88	56.7	10
Initiating friendships with other international students will new African students to adjust to the new environment	110	71.0	6
Becoming a member of the African Student Association will new African students to find a sense of belonging	91	58.7	8
Keeping in touch with other African students at other campuses creates a sense of belonging to a wider community	108	69.7	7
Staying focused on academic achievements is highly recommended for all African students	119	76.8	2
Learning more about Malaysia and its people will be helpful to reduce any form of cultural miscommunication	91	58.7	8
Keeping in touch with family and friends back home helps to reduce homesickness	128	82.6	1
Keeping in touch with lecturers will help to reduce frustrations about completing assignments	112	72.2	4
Staying active in extra-curricular activities will help to build good relationships with other students	111	71.6	5

Conclusion

Malaysia as a small and developing country has positioned herself as a hub for higher education and is aiming at increasing its international student population. However, the challenges faced by the higher education institutions that enroll them have to be identified, discussed, and delineated as part of a bigger system that intends to work towards world class standards in university education. One of the key issues is to begin to understand the different groups of international students who are in Malaysia and the challenges they face while living and studying here. Additionally, the experience of Malaysian students and staff in working with international students is another area that needs to be explored.

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An Embedded Information Literacy skills Training in PBL Model for Uncertainty Reduction: A
Comparison of two Designs of PBL model

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An Embedded Information Literacy skills Training in PBL Model for Uncertainty Reduction:
A Comparison of two Designs of PBL model

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Abstract

Problem-based learning (PBL) enables learners to learn from a “real world” problem. PBL incorporates uncertainty naturally as a source of intrinsic motivation and a stimulus to learning which appears as the natural provocations for real learning. This is very much different from traditional approach where students and lecturers believe that the purpose of teaching and learning is the reduction of uncertainty and the main resources to uncertainty reduction are teachers and textbooks. Students in PBL environment must possess high level of communication skills, ability to identify and define problems, seeking and evaluating information and use it effectively. These skills are embraced under the broad term of information literacy skills (ILS) to reduce uncertainty and enhance learning performance. Little research has been done on ILS training to reduce uncertainty of PBL Students. This paper aims to compare the difference in uncertainty reduction of science and engineering students in the two designs of PBL model. 78 students (Winter 2010 Semester) from American Degree Transfer Program of Taylor's University College in Malaysia participated in this study. Solomon Four-group quasi experimental design was utilized in this study. The independent variables were PBL models and pretesting while dependent variables were uncertainty level. Uncertainty construct was developed and designed to measure an individual's real or anticipated uncertainty level with regards to the cognitive, affective and physical dimension in a 30-item self-reporting, numerically measurable questionnaire. Results from the analysis of T-tests, factorial ANOVA, One-way ANOVA and ANCOVA showed that PBL model with embedded ILS training out performs the PBL model without embedded ILS in terms of uncertainty reduction. This paper contributes to the PBL research field of embedded ILS training as tools of empowerment to transform university students into independent and lifelong learning students. The results reported have implications for design of PBL curriculum by integrating ILS training with collaboration from academic librarian and subject facilitator to empower PBL students in exploring and maximize their potential in deep learning approach and knowledge acquisition in PBL environment.

Keywords: Problem-based learning, information literacy skills, uncertainty reduction

INTRODUCTION

Traditional lecture system where students and lecturers have the common understanding that the purpose of teaching and learning is the reduction of uncertainty (Lee, 1998) has been practiced in universities and institutes of higher education in Malaysia for decades. They believe that knowledge consists of right answers and learning is the memorization and reproduction of these answers (Perry, 1970). Students are spoon fed with the “prepackaged knowledge” with examination results serve as an indicator of academic performance and achievement in learning. Information seeking is in a “passive mode” through receiving “correct answers” and factual knowledge from lecturers and textbooks, which are perceived

as the main resources to uncertainty reduction, problem solving is considered as associated with a definite answer. Students always treated uncertainty as a source of anxiety, rather than a natural provocation for learning. This approach may undermine the process of learning and incapacitates student inquisitiveness and initiative. On the other hand, PBL incorporates uncertainty naturally as a source of intrinsic motivation and a stimulus to learning. Genuine uncertainty and doubt are the natural provocations for real learning. In PBL, facilitators present the scenarios of the learning experience so that students can discover the principle for themselves. PBL students will be stimulated by cognitive dissonance while they are encountering an ill-structured problem. The associated uncertainty acts as a catalyst which provokes real learning. They will begin to seek for information to fill the gaps between what they know in their existing knowledge base and what they do not know. This activity accompanies the appearance of reorganisation, stability, and progressive development or learning (Lee, 1998). As the higher education in Malaysia is emphasizing on outcome-based education (OBE) where PBL is considered as one of the learning approach under the framework, uncertainty reduction has emerged as an important construct in measuring learning.

Students in PBL environment are required to actively seek for information from a variety of information sources, make sense of the information to reduce uncertainty and fill their knowledge gap. PBL approach which is associated with challenge, incongruity, anomaly, and discrepant event in the problem cause the university students to experience cognitive dissonance (Keller, 1983). They experience uncertainty reduction during information seeking activities such as questioning, snooping and information searching to align themselves from the cognitive dissonance into a state of equilibrium (Keller, 1983). The uncertainty reduction process during problem solving activities enabled students to better understand the problem in learning task and add value to their learning experience.

The Problem

With the increased exposure and wider access to search engine technology and technology skills, PBL students believe that they already possess information skills, which Majka (2001) described that they may be functionally information illiterate. With the overconfidence of the information skills, students are able to fulfill simple information needs, searching information to answer simple question that exhibits only surface learning. However, they are unable to explore deeper concepts or determine if they have really reduced uncertainty successfully. They are unmotivated to learn and consequently this will affect their learning outcome. Research shows that this phenomenon can be viewed as the overconfidence in their information technology proficiency but lack of critical awareness (Armstrong et al, 2001; Brown et. al, 2003; Edwards, 2006; Jones 2002 and Logan, 2004). PBL educators on one hand, feel that university students have the information technology skills to use search engines to search for information in uncertainty reduction process, on the other hand complaint that student's presentation of proposal in PBL continue to decline in quality, which is due to exhaustive dependence on inappropriate online information resources. They are not aware of the subtle difference between information literacy skills and information technology skills, and the important role played by ILS in successful PBL implementation. PBL educators have over estimated the competence and capabilities of university students in ILS and omitted the importance of ILS which helps students to acquire an empowering set of "navigational" skills. This set of skills includes the ability to determine what information is needed, how to access this information effectively, efficiently at the same time evaluate the needed information and its sources critically while incorporate the selected information into

his or her knowledge base and value system. ILS also includes empowering students to use information effectively to accomplish a specific purpose individually or as a member of a group as well as understand the economic, legal, and social issues surrounding the use of information so as to access and use information ethically and legally. Overconfidence of the information technology skills as perceived by university students themselves and omission of PBL educator in embedding ILS in PBL will limit students' ability to reduce uncertainty and successfully participate in team work so as to explore their full potential in deep learning in PBL environment. This will also restrain the incorporation of generic skills which include critical thinking, communication and problem solving skills in PBL.

The Purpose of the Study

This research aims to study university students' uncertainty reduction with different designs of PBL model in the same physics course. The design of PBL model is shown in Figure 1.

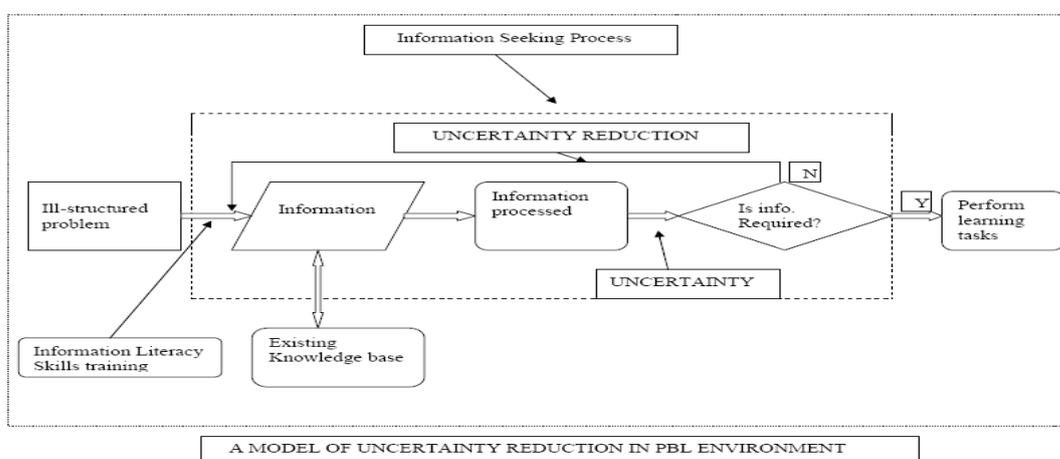


Figure 1. Designs of PBL model with / without information literacy skills embedded

The null hypothesis and its subsidiary null hypotheses of this study state that

H_{01} : There is no statistically significant difference in uncertainty reduction for university students in PBL model with embedded ILS training and PBL model without ILS training in PBL environment.

H_{01a} : There is no statistically significant difference in cognitive uncertainty reduction for university students in PBL model with ILS training and PBL model without ILS training in a PBL environment.

H_{01b} : There is no statistically significant difference in affective uncertainty reduction for university students in PBL model with ILS training and PBL model without ILS training in a PBL environment.

H_{01c} : There is no statistically significant difference in physical uncertainty reduction for university students in PBL model with ILS training and PBL model without ILS training in a PBL environment.

LITERATURE REVIEW

It has been known that human's daily activities are involved with uncertainty (Weber, 1997). These uncertainties will shape our action in seeking additional information to resolve unknown situation. Because of uncertainty, people seek information to make decisions and solve problem. It can be seen that uncertainty occurs in all aspects of our life. Generally, anxiety, concerns, emotions that we might encounter are due to uncertainty.

In a PBL environment, students are presented with ill-structured problem which creates a cognitive dissonance (Keller, 1983) or state of disequilibrium on them. The ill-structured and problematic nature of PBL problems is designed to create an imbalance or "cognitive dissonance" (Festinger, 1962) in the learner which motivates a search for explanations. In PBL, engagement in the problem comes before any preparation or formal study. Thus, during problem solving process, uncertainty is a possible disorder in student's cognitive state, which includes missing knowledge about the existence of important concepts or associations between concepts, incorrect association, or mistakes in procedural information (Reggia, 1990). This disorder in cognitive state leads to affective symptoms of anxiety to perform the tasks and lack of confidence in solving the problem. PBL students are actively involved themselves in questioning, snooping, and searching for information to reduce uncertainty and reenter a state of equilibrium. Kuhlthau (1993) defined uncertainty as a cognitive state which commonly causes affective symptoms of anxiety and lack of confidence. Her research shows that uncertainty and anxiety can be expressed in the early stages of the information search process and uncertainty due to lack of understanding, a gap in meaning, or a limited construct initiates the process of information seeking. Krikelas (1983) defined information need as the recognition of the existence of uncertainty, and information is "any stimulus that reduces the uncertainty". Shannon and Weaver (1949) posited that information itself refers to the reduction in uncertainty about the state of an event after a message has been sent relative to the uncertainty about the state of the event before the message was sent. Information theory defines uncertainty as lacking of information to choose from an exhaustive and well-defined set of possible states though it is not a complex set (Shannon 1949). Gate (1995) paraphrases Shannon's theories into the concept which suggested that information is the reduction of uncertainty.

Study on online learning shows that uncertainty reduction will enhance learning (Kati Mäkitalo 2004). Kuhlthau (1993) maintains that information seeking to reduce uncertainty is actually a complex learning process in a series of phases. Learning is always associated with knowledge acquisition, whereby users' cognitive state will be changed due to the change in uncertainty level. Even though information is the reduction of uncertainty, but it takes the university students to recognise when, and what information is needed and at the same time have the ability to effectively locate, evaluate and use the information needed. Yovits and Foulk (1985) found that in some situations information may increase the uncertainty of a person. Thus, a certain level of information literacy skills will definitely be advantageous to university students in reducing uncertainty as it enables them to effectively retrieve relevant information to solve problems, and not overload with information unnecessarily. University students can effectively reduce their uncertainty by acquiring, developing or improving the subject knowledge and ability to predict, infer or estimate through information seeking. Attitude towards uncertainty changes with the change in understanding of a situation. Rankin (1999) articulated that ILS are essential to the learning process, and problem solving process

in PBL parallel to IL competency standards set for higher education. Research showed that shifting to independent learning in PBL has made ILS fundamental to students' survival and success (Wales and Harmon, 1998). In PBL, uncertainty is effectively reduced when student is empowered and takes control of his own learning through effective information seeking.

Much research have emphasised on the uncertainty experienced by the users in information seeking and searching process. However, an important aspect which has not gained much attention in information searching is the impact of the ILS on uncertainty reduction. This research aims to compare the uncertainty reduction of university students while searching information to perform learning tasks in two designs of PBL models, namely PBL with ILS embedded and PBL without ILS embedded.

METHODS

The Sample

A total of 78 undergraduate students who have registered the winter-2010 Physics course in American Degree Transfer Program at Taylor's University College (Malaysia) participated in this study. The list of these students was obtained from the registrar office at Taylor's University College. These participants were randomly assigned to two PBL sections, one section with ILS training embedded in PBL process (treatment) while the other without ILS training embedded (control). Half of the participants in each section will be pretested. Thus, four groups of participants were formed in this study.

Research Design

This study utilized Solomon Four-group quasi-experimental design by setting up two experimental groups (with ILS training) and two control groups (without ILS training) for the experiment. The design is rigorous and robust enough to eliminate variations that might arise because of experiences and contaminate the validity of the study (Koul, 1992; Kothari, 2003). One experimental group and one control group were administered the pretest on uncertainty. The experimental groups were exposed to a two-hour ILS training conducted by the facilitator in collaboration with librarian while the control groups denied. All the four groups were post tested upon the completion of the PBL activities.

Treatment

The collaboration between the facilitator and librarian enabled the treatment of the IL skills training conducted to the two experimental groups at the beginning of the PBL process. Each training consists of two phase, the first phase was a 40-minutes lecture of IL knowledge conducted by the facilitator, while the second phase was 80 minutes hands-on ILS training session conducted by a librarian in the library training room.

The contents of the lecture included the five standards of IL for higher education, the importance of these standards and how to relate and apply the five standards as they participated in PBL, such as how to

1. determine the nature and extent of the information needed,
2. access needed information effectively and efficiently,

3. evaluate information and its sources critically and incorporates selected information into his or her knowledge base and value system,
4. use information effectively to accomplish a specific purpose, individually or as a member of a group,
5. understand many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

The librarian conducted a “mini-PBL” session in the second phase by giving four learning tasks related to the assessment of the project bibliography to work in small groups. The tasks were:

1. make a list of information sources,
2. describe the need of citing information sources in a bibliography,
3. identify the element included when citing a book or websites, and
4. identify a list of criteria that could be used to critically assess an information source.

These tasks involve the three elements of information literacy instruction outlined by Nahl-Jakobovits (1993) – critical thinking or information evaluation skills, information use skills, and learning to learn or enjoying the benefits of information success.

Instruments

The independent variable of this study was type of PBL design. The experimental groups were trained in a two-hour ILS program in the Physics related area by facilitator in collaboration with the librarian. The dependent variable was student’s uncertainty reduction. A carefully crafted problem that triggered the learning activity was given to all participants, with 20 minutes perusal time. The pretest of uncertainty level was administered to an experimental group (E_1) and control group (C_1). The pretest instrument is a questionnaire, consists of 30 items of uncertainty construct which record their thinking, feeling and action in terms of cognitive dimension, affective dimension and physical dimension. The 2 control groups, C_1 and C_2 will immediately follow the normal process of PBL and information seeking activity to solve the problem. The experimental groups will undergo a two-hour ILS training session, arranged in two separate phases prior to information seeking process of the PBL activities. All participants will then be post-tested on their uncertainty level at the end of the PBL process while they submit their report or solution. The dependent variable can be computed using SPSS to determine the gain score of the uncertainty level in each item attributed to the uncertainty construct.

RESULTS AND DISCUSSION

The objective of this study was to determine the differences in university students’ uncertainty reduction with different designs of PBL model in the same physics course, by comparing students’ uncertainty scores in three dimensions: cognitive, affective and physical, across the treatment and control groups. In order to examine whether this objective was achieved, it was imperative to test the three subsidiary null hypotheses before the main null hypothesis H_{01} was investigated. If all three subsidiary hypotheses have shown significant result, it was very likely that the hypothesis H_{01} will exhibit a significant result. Further analysis can be carried out to confirm this prediction. A summary of the F statistics and p values for the main effects and interaction of main effects of Factorial ANOVA tests was tabulated as shown in table 1.

Table 1. F statistics and p values from Factorial ANOVA

Dependent Variables	Source	MS	df	F	p
Cognitive Uncertainty	Treatment	71.33	1	4.88	0.030
	Pretest	2.92	1	0.20	0.656
	Treatment x Pretest	27.33	1	1.87	0.175
	Error	14.60	74		
Affective Uncertainty	Treatment	141.09	1	5.066	0.027
	Pretest	17.25	1	0.619	0.43
	Treatment x Pretest	9.88	1	0.355	0.553
	Error	27.85	74		
Physical Uncertainty	Treatment	112.00	1	3.63	0.061
	Pretest	44.00	1	1.43	0.236
	Treatment x Pretest	100.74	1	3.27	0.075
	Error	30.83	74		
Total Uncertainty	Treatment	955.23	1	5.44	0.022
	Pretest	17.53	1	0.100	0.75
	Treatment x Pretest	388.82	1	1.931	0.17
	Error	175.46	74		

Testing null hypothesis H_{01a}

A 2 x 2 between-group Factorial ANOVA was performed on the cognitive dimension of uncertainty posttest scores for the four groups. Table 1 shows the results of this analysis. There was no significant interaction ($F_{1,74} = 1.87$, $p = 0.175$) between the two main effects. It can be concluded that no pretest sensitisation was present. An investigation of treatment effect on posttest scores ($F_{1,74} = 4.88$, $p = 0.030$) revealed a statistically significant result. This implied that embedding ILS training in PBL design had an effect and this effect existed without any prerequisite. The cognitive uncertainty of university students attending PBL with embedded ILS training was significantly reduced (posttest scores lower than pretest scores) despite the presence of pretest. Thus, H_{01a} was rejected in favour of its alternative hypothesis. It follows that there was a statistically significant difference in cognitive uncertainty reduction between university students in PBL model with embedded ILS training and PBL model without embedded ILS training in a PBL environment.

Testing null hypothesis H_{01b}

A 2 x 2 between-group Factorial ANOVA was performed on posttest affective dimension of the posttest uncertainty scores for all four groups of participants. From the results in table 1, there was no significant interaction ($F_{1,74} = 0.355$, $p = 0.553$) between main effects. It can be concluded that no pretest sensitisation was present. An investigation on treatment effect of posttest scores ($F_{1,74} = 5.066$, $p = 0.027$) revealed a statistically significant result. This implied that embedding ILS training in PBL design had an effect and this effect existed without any prerequisite. The affective uncertainty of university students attending PBL with embedded ILS training was significantly reduced (posttest scores lower than pretest scores) despite the presence of pretest. Thus, H_{01b} was rejected in favour of its alternative hypothesis. It follows that there was a statistically significant difference in affective uncertainty reduction between university students in PBL model with embedded ILS training and PBL model without embedded ILS training in a PBL environment.

Testing null hypothesis H_{01c}

A 2 x 2 between-group Factorial ANOVA was performed on physical dimension of uncertainty posttest scores of all four groups of participants. From the results in table 1, it was evident that no significant interaction ($F_{1,74} = 3.267, p = 0.075$) between the two main effects. It can be concluded that no evidence of pretest sensitisation was present. An investigation on treatment effect of posttest scores ($F_{1,74} = 3.632, p = 0.061$) indicated that no statistically significant result was obtained. Since the above test disregards the pretest information available for the pretest groups, it should not be considered conclusive evidence against the treatment (Braver, 1988). Thus, ANCOVA on posttest scores with pretest scores as covariate was performed to compare the physical uncertainty scores between groups E_1 and C_1 . The results were shown in table 2. Result from ANCOVA, ($F_{1,37} = 1.55, p = 0.221$) indicated similar finding to previous results, no statistically significant result was obtained.

Table 2. ANCOVA for physical dimension of uncertainty for groups E_1 and C_1

Dependent Variables	Source	MS	df	F	p
Physical Uncertainty	Treatment	54.28	1	1.55	0.221
	Error	35.03	36		

ANCOVA with Pretest as covariate

An independent sample t-test was thus conducted on post-test scores of physical dimension of uncertainty for groups E_2 and C_2 . The result was shown in the table 3. Result from independent sample t-test showed that 19 participants in the treatment group ($M = 25.58, SD = 2.93$) and 20 participants in the control group ($M = 30.25, SD = 4.99$), demonstrated a significant difference in physical dimension of uncertainty level ($t[37] = -3.538, p = .001$). This indicated that the physical uncertainty of university students attending PBL with embedded ILS training was significantly lower than those attending PBL without embedded ILS training. Thus, H_{01c} was rejected in favour of its alternative hypothesis. It follows that there was a statistically significant difference in physical uncertainty reduction between university students in PBL model with embedded ILS training and PBL model without embedded ILS training in a PBL environment.

Table 3: Independent sample T-test on posttest physical uncertainty for group E_2 and C_2

		Independent Samples Test							
		t-test for Equality of Means						95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
PHYSICAL dimension of the uncertainty	Equal variances assumed	-3.538	37	.001	-4.6711	1.3202	-7.3461	-1.9960	
	Equal variances not assumed	-3.584	30.979	.001	-4.6711	1.3034	-7.3294	-2.0127	

Since all these subsidiary null hypotheses were rejected in favour of the alternative hypotheses, it enabled the researcher to predict that there was a significant difference in uncertainty reduction for university students in PBL model with embedded ILS training and PBL model without ILS training in a PBL environment. Further test on this hypothesis was conducted to verify this prediction.

A 2 x 2 between-group Factorial ANOVA was performed on overall scores of posttest uncertainty of all four groups. Table 1 showed that there was no significant interaction ($F_{1,74} = 1.931, p = 0.169$) between the two main effects. It can be concluded that no pretest sensitization was present. An investigation on treatment effect on posttest scores ($F_{1,74} = 5.44, p = 0.022$) revealed a statistically significant result. This implied that ILS training has an effect and this effect existed without any prerequisite. The ILS training thus significantly reduced uncertainty of university students (posttest scores is lower than pretest scores) despite the presence of pretest. Thus, as anticipated in the prediction, H_{01} was rejected in favour of its alternative hypothesis. It follows that there was a statistically significant difference in uncertainty reduction between university students in PBL model with embedded ILS training and PBL model without embedded ILS training in a PBL environment.

An independent sample t-test was also performed for the two groups with pretest and posttest. Results in Table 4 showed that the reduction of uncertainty scores between the posttest and pretest, DELTAUNC, for 20 participants in the experimental group ($M=16.10, SD = 14.35$) and 19 participants in the control group ($M=6.79, SD = 13.92$) demonstrated a significant difference in uncertainty reduction ($t[37] = 2.055, p = 0.047$). These findings can also infer that university students in PBL model with embedded ILS training experience better uncertainty reduction than those university students in PBL model without embedded ILS training.

Table 4 Independent sample t-test for uncertainty reduction between E₁ and C₁

T-Test										
Group Statistics										
group identifier		N	Mean	Std. Deviation	Std. Error Mean					
DELTAUNC	experimental group with pretest posttest	20	16.1000	14.3523	3.2093					
	Control group with pretest posttest	19	6.7895	13.9227	3.1941					
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
DELTAUNC	Equal variances assumed	.080	.779	2.055	37	.047	9.3105	4.5315	.1288	18.4922
	Equal variances not assumed			2.056	36.982	.047	9.3105	4.5279	.1360	18.4850

IMPLICATION

The result from this study will serve as an indicator of the success of reforms made on the university teaching approach. Educators and facilitators can use the results of this study to learn how information literacy skills program can be integrated in the PBL approach to overcome the challenge of implementing PBL in their courses. The study provided

information on the strength of collaboration between facilitators and librarian in designing a tailor-made information literacy skills training session for PBL students to accommodate their needs. One implication is that universities and colleges begin to emphasise information literacy as a standalone course or embedding it into the curricula can significantly impact students' uncertainty reduction in PBL environment. While this study cannot provide a guideline for adoption of PBL approach in every course in higher education, all courses could consider embedding information literacy skills training emphasising the respective subject matter into their curricula. This will train students to be information literate and facilitate lifelong learning, transforming the skills from student empowerment into knowledge worker empowerment in their future profession.

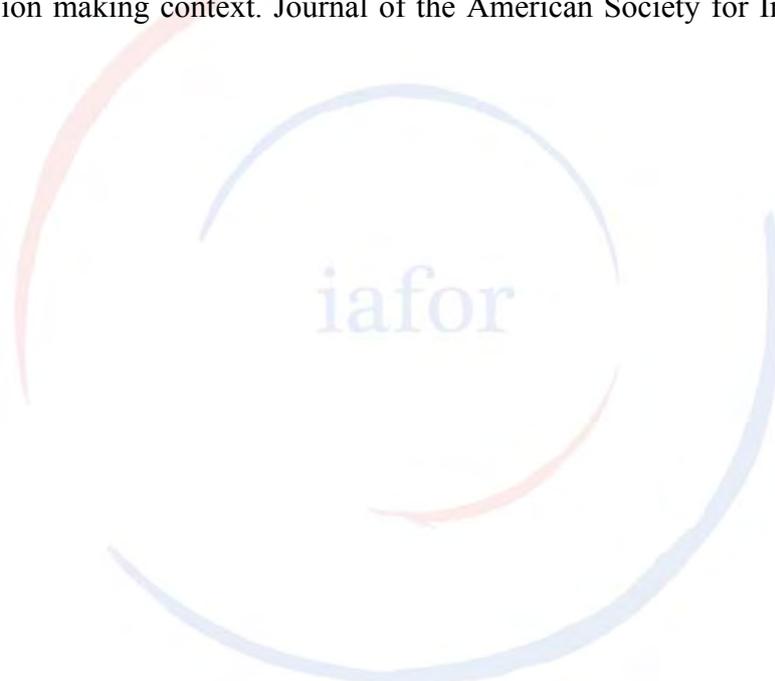
CONCLUSION

In this study, incorporation of uncertainty in the learning tasks was evidenced by the overall high uncertainty level in the pretest that students demonstrated, and the uncertainty may have reduced after seeking the information to fill the gap. The more confident they are in seeking the information, i.e., more competent in ILS, the better uncertainty reduction and understanding in the resolution of the problem, consequently perform better in the learning tasks. The positive results gained due to the experimental intervention confirmed the effectiveness of information literacy skills in student empowerment. This intervention encompasses problem solving skills, critical thinking ability, team work, effective information gathering and use the information ethically to reconstruct the information into knowledge and communicate among the members within the group. The success of the intervention endorses the successful implementation of PBL approach in helping students to overcome the anxiety due to uncertainty built in the authentic learning task in PBL. The information literacy skills required by the students have to be identified in advance and planned with explicit learning objectives based on the knowledge, skills and attitudes required by the other educational components in the curriculum. Much of the challenge lies in identifying the information knowledge and skills actually needed by students, teachers/tutors and ultimately practitioners and then work to incorporate these into the curriculum (Rankin, 1996). The result from this study will serve as an indicator to the success of reforms made on the university teaching approach.

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Promoting Diversity and Internationalization in Higher Education through Transformative Learning Experiences

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ABSTRACT

Globalization and the evolution of the knowledge-based economy have caused dramatic changes to reforming and restructuring higher education in most Asian Pacific countries. Thailand is of no exception in an attempt to internationalizing its higher education and has tried to develop themselves into regional thriving education hubs by exporting higher education services to mainly their neighbouring countries. Unfortunately, many diversity initiatives and internationalization programmes do not engage students in enough direct inter-group contact necessary for mutual understanding of diverse perspectives of complex issues to take place. The paper proposes transformative learning theory which its focal point is considered the process of constructing knowledge through critical reflection on the content, process, and premise of an experience. It begins by outlining a framework for developing transformative learning practices in international higher education.

The paper continues to draw on the role and function of 'international' universities: "Learning and teaching for transformation" which explores meanings and practices of education, participation and social change; and an emerging "cooperative inquiry" grounded in shared values and principles. While the internationalization has been strengthened the diversity has been inevitable. The paper thus reports on pedagogies that foster transformative learning in a multicultural education programme and describes how faculty can support diversity and internationalization by applying essential elements in transformative learning. As University lecturer of an international post-graduate programme, the author positioned her role as a learning facilitator. She discusses her experiences on the implementation of transformative learning into the teaching and learning process and how it encourages her students to interact and learn within and from diverse communities.

Introduction

In the process of internationalization of higher education, the nature of competitiveness is being particularly highlighted. Many of Asian Pacific countries are strategically committed to promoting their higher education services overseas. However, it is criticized that globalization forces many of the higher education institutions in Asia countries to follow global practices and ideologies without developing their own unique systems and honouring the rich traditions and cultures of their own countries. Under the impact of globalization, learning from the other systems is desirable, but the management of higher education institutions should consider avoiding duplicating without proper alteration and contextualization. Thailand is unexceptional. Undoubtedly, improving the

quality of higher education is necessary, especially since Thailand aspires to become the “Educational Hub” of the Asian region. While indulging to the game of marketing and exporting higher education to other regions, it is necessary to ask ourselves genuinely whether internationalization of higher education has really enhanced and enriched teaching and learning experiences in the campus and ensured education quality.

As part of Mahidol University’s determination to become a world class university, several activities for the promotion of internationalization of education are encouraged and supported. The University actively collaborates with over 130 overseas academic institutions and international agencies in research, curriculum development, staff and student exchange. It has international students from over 50 countries enrolled. To claim success in internationalization, the University must achieve progress in several interconnected areas. Responsible internationalization cannot be simply a matter of taking advantage of income-earning opportunities, but must be based on a firm commitment to social justice. The courses, research and instructional programmes must provide an introduction to the complex global environment. These activities, along with opportunities for international experience, help to prepare our students for active participation in the global economy and society.

The paper argues that preparing future leaders and citizens for a highly interdependent world requires a higher education system where internationalization promotes cultural diversity and fosters intercultural understanding respect, and tolerance among people and where the internationalized curriculum is committed to the pursuit of the notion of global citizenship. Such internationalization of higher education contributes to building more than economically competitive and politically powerful. It represents a commitment to international solidarity, human harmony and helps to build a climate of global peace. In doing so, transformative learning experiences find its balance to bridge between diversity and human harmony. They create collaborative and cooperative learning environments where students’ learning and interaction among diverse groups can be enhanced. Transformative learning experiences increase students’ interaction with locals in the host community by incorporating students in research and teaching activities (Kuh *et al*, 1994)

Increasing Demand for Higher Education Services in Asia

Exporting higher education services emerged in the 1980s and 1990s and is now becoming a global, market-oriented and private industry prevailing not only among those developed countries but also in the Asia-Pacific region. Australia and Singapore have already been established their international networks by setting up international academic offices and collaborating with partner institutions to attract overseas students to study in their own countries. Asia will dominate the global demand for international higher education for the next two decades. In forecasting global demand for international higher education, Bohm, Davis and Pearce (2002) find that the global demand for international higher education is set to grow enormously. The demand is forecasted to increase from 1.8 million international students in 2000 to 7.2 million international students in 2025.

The pace of internationalization of higher education, in fact, has expanded speedily in recent years as a result of the rapidly globalizing world of disintegrating country borders and supranational network of capital and knowledge (Bauman, 2002). The activities of internationalization may include international movement of students between countries; international links between nation states through open learning programmes and new technologies; bi-lateral links between governments and higher education institutions in different countries for collaboration in research, curriculum development, student and staff exchange, and other international activities; and export of education where education services are offered on a commercial basis in other countries, with students studying either in their home country or in the country of the providers (Harman, 2005).

The two concepts, internationalization and globalization, are very different in their approach and carries different consequences for different nations (Yang, 2002). They have often appeared in the discourses of various levels over their meanings and rationales (Fok, 2007). Yang (2002: 85) argues that “internationalization lies in an understanding of the universal nature of the advancement of knowledge” that is based on the common bonds of humanity. Knight (2004) also depicts that internationalization of higher education should help enhance students competencies and create a culture or climate on campus that promotes and supports international/intercultural understanding. This conception echoes to De Wit’s (2002) refines definition of internationalization of higher education which is a process integrating an international/cultural dimension into the teaching, research and service functions of the institutions. Knight’s (2004) view is of reference value in that internationalization of higher education needs to aim at preparing future leaders and citizens to address global issues and challenges like shaping sustainable development, international solidarity and global peace in a highly interdependent globalized world. Slaughter and Lesslie (1997) put forward a more severe critique in that globalization imperatives are of the nature of power, control, economy and efficiency. Thus, Yang (2003) contends that global exchange, under such a context, in economic, cultural and education domains will continues to be unequal. He adds, “Globalization, therefore, never meant global equality” (Yang, 2003: 273)

In recent decades, the role and policy of higher education has been significantly affected by the impact of globalization. Though we have been alerted in the discourse of global competition and the outcome of inequality with regard to the aforementioned conditions of globalization, what is really prevalent today is the intensity and the extent of internationalization activities occurring in higher education institutions especially in the Asia-Pacific region. In order to ensure that their higher education systems can compete globally and to survive and prosper in this fast changing world, higher education administrators have got hold of the belief that running a university becomes a customer-focused enterprise. Thus, university curriculum is market driven and students are customers.

To ensure they can share a significant portion of the pie in the higher education market, higher education institutions have developed a variety of promotion and marketing strategies such as recruiting quality professors, developing twinning programmes, forming international alliances, effective use of information technology and technical superiority, etc. University faculties have also needed to participate in the game of marketizing their knowledge (Mok, 2000) and have been mindful of their performance in

terms of efficiency indicators such as research output, student evaluation scores and other managerial initiatives.

Universities involved in the internationalization process need to revisit the strategies adopted as to whether they are learning from the Western traditions or they are duplicating without proper adaptation and deliberate contextualization. In fact, a great number of developing countries have worked in line with Western paradigm. This would create a dependency culture in the internationalization and also help reinforce the America-dominated hegemony (Chan, 2008; Mok, 2008). While Thailand and other Asian countries adopt English as a medium of instruction (MOI), use curricula designed by the Australian, British and American scholars and follow international benchmarks (Yang, 2002), they have not gone through adequate and proper contextual analysis to see whether these types of policies are compatible with indigenous cultures and local practices. Asian scholars are engaging in the game of “paper-chase” for the Research Assessment Exercise in that research outputs should be published in English, preferably in Science and Social Science Citation Index international journals while publications in local languages and local journals is regarded as of little importance. Reflecting from my experience, faculty staff is forced to produce research articles more in English and more in international journals.

In the interest of the customers – students, the university lecture will become a speech show that must carry the function of entertaining rather than analysing; such that the classroom is in danger of becoming a meaningless place nothing but “licensing and professionalism without the substantive knowledge and ethics of profession” is to be offered (Yang, 2003: 278), leaving those of educational values far behind. It is thus important to realize that internationalization is perceived differently in the West and in developing societies.

Internationalization and Diversity: Challenges and Risks in Higher Education

Internationalization has also been linked to the improvement of students’ outcomes. Vincenti (2001) notes a range of competencies supported by well-structured immersion and international study programmes such as gains in awareness, understanding, and appreciation of host culture and language; increased adaptability, critical thinking, self-esteem, independence, reflective thought, and interest in the welfare for others; more tolerance and acceptance of people who are different from themselves; more frequent and active participation in internationally oriented activities; a valuing in the elimination of barriers to intercultural interactions; an increased open mindedness to other cultures; and a strong decrease in ethnocentrism (Vincenti, 2001).

However, the prioritising of diversity and internationalization within higher education is due not only to external demands to equip students for a more global workplace and accreditation pressure on the administration. The priority also arises out of benefits students acquire when interacting with students who differ from themselves racially and

culturally (and in many other ways), in order to understand and value each other—the “liberation” goal of liberal education. Studies indicate that supporting student encounters across difference is linked to improved student outcomes, and that under optimal conditions, improving diversity on and off college campuses enhances inter-group understanding and relations, the ability of students to engage in more complex thinking, and students’ consideration of multiple perspectives (Hurtado *et al*, 1999).

Both diversity and internationalization are needed to create diverse learning environments to prepare individuals who are willing and able to engage with those who are different from themselves (Bennett and Bennett, 1994). Slimbach (2006) notes that historically, diversity and internationalization initiatives on campuses have been disconnected from each other. Although diversity and internationalization should be allies since they both strive to reach across barriers that divide, they are often pitted against each other as adversaries. While it is true that they have different beginnings, advocates, goals, and strategies, they have much in common and have much they can offer each other.

The first problem that arises when considering international programmes abroad as a means to internationalize, is that the option as it currently functions does not affect enough students to make much of an impact. The second problem is that study abroad programmes do not typically encourage students to engage meaningfully with members of their host communities. Finally, the majority of students in international programmes avoid challenging themselves to cross multiple boundaries of difference.

Reflecting from my own observation, international students often isolate themselves in foreign enclaves rather than associate with indigenous people. The international students bring with them unexamined ethnocentric attitudes and rather than learn with and from the locals. It could be concluded from my own observation that the nature of the relationships and interactions between international students and the local people is not balanced in power and it is not sustainable after the group leaves. In addition, the interaction does not foster the investigation of problems that arise from local perspectives.

The international students experienced only superficial cultural encounters and minimal language learning, this may do more to reinforce stereotypes than to dispel them, and so study abroad programmes such as the one described above, do little to diversity or internationalize the campus or affect deep change in individuals.

Slimbach (2006) describes an alternative to this insensitive intrusion and states,

“Some students find a way that is small enough, immersed enough, ecologically ‘soft’ enough, long enough, connected enough, structured enough, cheap enough, and hope-filled enough to support deep changes in their and others’ lives” (Slimbach, 2006).

In the research on intercultural study, Vincenti (2001) concludes that the most important factor in determining the success of a student international programme’s promoting positive attitude change is the amount of “*direct intergroup contact*”. Programmes that

encourage participants to learn the language, live with the people, serve under national leadership, complete community study projects, and reflect critically upon their personal identity and beliefs hold great potential for helping participants to overcome ethnocentrism and develop intercultural competence.

A factor that could create problems for diversity is when internationalization and diversity are not equally valued and pursued. Factors that help to promote positive change in the campus climate include planning, assessment, and support of diversity and internationalization initiatives (Torres *et al*, 2003).

Perhaps most crucial to success of diversifying college campuses and internationalizing institutions of higher learning is the type of interaction that transpires among different communities. In order for change to occur, interactions must be more than casual. Meaningful, sustained, face-to-face interaction among people who are different from one another, socially, economically, ethnically, culturally, or ideologically must be promoted in a supportive environment with structures that encourage investigation and reflection. Collaborative and cooperative activities in which students work toward a common goal and promote relations and interactions across ethnic groups, maximizing intercultural learning holds great potential for deep change to take place within students, a type of learning may refer to as transformative learning experiences.

What is Missing in Internationalization of Higher Education?

When students cross social, economic, ethnic, racial, cultural, gender, religious, or ideological boundaries with the support of faculty who provide structured academic assignments fostering reflection, deep change can result. Faculty can support diversity and internationalization by applying essential elements in transformative learning

Francis (1993) provides a snapshot of the state of internationalization in the province of British Columbia, Canada, and serves an important contextualizing function for later research by Whalley (1997) and Maidstone (1996). These two researchers also adopt a transformative interdisciplinary and learner oriented approach to internationalizing higher education and its curricula, instruction, and administration. Steiner (2000) supports Wachter's (2000) position and argues that internationalization requires and promotes the development of a new consciousness that includes the intercultural as a central component. Steiner (2000: 73) discusses on internationalization as a "learning oriented cultural understanding model". Bond (2003: 8) defines what she terms a "transformational approach" as one that "produces reform, which requires a shift in the ways in which we understand the world".

According to Liddicoat (2004: 71), internationalization needs not only deal with newly arriving students from other places, but also with local students who bring their own language, culture and identity to the learning context and who equally need to be able to respond productively to the cultural contexts in which they now find themselves. This approach places intercultural competence as the central outcome for all participants,

whether international or domestic students, faculty or staff.

Differences are often seen as problematic: the cause of separation, the flash point for aggression, the source of dissonance and suffering. Encounter with differences, however, can be an invitation to develop higher awareness through intrapersonal and interpersonal work, an opportunity to increase consciousness and enlarge our sense of humanity and personal humanness through transformative learning experiences.

Transformative experiences “alter our consciousness, forcing us to look at ourselves and world around us in different ways” (Slimbach, 2006). They involve fist-hand concrete experiences, often when one is vulnerable and ones’ limitations are exposed such as in encounters with difference. They can be emotional and contain adversity causing one to rethink former ways of understanding challenging basic assumptions.

Referring to transformative learning and its concept, Mezirow (1991) articulates what he terms transformative theory that emphasizes “meaning how it is constructed, validated, and reformulated” (1991: xxi). He notes that meaning is an interpretation that is formed through both perception and cognition and that meaning is made both unintentionally and intentionally. Becoming aware of meaning schemes and these three types of meaning perspectives can particularly help people who communicate across cultures to understand themselves as well as those from other backgrounds who have different ones (Boyd and Myers, 1988).

Cranton (1994) argues that these differences in approach (rationale versus emotional) and the different ways students experience transformation, indicate that no single mode of transformative learning exists. She notes that differences in learners, learning contexts, and teachers all influence learning and adds that not all learners and teachers may feel comfortable with transformative learning, and not all situations lend themselves to it. While this is an important limitation to acknowledge, cross-cultural encounters provide the ideal environment for transformative learning to take place, and for the teachers and students who are predisposed to it, this type of learning provides great potential for change.

In addition, Romm, Patterson and Hill (1991) confirm that failure of social interaction with domestic students was a major source of course dissatisfaction for international students. Research findings inform us that a number factors affecting the study life of overseas students, such as students’ aspiration, perception of their courses and institutions, impact of culture and values on learning environments, learning autonomy and styles of learning (Harman, 2005). Consequently, internationalization should integrate an intercultural dimension into teaching, research and community service in order to enhance academic excellence and promote the notion of social responsibility and community engagement in societies.

Hence, what is missing in the internationalization process is higher education that should be embedded with the vision of preparing future leaders and citizens to address global

issues and challenges like shaping sustainable development, international solidarity and global peace in a highly independent globalized world, in order to achieve those visions, transformative learning practices should be applied in University programmes.

Transformative Learning Experiences: the Missing Links

The president of Brown University, Ruth Simmons, once stated that “the goal of university was not to get yourself a better job: education is about transforming your soul” (Simmons, 2001). It sent shivers down my spine. Are we creating university programmes that transform our souls?

This section mainly discusses on my own transformative learning experiences in teaching a group of graduate international students registered for M.Ed in Educational Management. The group comprises of 18 students from different Asian countries such as Sri Lanka, Vietnam, Bhutan, Maldives, China, and Thailand. As a lecturer of international programme at the University, I often position myself as a learning facilitator, I integrate self-awareness, critical reflection, and reconstruction of previous assumptions that will contribute to transformative learning via an experiential and process-focused approach. Banks (1997) views teaching studies from different backgrounds at a transformational level where students view issues from the perspectives of the ethnic groups being studied.

Teaching students in the international environment can no longer simply be about the transmission of knowledge to students, but needs to focus on equipping students with the tools required to make sense of the knowledge and realities around them. The focus needs to be more on concepts and processes as well as critical analysis.

Learning in the diverse community exposes learners to different ways of thinking, feeling, and doing. I relate a transformative learning experience I encountered as an international graduate student in the UK. I found my usual ways of being are likely to be called into question as I engaged with the people who speak different languages and have different ways of life. I realize that as we study other cultures that there is more than one valid and acceptable way to be human may provoke new and unsettling questions and open possibilities we never considered. My graduate life in the UK relentlessly, often painfully, confronted me with my own edges; and I found it necessary to deal with them in order to stay. I later found that working at and with our edges offers the possibility of personal integration and expansion. I also share my graduate's transformative learning experiences to the class. I conclude when we encounter significant differences, we are given the opportunity to develop awareness and to go over our edges, our own limited self-definitions, to an expanded sense of our humanity. I emphasise to students that they recognise and embrace the potential for personal development, even transformation that their educational choices can create.

I am attempting to break free from the institutional barriers that help reproduce the institution of which I am now a part. I am learning about the theory as it exists in books and journal articles, aware that I am simultaneously experiencing transformations on a series of conscious and unconscious levels. After a transformative awakening to feminist theory during my doctoral studies, I have come to recognise that I cannot look at the world the way I did before. There is a need to include experience and emotion in my writing and teaching. I have encountered a literature that I never knew existed, a place where research starts with an investigation of the interactions in everyday life (Smith, 1999). The ability to cross disciplines and to work in transdisciplinary spaces has allowed me to change and will eventually allow the disciplines to change with the next generation of interdisciplinary students.

Teaching diversity should reflect a commitment to explore personal perspectives of difference as well as the shaping effects of these perspectives upon all aspects of our teaching. To benefit from the immense richness of diversity in our classrooms, it is essential to explore the messages delivered and internalized during the course of our own development. Biases and prejudice mark everyone; but the “difference-sensitive”.

I want to find an approach to teaching and learning that could provoke or enable new ways of seeing and, possibly, being for our students. In the event, it is the students’ encounter with alternative methods of teaching—the use of cooperative learning methods and a reflective learning diary as the assessment—that provide a catalyst for transformative learning. This approach proves to be a significant challenge to students’ prior assumptions, causing negative reactions amongst the cohort but also prompting critical reflection and some profound changes in understanding. Students are continually reminded that our whole self is involved in the process of communicating and that these two components overlap and interact; they cannot be strictly separated. Passages written by students in English in final papers will be used as illustrations.

I reflect some of learning methods fostering transformative learning which I conduct in the class. I usually begin the class with an ice-breaking activity to ease the students and to be a linkage to the lessons. In one particular qualitative research class, one activity is introduced in order to explore cultural blind spots. Students are requested to break into pairs and write down five things about themselves. Two of these things must be true, and three must be false, though regularly assumed by others to be true. Exchanging their lists of information, classmates identify which characteristic he or she believes to be true or false about their partners. After partners disclose which items are actually accurate, and which are not, they discuss the reasons for their assumptions. The activity concludes with a large group discussion, during which the students are prompted with several discussion questions: *Did you notice any pattern to your assumptions? What aspects of your partner’s visible identity caused you to make such assumptions? How did it feel to have someone make false assumptions about you based on your visible identity?*

It is necessary to be constant in searching out the traces of our “identity perspectives” in our engagement with students and our encouragement of their engagements with each other, in the materials we select for learning, and in the diversity issues we raise

explicitly and those we avoid altogether. A critical step, then, in creating a culturally safe learning environment is bringing into consciousness our cultural “blind spots.”

Such activity provokes a discussion of the perception and classification of people and behaviours based on appearance. It clearly suggests to students that making these assumptions is natural. The students learn to analyze the socialization that results in partial views of the people around them, as well as their tendencies to highlight or ignore specific aspects of an individual’s identity based on preconceived notions of that individual’s visible reference groups. The importance of checking and understanding assumptions and the reasons for making them is always emphasized. The purpose of such activity is to guide students in identifying cultural blind spots and their effects on their personal lives and the lives of others, particularly in the classroom and in the workplace. Taking that step will lead to a paradigm shift in views of diversity that extend multicultural knowledge and appreciation of others to include personal self-reflection and the transforming awareness of our own cultural blind spots.

Field trips are also active learning method in my class. Since the campus is located in the suburb of the capital city, it is surrounded by the local Thai community which is best represented Thailand. The mutual learning takes place among local and foreign students when they engage in peer observation and discussions around common concerns with people in contexts that they were previously isolated from. One Sri Lanka student notes, “Today was the day I opened the door to the other side of the world”. The account of another student shows how seeing the local school management in the community causes her to reflect on the people endure, which she had been “oblivious” to before. She writes:

“We went to the local school in Nakorn Pathom, a 30 minute drive from University but it seems like another part of the world. The small sized community school offers only primary level. There are only six teachers including the principal who takes teaching’s role. The principal admitted that during our visit, the students in at least 3 classrooms are left unmonitored. The principal pointed out that the school has requested for the English teacher position for over a year but it has been put on hold given the poor circumstances and remote distant (from the capital city). None of pre-service teacher would choose here as their ‘preferable choice’. The attendance rate of the students is low since they are made to help out their parents at home. The future of those kids seems uncertain, I wonder what the future career would be for these children while they still struggle to survive. It’s hard to think clearly when realising how much people suffer and how oblivious I am to it”.

An important outcome or evidence of change in students and faculty is a renewed vision of the world and our place in it. While it is impossible to produce final solutions to world problems, it is important to envision the world we hope to create and consider what type of person is needed to sustain such a world. As educators, it is necessary to consider what type of learning experiences will help prepare students who will fashion such a world. If we envision a world with fewer armed conflicts, reduced levels of poverty, and more just forms of governments, then our task is to provide the educational opportunities in which transformative learning experiences can take place, where students are infused with respect for other cultures that arises from a humble awareness of being deeply connected with and responsible to not only those of their own group, school, race, nation, but those

who share a common humanity. It is this vision and the process of re-envisioning that will help both faculty and students find hope when faced with the complexities and harsh realities of a world that is marked by glaring injustices and inequality.

Conclusions

Higher Education Institutions need to create positive future by defining the real aim and mission of higher education in the internationalization process. Internationalization of higher education should be motivated by education for global citizenship rather than dominated more by the desire for income than better education. Internationalization of higher education should be committed to encouraging democratic inclusivity and ethical living. Internationalization of higher education should be imbedded with these missions and values that provide the global society with a future. This will affect the way courses and programmes are delivered and life in the campus is conducted. This also demands cultural change driven by educationists inside the campus and policy makers at the system level.

The article shows that students' learning and interaction among diverse groups can be enhanced when faculty create collaborative and supportive learning environments outside the class, which increase dialogue and build bridges across communities of difference. This paper demonstrates that transformative learning experiences can be used by faculty to minimize the problems and maximize the potential for diversity and internationalization in higher education. Although transformative learning may not suit all students, teachers, and situations, it is being used with some success in three programs at one university in which students cross boundaries of difference and encounter change. In addition, faculties should help promote change by delivering the message that multicultural and intercultural characteristics of mankind in the globe are respected and that will help transform higher education institutions into sustainable learning communities that could support the learning need of a future global citizenship.

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IVLE Secure Exam Browser - the secured way to testing

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IVLE Secure Exam Browser - the secured way to testing

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Abstract

As the use of technology advances, the way traditional assessment is delivered changes. Both summative and formative assessment measure progress and guide learning; whether done face-to-face or online. Any form of assessment needs to ensure validity, reliability and fairness. Online assessments need to address security, flexibility and authentication issues in order to ensure successful implementation. In this paper, we share the experience in implementing an online secure assessment through the University's Course Management System, IVLE (Integrated Virtual Learning Environment). Students attempt the test or examination questions and submit them within a secure environment; supported using Juniper Virtual Private Network (VPN) solution. The advent of tabbed browsing in Internet Explorer, which was used on the online assessment PCs, created a possible channel for accessing content in background tabs. This created another security challenge for secure online testing. As a result, a client application, the IVLE Secure Exam Browser was developed and implemented in last quarter of 2009. It locks down a Windows PC to create a safe environment for conducting an online assessment via IVLE. It is developed using Microsoft.NET with a client / server architecture. The following paper examines the university's need for an online secure assessment, its benefits, the issues encountered (in administration, technical support and logistics), the customized features of IVLE Exam Secure Browser and future enhancements. This paper concludes with a discussion about the notion that ever-changing needs seem to be driven by technical demands rather than educational requirements.

Background

IVLE, the University's Course Management System, has delivered numerous online secure assessments since Academic Year 2006/07. It began with a simple request for an online examination, which lead to the demand for a secure assessment system. We reviewed and explored a number of third party products but eventually leveraged on NUS campus infrastructure; using Juniper VPN solutions to address security. This is to ensure that only authorized users can take the test or examination upon successful authentication before they are allowed to login into online secure assessment. The secure environment also known as IVLE Secure Assessment also addresses three main areas: students are unable to surf the internet;

cannot access their external emails and cannot save/view any content to/from external media (e.g. thumb drives).

Despite several enhancements to improve the system, we faced new challenges. The advent of tabbed browsing in Internet Explorer 7 created a possible channel for viewing content in multiple tabs thus causing a loophole when students attempt the online secure assessment.

To counter this, CIT (Centre for Instructional Technology) developed the IVLE secure exam browser; a client application in mid-2009. With the initial deployment of a prototype version to the currently working model, we have implemented it in several examinations this year. The client application locks down all applications in a PC; provides easy access for site administrators to manage users, files and secure browser settings (password management). Should security be breached, an alert notifies the system administrator immediately for investigation. The logs captured by the system also allow auditing after the examination.

IVLE secure exam browser is developed using Microsoft.NET with a client/server architecture. It is now a robust and secure system that serves the NUS community.

The need for an online secure assessment

Back before Year 2006, NUS staff started to use the IVLE assessment tool for examinations. Students have to take their online examination in a PC room, monitored by staff. The benefits of having online then was to take advantage of the assessment tool's automatic marking features and the ability to immediately generate the student's progress and tracking results after the completion of an examination.

Associate Professor Erle Chuen-Hian Lim at the Yong Loo Lin School of Medicine said that "students feel that computer-based testing is fairer instead of being projected on a wall, the high resolution images and photographs - which had to be printed prior to this - were delivered directly to the student's desktop display and seeing them this way made them clearer and sharper," he said.

As we progresses, with the use of the assessment tool for examination purposes, the issues of validity, reliability and fairness were somehow addressed but not fully, in the aspects of security. Thus the challenge was to deliver the online examinations through a secured environment. This secured environment must prevent students from:-

- surfing websites for answers
- reading emails
- using instant messaging services
- copying questions to local or external drive
- opening files locally from the PC or externally from thumb drive

Our development history

So the transformation of a simple online assessment tool started to evolve. In Academic Year 2006/2007, CIT launched a new service known as IVLE Secure Assessment where we leveraged on Juniper's Secure Access SSL VPN platforms to securely deliver online examinations to its students. The new network could completely "encapsulate" a student's notebook computer that he could not look at the hard drive or open up Internet Explorer. Such is its ability to exert total control over the network environment that it can even limit the student to just a blank screen.

Progressively, Juniper application enhancement was to tighten the security with more restrictive security policy. Not long after (Nov. 2008 to Feb. 2009), we were challenged with new technology and this challenge was the introduction of tabbed browsing in Internet Explorer 7. It created a possible channel for viewing content in multiple tabs. So in situation where questions are set that the following question may have answers to the preceding question, the ability to view in multiple tabs became a loophole for students during an online secure assessment.

The search for third party

We started the search for third party products or solutions on the market that can secured the web browser. There are many such similar products and to help narrow the search, below are the factors to be considered:-

- Allow ease of updating and one-point creation of the list of applications to be blocked
- The examination system needs to be QTI compliant so that questions can be conveniently uploaded from our University's Course Management System to vendor's system
- Allow single sign-on integration
- Support on-site server, in campus

These are the following products and solutions that were reviewed as at December 2008:-

- BrowseControl
- ExamSoft
- Secureexam Student
- Secureexam Browser
- Customised online exam system by local vendor

The vendor's online exam system has to be integrated with IVLE. Student submits the answers through the online exam system and the question inputs have to be transferred to IVLE for final marking. To ensure that this area is validated, an audit check program needs to be customised to ensure that records are updated or returned successfully and correctly to IVLE database. This has elevated to a high-stake concern on the management of the examination results.

- Thin Client with VMWare

The thin client offering for desktop virtualization with ability to provision and switch to exam desktop during a secure examination. Security is guaranteed because:-

- thin client does not have the ability to store any data
- exam desktop will be installed with only basic OS (Windows XP)
- These exam desktops will be deleted once the exam is completed.
- Exam desktops used a virtual network which is shut off from normal internet

Each thin client cost about S\$800 (inclusive of thin client, LCD, keyboard and mouse); and the need to provision resources on server side to cater for the 140 virtual desktops (about 14 of 2xQuad Core, 8GB Ram servers). But in terms of support, thin client was not part of Campus IT infrastructure then.

There was not one reviewed products or solutions that was a total solution for us to adopt. We then extended our search over to open source solution. In mid-2009, a prototype secure client browser was developed using open source codes. It was a potential direction to further enhance this client application. Thus the IVLE Secure Exam Browser was born in Q4 of 2009. This new client is developed using Microsoft.NET with a client / server architecture. It locks down a Windows PC (XP and above) to create a safe environment to conduct an online assessment via IVLE. The PC must be one where students do not have administrator rights too. We customised our product with the following features:-

- Password management; to open, close and return to browser
- Administrator/single control interface (allow user to set settings, all in a single page)
- Lock down URLs
- Firewall
- Restrict keyboard
- Restrict internet access
- Restrict URL
- Restrict disk access
- Restrict time

Security testing on the product was also carried out by our campus Security team and an external security company. This is to verify that this solution is fully secured to deliver an online examination; and it can be run with confidence.

Finally in January to March 2010, we successful deployed the IVLE Secure Exam Browser during trial runs and actual examinations. The Final Professional Examinations paper for Medicine and Surgery delivered on March 2010 for about 250 students has proven to be a stable and secure solution.

The Benefits

The deployment of the IVLE Secure Exam Browser definitely addresses the issues of security, flexibility and authentication. The biggest issue, security, has been overcome with the application itself. Flexibility was demonstrated, the client application can be easily installed and run the service anywhere. We have conducted several online examinations in different computer cluster/lab; and with Faculty of Law, which is located in another campus. We ensure only authorised students or users can access and view the examination questions in IVLE. The first authentication is to upload the list of students who are allowed to access the secure environment. The second authentication is where users need to login into IVLE Secure Assessment with their NUSnet User ID thus authenticated through the Exchange server. Lastly, within IVLE, the class has to be granted access to take the quiz. You may understand better from the screen captures shown in the following section under ‘Features of IVLE Secure Exam Browser’ or refer to Annex A to walkthrough on the activation of IVLE Secure Exam Browser.

It has helped us reduce downtime and increase productivity. There was a significant improvement with the use of IVLE Secure Exam Browser as compared to the previous solution. As gathered from our customer’s feedback this year (see below), there were close to zero glitches for the examinations.

*“The exam went without a hitch - and only one computer had problems - am so grateful to u all”
– Academic staff, Assoc Prof Erle Lim, March 2010*

“...CIT colleagues for working with us to enhance the secured examination, over this 1-2 years. Jeffery’s innovation of using the client apps’ browser is really effective and the M5 MEQ exam ran very well this year without any glitch.” – Administrative staff, Mr Shawn Chang, March 2010

The Challenges Faced

Despite the successfully implementation, these are the challenges faced or still facing:-

1. Logistics
Students take their online examination in a designated computer cluster in campus. They are being invigilated by administrative staff and examination invigilators. Like usual,

staff still need to verify the students against their photo on the student matriculation card. Our campus, do not have computer cluster that is big enough to host a cohort of students in one sitting. Thus students are split into groups and take the exams online in batch. While the first batch of students is taking their online examination, the second batch will have to wait in a holding area. This is to ensure that the two groups will not get to meet each other after the first batch of students complete their online paper.

2. Network and hardware stability

Each examination scenario is different. Although we have been running it over a few semesters, there are occasional issues on network congestion, dis-connection of the PCs from the network and memory issues on the PCs. These are situations that are beyond our control. Thus contingency plans are required. We will always have at least 5-10% of unoccupied PCs as stand-by so when a PC is 'down', the student will be immediately moved over to the unoccupied seat and continue his examination without much disruption. We may also choose to fall back on the normal running (without the secured environment) of the IVLE Assessment tool with more vigilant monitoring by staff. And in the worst case, we will postpone the examination – a scenario which we have yet to experience.

3. Administrative support

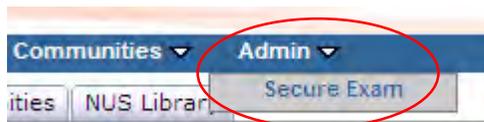
The need to assign dedicated staff to support this service is still required. Having examination online does not reduce the number of support staff. The Computer Centre's network team is also required to work closely with us on the infrastructure needs.

4. Decentralisation of the administrator features

For each examination, the students' IDs need to be uploaded into the secure system so that they will enter the secure environment to take their online examination through IVLE. Thus we grant the staff in-charge with administrator rights so that he or she can conveniently start IVLE Secure Exam Browser through the set up of the User Management and Secure Browser Settings. We are beginning to see that non-IT staff are receptive in the managing and running of online secured examinations.

Features of IVLE Secure Exam Browser

The features of IVLE Secure Exam Browser will be shown in the following screen captures. The administrative settings are done through IVLE. Only authorized personnel will have access to the administrative view of the IVLE Secure Exam Browser in IVLE.



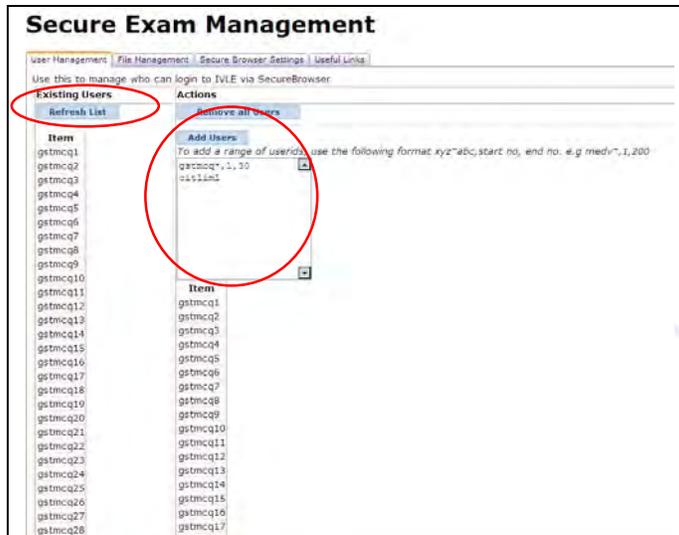
The IVLE Secure Exam Browser administrative settings consist of the following:-

1. User Management

2. File Management
3. Secure Browser Settings

1. User Management

List of NUSnet user IDs have to be entered through the User Management. Only user IDs entered here will be allowed or granted access to the Secure Environment. These are class students/authorized users that will be taking the examination or test during the examination date and time.

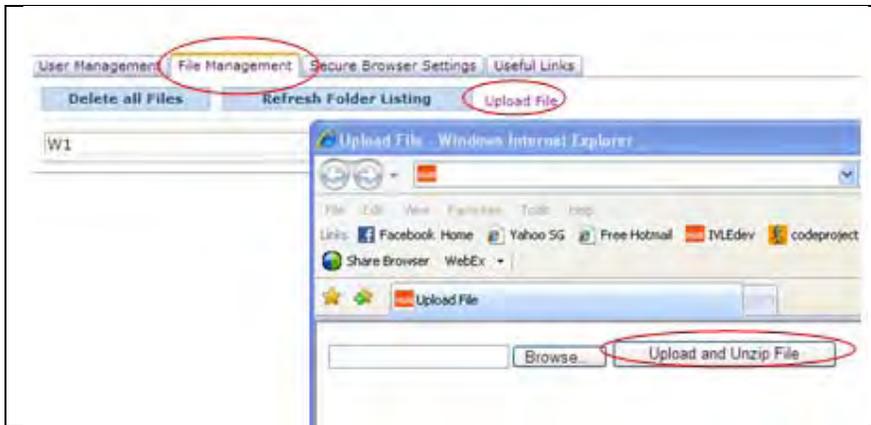


2. File Management (to be used for uploading of PowerPoint file only)

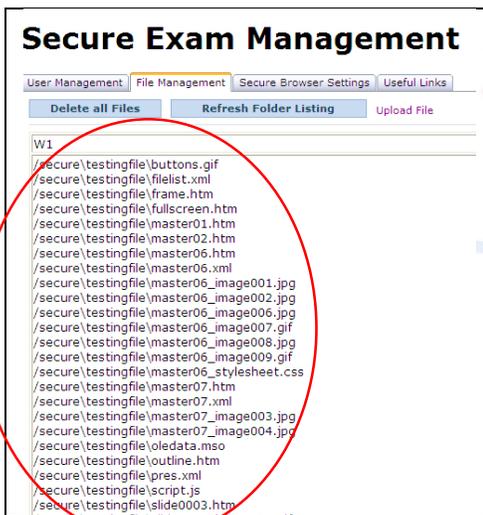
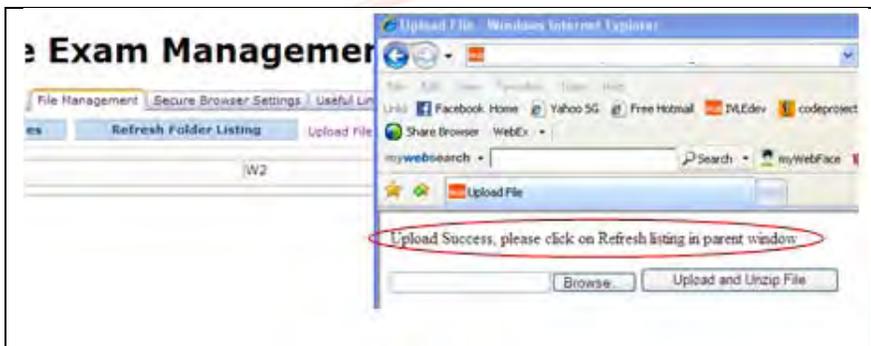
This feature was created for user who wants to leverage on the security of IVLE Secure Exam Browser. The examination questions are not delivered IVLE Assessment instead through PowerPoint slides. Thus the system was developed to accept zip file format. User has to zip their PowerPoint html files into a zipped file.

2.1 Upload File

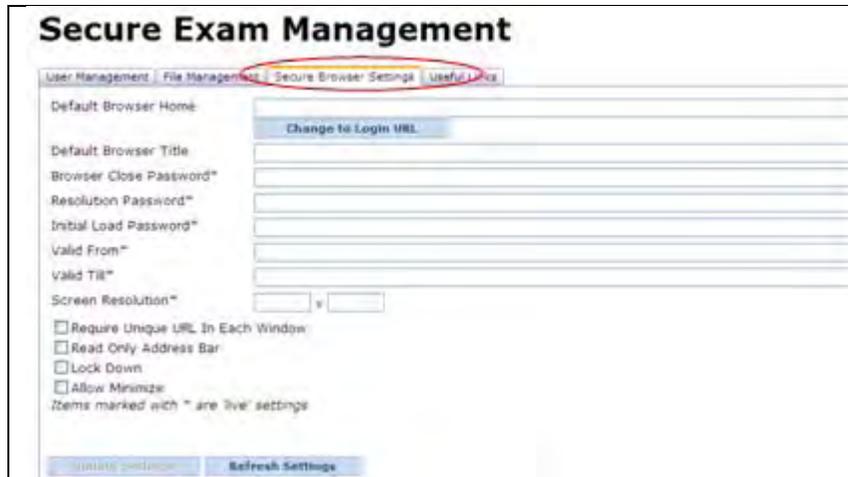
Browse file and then click the “Upload and Unzip File” button to upload and unzip the files into the server’s secure folder.



Upon successful upload and file being unzipped in the server, you will see below screens:



3. Secure Browser Settings



3.1 Set – Passwords

Item as seen in screen	Purpose/Function
Initial Load Password	To authorise entry to the secure environment with a valid password.
Browser Close Password	Need a password to close the browser/window thus prevent accidentally closure of the window by student.
Resolution Password	To resolve unforeseen logouts; support staff can enter password to promptly assist the student to quickly re-enter into the IVLE secure assessment/environment. Note: Support staff will still need to take down the student name/user ID in the log sheet. The system will also capture invalid operation that may be attempted by users or system issues that may occur.

3.2 Set – Valid Date and Time

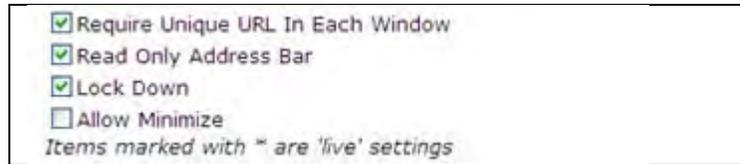
The time here does not refer to the start and end time of the assessment. It is to allow administrator to determine the date, and the duration where the secure environment can be made accessible to the list of authorized students/users. Thus it is recommended that the estimated time to be input in the “Valid Till” field, should have allowance to cater to delays, at least 30 mins after the assessment ending time. This is to ensure that the secure environment is still valid or open.

The valid till time set here also acts as an automatically shut-down feature of the IVLE Secure Exam Browser from all PCs running the secure client application.

Valid From*	17 Nov 2009 05:00 PM
Valid Till*	17 Nov 2009 05:50 PM

3.3 Recommended default settings

The 'Allow Minimize' option is to enable users the option to manually resize the browser window.



Future Enhancements

It is now a robust and secure system that serves the NUS community. Our plan is to enhance the system so that it is able to support multiple concurrent sessions which can be administered by many different requestors. It would also be an advantage if students can do their online examination anytime and anywhere, with fool-proof verification that the person taking the examination is the actual student. We have reviewed some online proctoring products that may address this challenging issue but will not be able to justify the cost against the needs for now. There are more challenges ahead. However, as an in-house application, CIT has the flexibility to customise the application according to the ever-changing technological landscape as well as to our clients varying needs.

Conclusion

In this paper, we have shown that the advances made in developing and delivering an online examination in a secured environment in our context has been driven by technical demands rather than educational requirements. Even if there was change request by our customers, they are mostly to deal with the online assessment interface and/or the features. Though the series of development from IVLE Assessment tool, to IVLE Secure Assessment till the latest IVLE Secure Exam Browser application; it was the technology challenges that we have to counter to ensure that our online examination system provides reliability, security, flexibility and a sound framework on authentication.

Annex A

Walkthrough on the activation of IVLE Secure Exam Browser

1. Activate the Secure Exam Browser, client application

You (support staff) will need to login to the local PCs with Administrator logins. (You must liaise with the PC cluster administrator for technical support.)



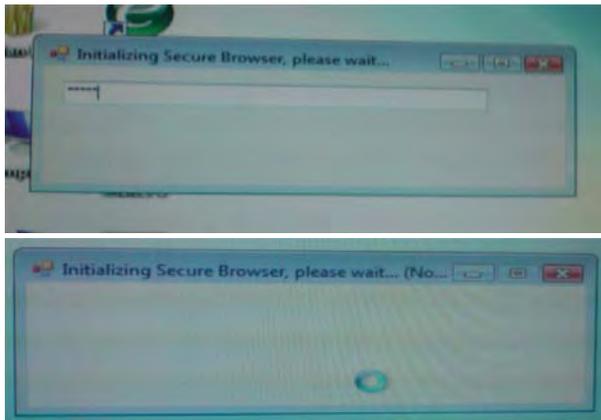
For the first time the Secure Exam Browser application file has to be saved on the desktop of each PCs. You can get this “updater.exe” file from the IVLE Secure Exam Administrator. (It can be downloaded from the IVLE>Admin>Secure Exam>Useful Links tab>Updater Program link.) Subsequently, upon clicking the “updater.exe” file, it will automatically get the latest copy from the server. Click on the “updater.exe” file to activate the secure exam browser application.

2. Start the Secure Browser

You (support staff) will see a screen, “Press any key to start SecureBrowser” This may take a while or longer as the application is locking down all the PC’s applications.



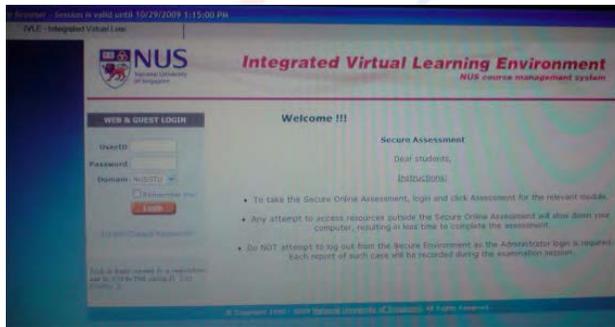
3. **Set Initial Load Password (optional) – Password required to load the Secure Browser**
You may need to enter password to initialize/load the Secure Browser.



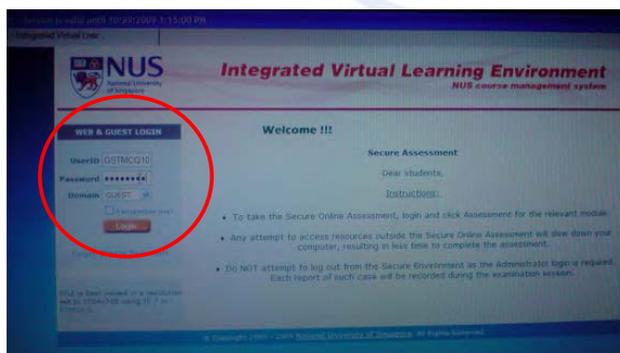
4. **Accessing the Secure Environment or Assessment**

4.1 Display of IVLE homepage:-

Upon your successfully entry to Secure Browser, you will be directed to the IVLE Secure Assessment homepage.



- 4.1.1 Only authorized students may enter their NUSnet userid to begin their secure assessment.



- 4.1.2 The student has successfully entered IVLE Secure Assessment. He/she may click on the 'notebook' icon to select and access the online assessment.

Cover page

Title: A Study on Developing MSN Virtual Learning Companion System based on Individual Cognitive Style for Microsoft Certification Course

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Topic of the submission: Technology in learning

The logo for the International Association for Frontiers in Education (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, curved lines in shades of blue and red, creating a circular, abstract design.

ABSTRACT

The development of computer and Internet technology has brought a new learning approach. However, because of the individual difference among learners, it is important to provide proper assistance and guidance in the learning process. This study uses the software robot technique to design a virtual learning companion, Confucius, on the popular MSN platform to play the role of a learning companion 24 hours a day on the Internet to give learners assistance. Confucius provides different learning guidance methods according to the different learning cognitive styles to help learners learn more efficiently. This paper conducted the experiment to the 104 college students and the learning content is Microsoft Certification Course (MCTS-70620). The result shows that when the learning guidance method of Confucius is discussion mode, the learning performance of learners whose cognitive style is field-dependent is higher than that of the learners whose cognitive style is field-independent. However, when the learning guidance method of Confucius is lecture mode, the learning performance of the field-independent learners is higher than that of the field-dependent learners. The result is similar to the finding of Garger and Guild (1987) that field-dependent learners prefer the learning situation which they can discuss and interact with the others, and the field-independent learners prefer lecture mode in the learning process. Therefore, this study called the grouping that fit learners' cognitive styles the adaptive group; otherwise it is called the non-adaptive group. Finally, this paper conducted the analysis of learning performance to these two groups. The finding suggested that the learning performance of the adaptive group learners is significantly higher than those of the non-adaptive group learners.

Keywords

Virtual Learning Companion, Individual Cognitive Style, MSN platform, Microsoft Certification Course

Introduction

Technology development has changed the traditional teaching approach (Chen & Ko, 2010; Chen & Wang, 2008; Guan, Tsai, & Hwang, 2006; Hong, 2002), and prevents learning from being limited by time and space (Berge & Collins, 1995; Kaiser, Tullar, & Mackowen, 2000; Raquel, 2002). In recent years, the popularity of e-learning has revealed the trend and importance of the application of information technology (Graham, 2002). Therefore, information technology has been considered as a critical learning supplement and how to effectively apply it to increase learning performance is an important issue.

In the environment of e-learning, instructors not only have to teach learners knowledge but most importantly they have to provide learners with adaptive assistance and guidance in their learning process to help them learn more efficiently (McFadzean & Nelson, 1998; McFadzean, Somersall,

& Coker, 1999; McFadzeav & McKenzie, 2001). However, instructors, because of the heavy workload, are usually not able to effectively provide the real-time guidance to learners 24 hours a day. Learners, therefore, need the assistance of virtual learning companions. The concept of virtual learning companion is that along with the instructor and the learner, there is one peer learner for peer interaction in e-learning environment to help the learner learn more efficiently (Chan & Baskin, 1988, 1990). Hence, it is an important issue to build a virtual learning companion system to assist learners learning 24 hours a day.

However, because of the individual differences among learners, there is no guidance method that can be adaptive to all of them. Researchers suggest that instructors need to learn a different set of teaching skills for teaching online (Brower, 2003; Easton, 2003). Besides, the learning materials are usually based on the viewpoints of instructors but not based on learners' needs, and it could result in opposite learning effect. Drummond (2000) believed that the reason of opposite learning effect may be the disregard of learners' cognitive styles. Dunn and Dunn (1994) found that when the teaching methods and materials fit learners' cognitive styles, it improves not only learners' learning performance but also their learning attitude. Hence, a good design of virtual learning companion should be adaptive to learners' cognitive styles to assist them to learn more effectively.

Moreover, constructivists suggested that instruction should be learner-centered (Brooks & Brooks, 1993). Learners are thinking individuals, hence instructors should provide them with opportunities to develop their potential ability and help them gain thinking, inferring and problem-solving abilities in the learning process. Therefore, it is necessary to build a virtual learning companion system that provides different guidance according to different cognitive styles. Furthermore, according to the statistics of InsightXplorer Ltd. in March, 2008, MSN Messenger is the most popular instant communication system in Taiwan and the user population has exceeded eight million. Hence, this study uses the technique of software robot to design a virtual learning companion that can provide adaptive guidance according to individual cognitive style through the MSN platform to help learners study more efficiently.

Literature Review

Virtual learning companion

Chan and Baskin (1988) first proposed the concept of virtual learning companions. A virtual learning companion is a partner that can accompany learners to study in the e-learning environment. In other words, beside the instructor and the learner, there is a virtual learning companion helping the learner acquire knowledge anytime and anywhere.

Webb (1982) discovered that through the help and message supplied among learning companions, it can increase learning performance. Besides, through the interaction with virtual learning companions, learners can engage in the learning situation to increase their concentration, engagement, and learning attention (Hsu et al., 2007). Hong (2002) found that when there is an absence of interaction with learning companions in e-learning environment, it causes learners the feeling of isolation and decreases their learning satisfaction (Hiltz & Wellman, 1997; Rovai, 2002; Rovai & Wighting, 2005). Arbaugh (2002) also pointed out the positive relationship between learning satisfaction and the interaction among the learners, the instructor and the learning companions. Christensen, Anakwe & Kessler (2001) discovered that students who participate in e-learning prefer to interact with other learning companions. Moreover, in the learning process, through the interactive relationship of the encouragement, explanation, interpretation, instruction and demonstration among learning companions, it is easier to reach study goals (Hooper, 1992; Slavin, 1995). Therefore, it is a critical issue to build a virtual learning companion system to support learners and to prevent the feeling of isolation.

However, because there are individual differences among learners, the guidance of the virtual learning companion system cannot be built only on one method to adapt to all the learners. Renzulli (1994) also pointed out that when the guidance method and the learner's cognitive style are consistent with each other, it makes the learner learn easier and more delighted, and have better attitude towards learning (Dunn and Dunn, 1994) while the learning performance will not be decreased (Drummond, 2000). She & Fisher (2003) found that if the instruction methods correspond to learners' cognitive styles, it will make the greatest learning effect in the change of subject concept. Therefore, in order to assist learners to learn more effectively, it is important to build a virtual learning companion system that can provide different guidance methods according to individual cognitive style to assist learning more efficiently.

Cognitive style

Messick (1984) defined cognitive styles as "characteristic self-consistencies in information processing that develop in congenial ways around the underlying personality trends". Witkin, Moore, Goodenough and Cox (1977) referred cognitive style to the individual differences in perception, thinking, problem solving and learning. Cognitive style is a hypothetical construct and it is the special individual style or method when engaging in cognitive activities (Witkin & Goodenough, 1981; Riding & Cheema, 1991; Morgan, 1997). Among different cognitive styles, there are many studies about field-independence and field-dependence. This cognitive style was first purposed by Witkin et al. in 1954 and was also named psychological differentiation (Witkin et al., 1962) or field articulation. This cognitive style uses the embedded figures test (EFT) as the measurement instrument to measure the field independency degree of the subjects (Messick, 1962).

Witkin et al. (1962) used field independency to divide cognitive styles into the two categories, field-dependence style and field-independence style. Field independency is to measure the degree that the subject overcomes the influence of the irrelevant field elements while recognizing the related portion under the specific situation. The less a person is influenced by the irrelevant elements, the more analytical or field independent the person is. On the contrary, the easier a person is influenced by the irrelevant elements, the more global or field dependent the person is (Wu, 1987).

Chapelle and Roberts (1986) found that field independent learners are not influenced by the social orientation and the extrinsic motives, and prefer analytical learning and independent study. Field independent learners think they can learn more, faster and easier through independent study. On the other hand, field dependent learners are much influenced by the external environment, and the social orientation and extrinsic motives. They prefer global and collaborative learning, and accept peer guidance to reduce learning anxiety and increase learning interest. Garger and Guild (1987) also discovered that field dependent learners prefer the learning environment where they can interact and discuss with the others, and that field independent learners prefer the teaching method of lecture mode.

In short, cognitive style is the individual perception and memory in information processing, and it is also the tendency of problem solving and learning. It is a non-intelligence personal characteristic but it can influence learning. In terms of field independency, it affects the individual response to the environmental change and the learning materials. Therefore, when discussing learning performance, it is necessary to concern the influence caused by cognitive styles.

Virtual learning companion system (Confucius)

The designed virtual learning companion system of this study, Confucius, can assist instructors to provide learners guidance and assistance after class 24 hours a day. Confucius is able to help learners practice class content through two-ways interaction by using real-time Questions and Answers (Q&A). When learners can't give the right answer, Confucius provides two guidance methods, the lecture mode and the discussion mode, to assist learners to solve the questions.

The lecture mode guidance supplies the related information and contents to learners when they have learning errors. As shown in the figure 1, when Confucius proposes a question to the learner (block A) and the learner gives a wrong answer, Confucius will provide the correct answer (block B) and the webpage with the supplement teaching materials prepared by the instructor (block C).

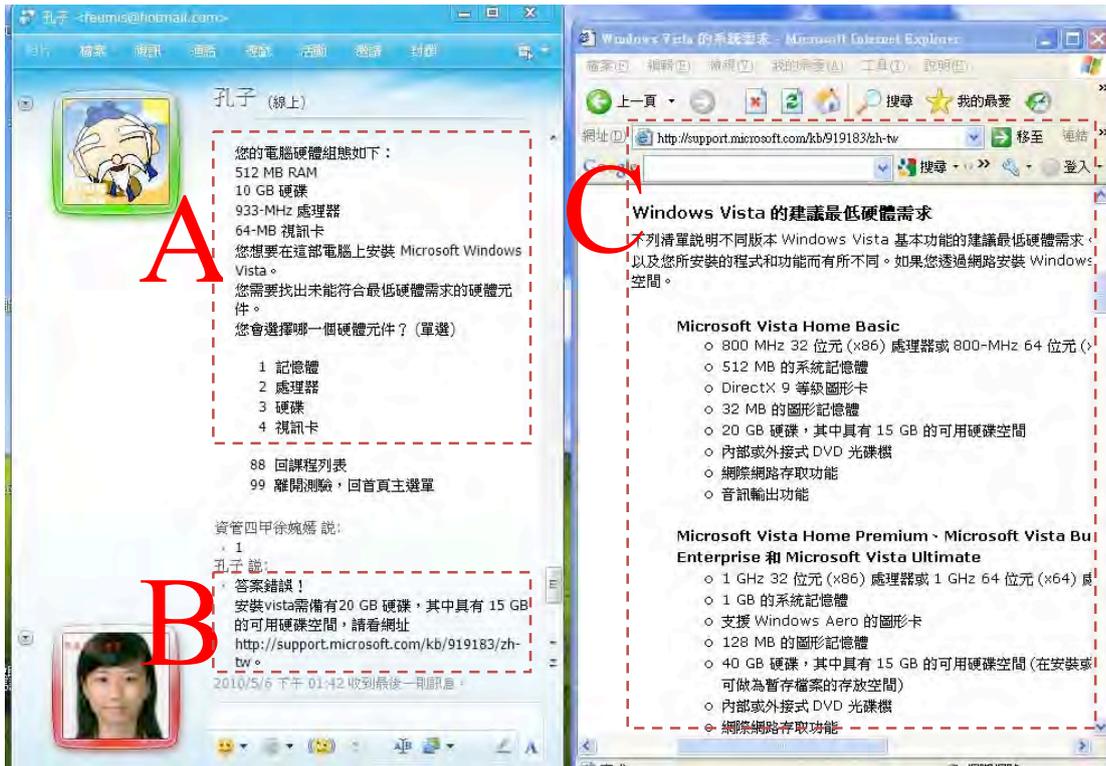


Figure 1 Lecture mode guidance of virtual learning companion

The discussion mode guidance is to provide peer discussion when learners have learning errors. As shown in the figure 2, when Confucius proposes a question to the learner (block A) and the learner gives a wrong answer, Confucius will search the database to find the online learners who have the correct answer and randomly choose some of them to be the list for peer discussion (block B). The learner, at this time, can choose one of them to discuss the question. Then, Confucius will inquire if the selected peer learner agrees to do interactive discussion (block C) and connect it to the discussion window (block D).



Figure 2 Discussion mode guidance of virtual learning companion

Research Methodology

This study adopts the certification exam of Microsoft technical specialist (Exam-70620¹) as the instruction content and the factorial design as the experimental design method to explore how the guidance methods of the virtual learning companions in e-learning environment influence the learning performance. This paper uses the formal 70620 examination held at PROMETRIC test center to collect data of learning performance, and employs quantitative analysis method to analyze it. The instrument of the quantitative analysis is the statistic software, SPSS. The goal of the experiment is to discuss the following questions.

1. If the different guidance methods of the virtual learning companion will make college students have different learning performance on Microsoft certification course?
2. If the guidance of the virtual learning companion will make variant cognitive style learners have different learning performance on Microsoft certification course?
3. If there is any interactive effect between the guidance methods of the virtual learning companion and the cognitive styles on the learning performance?

Experiment Content

Microsoft technical specialist exam (Exam-70620) is used as the instruction content in the experiment. Exam-70620: Windows Vista, Configuring, became available in January 2007. Exam-70620 test takers should have the ability to resolve issues concerning network connectivity, desktop operating systems, security, and applications. Their ability should also include addressing logon problems, performing password resets, and resolving most issues with desktop applications. When test takers pass the Exam-70620 that held at the PROMETRIC² test center, they will earn the credential of "Microsoft Certified Technology Specialist (MCTS): Windows Vista, Configuration".

Our experiment course teaches the learners to prepare for this exam and earn the credential. The related experimental activities include curriculum instruction and the use of virtual learning companion system after class. Before the course, the instructor introduces the teaching goals and contents. Then, the students are divided into different experimental groups. After class, students practice the instruction contents through the assistance of the virtual learning companion system.

Research Design and Variables

This study adopts the experimental method. Before the experiment, a self developed examination

¹ <http://www.microsoft.com/learning/en/us/exam.aspx>

² <http://www.prometric.com>

of Exam-70620 is used to confirm whether students have consistent prior knowledge. Students, then, take the computerized EFT (Figure 3) to determine their cognitive styles, and are randomly divided into the groups with the two different guidance methods, shown as table 1.

The independent variable of the study is the difference of the guidance methods of the virtual learning companion and the dependent variable is the learning performance. The measurement of the learning performance is based on the learner's formal score of the Exam-70620.

Table 1 Experiment design

Experiment Groups	Cognitive Style	Guidance methods of virtual learning companion
Experiment Group 1 (EG1)	Field-dependent style	Discussion mode
Experiment Group 2 (EG2)	Field-dependent style	Lecture mode
Experiment Group 3 (EG3)	Field-independent style	Discussion mode
Experiment Group 4 (EG4)	Field-independent style	Lecture mode

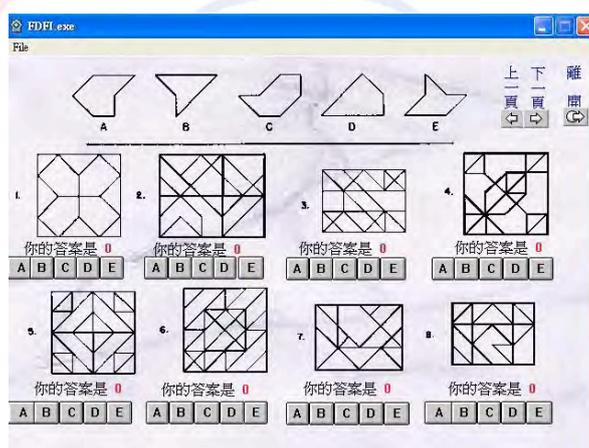


Figure 3 Computerized EFT

Experiment Subjects and Procedure

The experiment subjects include the 192 freshmen and juniors at one university of science and technology. 61.5% of them are male students, and 38.5% are female students; 59.4% of the students are freshmen, and 40.6% are juniors.

The experiment period lasted 12 weeks. In the first week, a self developed examination of Exam-70620 was used to measure the prior knowledge and the computerized EFT was used to explore students' cognitive styles. In the second week, according to their cognitive styles, students were randomly assigned to the 4 experimental groups and Confucius, the system of virtual learning companion, was introduced to them. From the second week to the eighth week, the instruction was given by the same instructor and students were asked to use the virtual

learning companion system after class. In the ninth week, students took the formal examination held at PROMETRIC test center. In the thirteenth week, the self developed examination of Exam-70620 was used to do the follow-up exam to evaluate students' memory of the instruction content.

Research Results and Discussions

The study subjects include the 192 university students. Before the experiment, the 192 students take the EFT to classify their cognitive styles. The EFT was edited by Messick (1962). The main measurement includes two parts and each part has 16 items for the subjects to find the embedded simple figures in the complicated figures in ten minutes. Because the EFT identifies cognitive styles along a continuum which score range is from 0 (field-dependent) to 32 (field-independent) depending on the number of figures traced correctly. This paper has followed a statistical procedure of using the upper and lower 27% of the EFT scores to identify extreme field-dependent and field-independent subjects (Spanier & Tate, 1988). The 52 out of the 192 subjects who have taken the EFT are field-dependent (their EFT scores locate at the lower 27% and their average score is 5.38) and they are randomly assigned to experimental group 1 and 2. The 52 of the 192 subjects are field-independent (their EFT scores locate at the upper 27% and their average score is 22.14) and they are randomly assigned to experimental group 3 and 4, shown as table 2.

Table 2 Four experiment groups

Experiment Group	Cognitive Style	Guidance Methods of Virtual Learning Companion	Numbers of Learner	Average Scores of EFT
EG1	Field-dependent style	Discussion mode	26	5.38
EG2	Field-dependent style	Lecture mode	26	
EG3	Field-independent style	Discussion mode	26	22.14
EG4	Field-independent style	Lecture mode	26	

In order to examine if their prior knowledge of Exam-70620 is significantly different, a self developed examination of Exam-70620 is adopted as the pre-test. The pre-test grades of the four experimental group students are analyzed by one-way ANOVA to discover if the four group students have significant different prior knowledge for Exam-70620. The result shows that their prior knowledge for Exam-70620 is not significantly different ($F=2.114$, $p\text{-value}=0.103>0.05$), shown as table 3.

Table 3 One-way ANOVA for pre-test of 4 experimental groups

	Sum of Squares	df	Mean Square	F	Sig.

Between Groups	45925.962	3	15308.654	2.114	.103
Within Groups	724173.077	100	7241.731		
Total	770099.038	103			

The result of the quantitative analysis shows that the scores of Exam-70620 of the four experimental group students rise after Microsoft certification course (shown as table 4). This outcome suggests that the two learning guidance methods with the course instruction have positive effect in increasing learners' learning performance. In addition, according to the pair-samples t-test, the test scores of all experimental students have significant difference (p -value <0.05). Therefore, it shows that the course instruction and virtual learning companion guidance have significant effect on learners' learning performance.

Table 4 Pair-samples T test analysis of four experimental groups

Experimental group		Mean	Std. Deviation	Mean	Std. Deviation	t	Sig. (2-tailed)
EG1	Post-test	818.46	88.450	469.231	128.582	18.608	0.000
	Pre-test	349.23	82.996				
EG2	Post-test	780.19	95.544	429.423	95.547	22.917	0.000
	Pre-test	350.77	86.576				
EG3	Post-test	770.62	75.020	469.462	123.635	19.362	0.000
	Pre-test	301.15	91.185				
EG4	Post-test	839.12	88.105	520.654	130.481	20.346	0.000
	Pre-test	318.46	73.031				

Since this study is to discuss if the learning guidance methods, learners' cognitive styles, and the interaction between them have different effect on the learning performance of Exam-70620, this research takes the learning guidance methods and cognitive styles as the independent variables to do two-way ANOVA analysis on learners' learning performance (shown as table 5).

Table 5 Two-way ANOVA analysis of four experimental groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	6.691E7	1	6.691E7	9101.030	.000
Cognitive Styles	797.538	1	797.538	.108	.743
Guidance Methods	5940.346	1	5940.346	.808	.371
Cognitive Styles * Guidance Methods	74097.846	1	74097.846	10.079	.002
Error	735183.308	100	7351.833		
Total	6.773E7	104			

The result of Table5 shows that both the effects of individual cognitive styles ($F=0.108$, $p\text{-value}>0.05$) and virtual learning companion guidance methods ($F=0.371$, $p\text{-value}>0.05$) are not statistically significant. It means that learners with different cognitive styles and virtual learning companion guidance methods have no significant difference on learning performance. However, the effect of the interaction between individual cognitive styles and virtual learning companion guidance methods is significant ($F=10.079$, $p\text{-value}<0.05$). Hence, this result shows that the individual cognitive styles and the guidance methods of the virtual learning companion have interactive effect on learning performance.

In order to further understand the interactive effect between individual cognitive styles and guidance methods of virtual learning companion, this study uses Least Significant Difference (LSD) as the post-hoc analysis, shown as table 6. The result shows that the difference of the learning performance between EG1 and EG3 ($p\text{-value}=0.047$), EG2 and EG4 ($p\text{-value}=0.015$), EG3 and EG4 ($p\text{-value}=0.005$) are all significant.

Table 6 post-hoc analysis of four experimental groups

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
EG1	EG2	38.269	23.781	.111	-8.91	85.45
	EG3	47.846*	23.781	.047*	.67	95.03
	EG4	-20.654	23.781	.387	-67.83	26.53
EG2	EG1	-38.269	23.781	.111	-85.45	8.91
	EG3	9.577	23.781	.688	-37.60	56.76
	EG4	-58.923*	23.781	.015*	-106.10	-11.74
EG3	EG1	-47.846*	23.781	.047*	-95.03	-.67
	EG2	-9.577	23.781	.688	-56.76	37.60
	EG4	-68.500*	23.781	.005*	-115.68	-21.32
EG4	EG1	20.654	23.781	.387	-26.53	67.83
	EG2	58.923*	23.781	.015*	11.74	106.10
	EG3	68.500*	23.781	.005*	21.32	115.68

*. The mean difference is significant at the 0.05 level.

From the difference of the learning performance between EG1 and EG3 ($p\text{-value}=0.047$), it shows that when the guidance methods of the virtual learning companion is discussion mode, the learning performance of field-dependent learners is higher than that of the field-independent learners. Then, from the difference between EG2 and EG4 ($p\text{-value}=0.015$), it reveals that when the learning guidance method of the virtual learning companion is lecture mode, the learning

performance of field-independent learners is higher than that of the field-dependent learners. In addition, from the difference between EG3 and EG4, it presents that when learners' cognitive style is field-independent, the learning performance with the lecture mode is higher than that with the discussion mode.

The result is similar to the finding of Garger and Guild (1987) that field-dependent learners like to discuss and interact with the other learners, and field-independent learners prefer the teaching method of lecture mode. Hence, this study suggests that providing field-dependent learners with the learning guidance method of discussion mode (EG1) and field-independent learners with the lecture mode (EG4), it meets learners' cognitive styles. The grouping that fits learners' cognitive styles is called the adaptive group; otherwise it is called the non-adaptive group (EG2 and EG3), shown as table 7.

Table 7 Experiment design of adaptive group and non-adaptive Group

		Guidance Methods of Virtual Learning Companion	
		Discussion mode	Lecture mode
Cognitive Style	Field-dependent style	EG1 Adaptive Group	EG2 Non-adaptive Group
	Field-independent style	EG3 Non-adaptive Group	EG4 Adaptive Group

Then, the research uses t-test to explore if the learning performance of the adaptive groups is higher than that of the non-adaptive groups, shown as table 8. Table 8 shows that the learning performance of the adaptive groups is significantly higher than that of the non-adaptive groups (p -value=0.002). Besides, to discover that with the different instruction methods if there is any significant difference on learners' long term memory, this study conducted the follow-up exam. Since the result of the follow-up exam shows that the learning performance of the adaptive groups is still higher than that of the non-adaptive groups (p -value =0.001), it means that providing different cognitive styles learners with different learning guidance methods can effectively increase their learning performance.

Table 8 Post-test and follow-up exam of adaptive group and non-adaptive Group

	Group	Mean	Std. Deviation	t	Sig. (2-tailed)
Post-test	Adaptive Group	828.79	85.384	3.192	0.002
	Non- adaptive Group	775.40	85.188		
Follow-up exam	Adaptive Group	764.77	93.856	3.459	0.001
	Non-adaptive Group	703.42	86.875		

Conclusion

The goal of this study is to design a virtual learning companion, Confucius, to play the role of a learning companion 24 hours a day on the Internet to assist learners to learn more efficiently. In the meanwhile, this paper discusses if there is any significant difference among the learning performance of learners with different cognitive styles when using different learning guidance methods in the learning environment on MSN platform. The findings are summarized as below.

1. When the learning guidance method of the virtual learning companion is discussion mode, the learning performance of the field-dependent learners is higher than that of the field-independent learners.
2. When the learning guidance method of the virtual learning companion is lecture mode, the learning performance of the field-independent learners is higher than that of the field-dependent learners.
3. The learning performance of the adaptive group is significantly higher than that of the non-adaptive group.

The finding suggested that when the guidance methods of the virtual learning companion correspond to individual cognitive styles, it can efficiently increase their learning performance. This result is similar to the viewpoint of Kraus, Reed and Fitzgerald (2001) that the well designed e-learning environment can make learners with different cognitive styles have the same learning performance. Besides, Dunn and Dunn (1994) found that when the instruction and teaching resources correspond to learners' unique learning styles, it can increase their learning performance and learning attitude. Through different learning guidance methods, the virtual learning companion designed by this study can efficiently help learners develop their own learning styles and teach them in accordance with their aptitude.

In short, this study found that when the learning guidance method is designed based on individual cognitive styles, and it can increase their learning performance on Microsoft certification course. Specifically, when the virtual learning companion provides the mechanism which corresponds to learners' learning styles, makes learners actively participate in learning, and gives them timely feedback, it increases their learning performance. This result is also similar to the finding of Meyer (2003) that the successful learning in the Internet environment is highly related to learners' cognitive styles. Through the understanding that learners with different cognitive styles have their particular learning approach, the researcher hopes to provide this viewpoint as the reference for the other instructors in designing teaching activities to increase learners' learning performance in the e-learning environment.

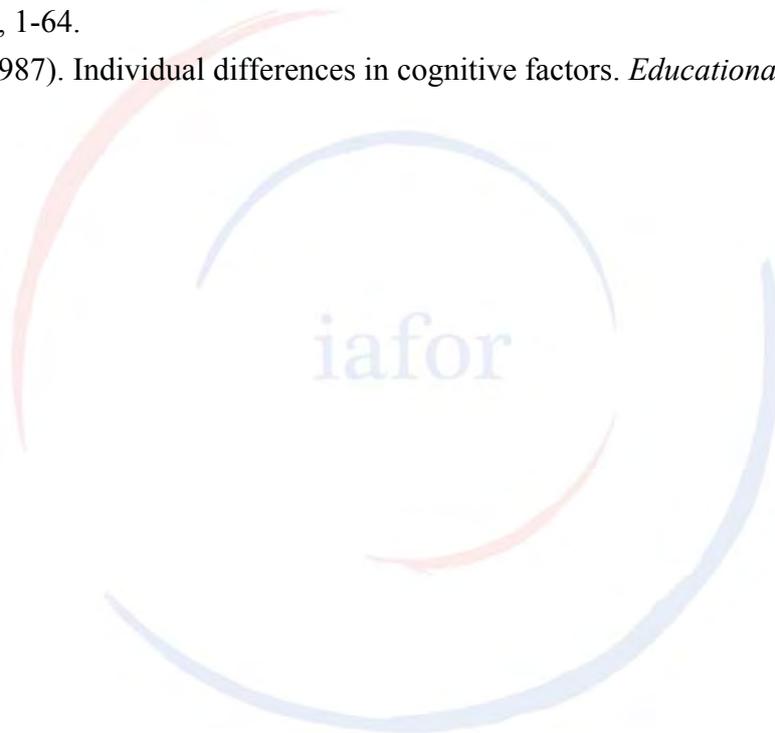
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Creativity development pattern and its effectiveness in creative teaching in elementary school teachers

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Abstract:

Nowadays, the study of creativity from the viewpoint of education is receiving attention from educational researchers and planners. With regard to educational plans, objectives, content, and other factors, educational systems have an important role in the development or suppression of creativity in students. Teachers play a crucial role in this regard.

This paper addresses creativity as an educational approach, reviews the related theories and patterns of creative learning, and deals with teaching creativity to teachers generally, and Iranian teachers specifically. This idea has been proposed and studied by the researcher. The main focus of this program is the pattern of creativity development, in which five basic aspects of teacher performance have been dealt with: contextual-social, affective-cognitive, mental, educational, and physical aspects.

A part of this study deals with the effect of the program and the pattern of creativity development on teachers' skills. Data analysis by T-test for this quasi-experimental research indicated the positive effect of the program and led to the confirmation of the research hypothesis. Feedback from the teachers regarding their change of performance in the classroom, in spite of the passing of several years, indicates that they made positive use of the pattern.

All the teachers participating in the course stated that attending the course helped them to move away from teacher-centered toward learner-centered classes, which has made their students very enthusiastic.

Introduction

The importance and necessity of creativity and its ever-developing process in the present time has attracted the attention of researchers and educational planners towards the study and analysis of creativity from the educational point of view. Considering their plans, objectives, content, and educational facilities, educational systems have an important role in the activation or suppression of creative abilities in individuals. Therefore, most communities have focused their attention since long ago on the revision and modification of the curricula and educational plans with the purpose of helping the development of creative abilities in children and adolescents. Today's students are more technologically capable and expect the educational experience to acknowledge this. The old tried and true methods may no longer be effective because current technological development are changing the learning process (Simplicio, 2000). Simplicio stated that teachers must be willing to utilize different strategies, methodologies, and approaches to instruction, they must be willing to change their methods and criteria of evaluation.

A number of authors have suggested attributes of innovative teaching and identified personal characteristic of innovative teachers (Fatt, 2000; Ritchhart, 2004). A creative teacher is seen as the one who is consistently curious and constantly seeks out new ways to improve her or his teaching abilities. In addition to improving their skills, teachers must also increase their

understanding of student needs and preferences and constantly seek out new ways for transmitting knowledge (Simplicio, 2000).

However, as teacher review promotional materials from creativity training programs, they should seek those programs that have the strongest research and evaluation bases to ensure that the desired effect have been documented.

Whatever programs are used or strategies are taught, teachers should be aware that transfer from the context in which they were taught to other situations will likely not occur unless they take time to assist students with seeing and practicing other application (Hunsaker, 2005).

Fatt (2000) assert that great teaching requires an open relationship between the teacher and students. Teachers should provide students with opportunities to have input into classes. This interaction between teacher and student helps the teacher identify the particular abilities and needs of each student. Ritchhart (2004) also emphasized the importance of teacher – student interaction. In a truly creative classroom, the students are doing more than learning the curricular content. Innovative teachers create opportunities for student expression, such as open – ended assignments or student – led discussions. Ritchhart (2004) identified two areas of creative teaching – curriculum and instruction. According to him, creative teachers look to shape curriculum and present it in new, more productive ways. A creative approach to curriculum involves finding new topics for students to explore. A creative approach to instruction involves finding new approaches or ways of presenting information.

The creative teacher will find multiple methods to engage students. (Jaskyte et al, 2009).

Studies on creative teaching found that teachers placed a great emphasis on their interpersonal relationship with students (Dacey, 1989; Horng et al, 2005; Lynch, 2001).

Creativity training programs have general support among students, educators, and parents (Roell, 2002), with what Saxon, Treffinger, Young, and Wittig (2003) call " customer satisfaction " (p. 68); thought in a study of one competitive program, teachers were more supportive than students, and younger students were more positive than older students (Frasier, Winsted, & Lee, 1997).

We Iranians, too, need a fundamental and profound revolution in our educational system in order to revive this ability, which itself requires an awareness of our present situation so that we can plan for enhancing our educational system.

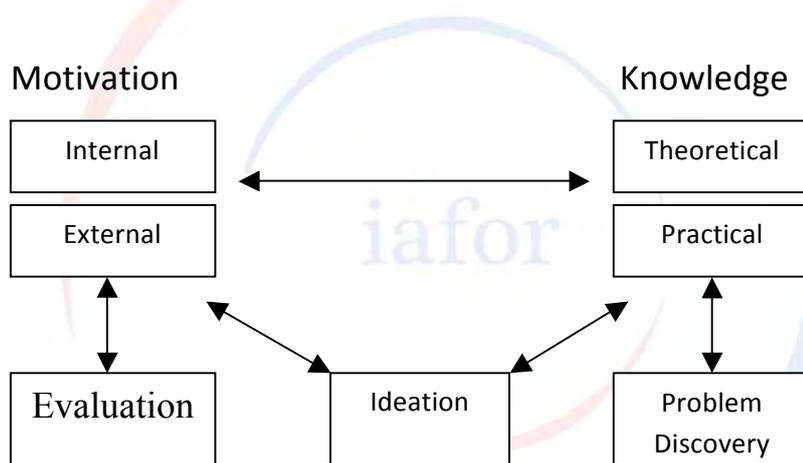
Considering the educational system in our country, we find that there is still a long way to the situation that can pave the way for the development of creativity in children and adolescents. Therefore, research into different educational elements and their roles in nurturing creativity in students is of great importance. Teachers, from among effective educational elements and factors, play a crucial role. The author has proved, via several research studies, that teachers are capable of replacing their previous teaching methods with a

creative approach, in spite of the serious obstacles such as a stereotyped curriculum, if they are provided with a suitable educational structure (Hosseini, 2002; Hosseini, 1998).

Creativity as an educational approach

Runco and Chand (1995) stated that a creative thinking is one that leads to innovative thoughts, solutions, and insight, which requires interactive components and processes, as presented in the following diagram.

Runco and Chand's (1995) model of creative thinking.



Runco and Chand (1995) tried to represent the complex structure of creative thinking and creativity through this pattern. They stressed the importance of knowledge and motivation in developing creative thinking. Theoretical knowledge is simple information that creative thinking gets involved with, whereas practical knowledge is the strategic thinking that Runco and Chand call metacognitive ability.

Ranco and Chand's study shows that motivation, especially internal motivation, is of importance in discovering the problem. Motivation increases when the student is free to choose the tasks to be performed, as this makes the task meaningful to the student. Rango and Chand suggest that instructors allocate a lot of time to the problem-related skills, because they are no less important than problem solving itself and, in doing so, external motivations are utilized to nurture internal motivations. They emphasized that motivation depends upon cognitive and metacognitive processes such as recognition.

Learning theories

Cognitive learning theories, which started in early 1960's, have influenced our understanding of creativity. These theories view thinking as a structural process (Houts and Krug, 1995). Houts and Krug reported that creativity can be considered as both a cognitive and an affective attempt. According to the cognitive theory, the brain is involved in an ongoing process of creating (p.288). Treffinger et al. (1983) proposed the creative learning model as a combination of three levels.

The first level of the creative learning model consists of several cognitive and motivational factors called divergent functions. There is great emphasis at this level on openness, seeing and feeling various possibilities, which serves as the basis for creative learning because it involves a large variety of thinking and

feeling processes that play a major role in learning. Cognitive factors include flow of ideas, flexibility, innovation, and improvement, and affective factors involve curiosity, interest in reaction, taking risks, etc.

The second level consists of the higher-level, more complicated processes of thinking and feeling. Moreover, the emphasis at this level is on dealing with the complicated feelings and tensions that are involved in mental imagery and bringing about psychic security and freedom. This includes cognitive factors such as application, analysis, synthesis, ..., and affective factors such as peace and nurturing values.

The third level emphasizes the involvement of the learner in real problems and challenges. The cognitive factors at this level include independent investigation, self-orientation in learning, resource management, and creation of products.

Moreover, Williams (1970) designed the cognitive-affective pattern for the development of creativity in children. The cognitive domain encompasses knowledge, reasoning skills and what Williams calls algorithm, technical skills, and particular talent; the cognitive domain is generally among the educational objectives of the teacher and depends on the experience and capabilities of the learner.

The affective domain includes esthetics, feelings and affects of the individual. Williams believes that the students' evaluation of their own creative activities as well as those of others pertain to this domain. Davis and Rimm

(1985) maintain that arousing creative thinking is possible through attitudes constructive to creativity. (Fosco, 2001) Thus, it seems that the affective domain is as important as the cognitive domain in developing creativity. Davis and Rimm (1985) stated that creative attitudes should be taught in all creativity programs. Williams (1970) believes that in spite of the importance of the affective domain, it rarely receives attention and teachers are not able to evaluate affective behavior.

Torrance (1980) is of the view that the most effective methods in teaching creativity are those that have paid attention to both cognitive and affective domains to create motivation and provide opportunities for active learning. For instance, using creative arts (such as theater) has been effective in teaching creative thinking to children.

On the basis of the advanced theory of creativity, proposed by Renzulli (1993), students should allocate some time to dealing with the ideal principles of learning. Learners, teachers, and the curriculum should pay attention to these principles.

Different individuals have different abilities, interests, and learning methods; in a desirable and appropriate learning situation, the learning method that is suitable for each student is taken into account. Renzulli suggested that teachers encourage the tendency towards creative activities through the interests of the students. The more and the stronger the interest, the more the creativity that the

students exhibit. Also, the curriculum should be planned in accordance with the individual abilities, interests, and learning methods of the students (p. 176).

Of the basic elements in the curriculum are the structure, content, and methodology of the subject matter. In the structure of a matter, the important item is not the set of information and facts, and the precise method of thinking about the information should be considered. Many people know many things in a particular field, but do not know the correct way of thinking about the matter. Regarding the content of a matter, there are two issues to be considered: first, which items a curriculum or course should include, and second, what is the appropriate level of complexity of the content (Hosseini, 2002, p. 104).

Renzulli (1993) also emphasizes the role of teachers as the consultant and model in creativity growth. Teachers should have mastery in their field, and be familiar with different teaching methods, and take advantage of them. Moreover, the teachers' motivation and their interest in their job have a critical effect on desirable learning.

In the school enrichment model (SEM), Renzulli and Reis (1985) promoted creativity in schools. The followings are the objectives of SEM:

- 1- Prompting and improving creativity in gifted students.
- 2- Improving the quality and range of the enrichment program for all students.
- 3- Providing regular educational programs, and developing cooperation instead of competition among teachers and staffs participating SEM.

Renzulli and Reis (1985) reported that SEM also improved self-esteem and learning abilities of students. Renzulli revised and modified his SEM frequently. For instance, in a revision of his model, Renzulli (1994) stated that “all learning experiments should be provided for all students, such that each student can follow any path suitable for his/her individual abilities, interests, and learning. If we do not develop specific methods to achieve this ideal, our educational system will decline as a result of the view point of uniformly appropriate education is similar for all individuals” (p. 33).

Teacher creativity educational program:

To provide a creative atmosphere in the class and nurturing the abilities of their students, it is necessary for the teachers to be familiar with creativity and have a positive view toward it. Moreover, they should be acquainted with creative teaching skills and the strategies to develop creativity. Thus, they should receive an education on these items.

Mc Dunof and Mc Dunof (1987) stated that only a limited number of American faculties and universities held creativity teaching course. By expressing regret about these results, Fasko (2001) pointed out the universities such as the Central Creativity University of Northwood in Midland and Michigan , which paid attention to creativity in the recent decade. In these universities, it is suggested to provide a relaxed and peaceful setting, such that students feel that they are free to discover their creative talents. This survey leads to uncovering of creative experiments, expansion of curiosity, creativity and innovation.

In an experimental study, Blumen (2002) evaluated the influence of teachers' educational workshops on cognition creativity and educational progress of second year primary school gifted and ungifted students.

According to Pardo, factors associated with schools and teachers have the most significant effect on students' performance in developing countries. Bloom (1985) believes that the important role of teachers in expression of abilities has been proved. But the teachers do not know the individual eligible for education of gifted students.

The studies carried out by Blumen (2002) demonstrated that trained teachers have an important effect on creativity performance, education progress, and the cognitive growth of students, both in gifted and ungifted students. Considering these results, he suggested continuous and regular training for teachers, particularly for those in developing countries.

Creativity education program in Iran :

Considering the key role of teachers in nurturing students' creativity, the author (2002,1998) established creativity education program for teachers. During the program, the teachers trained 70 hours. First, they got familiar with the nature and essential concepts of creativity in a 15-hour educational workshop, and then they learned methods of creativity education in a 25-hour course, and applied the methods in their classrooms. The creativity growth model which was established on the basis of creativity theories in 1999 by the researcher, was thought

in a 30-hour educational workshop, and the efficiency of the model in increasing the skills of creative teaching was tested.

This study evaluated the effect of creativity education program on knowledge, attitude and skills of teachers. The paper only addresses the effect of the creativity education program in general, and creativity growth model in particular, on the teachers' training skills. However, it is necessary to explain the creativity growth model in classrooms.

Creativity growth model:

Teacher performance can be evaluated from different points of view. Herein, we discuss five essential aspects of teacher performance:

- Contextual-social,
- Affective- cognitive,
- Mental,
- Educational, and
- Physical aspects.

The social structure of classes has a deep effect on learning process. Having the security feeling is the primary condition for a creative classroom, since students should be able to ask any question and participate in discussions without being worried. The mutual respect of teacher and student result in improvement of self-confidence in students. Moreover, as was mentioned above, a fundamental characteristic of creative individuals is that they are highly self-confident.

Amabile (1983) considers evaluation and completion as killers of creativity. Although the essence of evaluation cannot be denied, it is sometimes essential to give students some tasks without evaluating them. In such case, self-evaluation by students can be employed.

Furthermore, if the evaluation is qualitative, and its goal is to make the student aware of what he/she has done, its negative effects are reduced.

Competition will result in the feeling of humility in students. Hence, it is necessary to take advantage of intra-individual completion; i.e., the competition of each individual with him/herself, instead of inter-individual competition.

The existence of freedom of thought, speech and, movement are necessary to provide a creative classroom.

The affective-cognitive structure: Researchers consider the existence of affective-cognitive backgrounds essential for creativity growth (Williams, 1970; Torrance, 1990; Strenberg and Williams, 1997).

Curiosity, involving ambiguity and dreams, and ability to take risk are the most important factors in a creativity-making affective-cognitive structure. Providing the opportunity for observation, testing, and searching the surrounding environment, and experiment is essential. By sensitizing students to different scientific and social problems, a competent teacher can play a crucial role in this concern. Rational risk taking is accompanied by test and consideration of new and unusual methods. Additionally, involving complexity and enjoying this complexity is important in creativity growth of children. As was mentioned in the previous section, dreams can also play an important role in training.

Although the appropriate mental structure for creativity growth is not only considering the divergent thinking, considering the shortcomings in divergent thinking it is necessary to prompting this ability. If teachers value unusual ideas, they can promote their students' innovation ability. Many innovations and inventions have begun an unusual and strange question. Therefore, should encourage the unusual and seemingly irrational questions and responses of students.

Besides, if students are asked to focus on different aspects of a problem, the possibility of finding numerous different questions is increased. The quality of questions proposed by teacher has a determining effect in this regard and can

lead to higher flexibility in students. By enhancing the quantity besides the quality, a teacher can increase the students' flexibility (Hosseini, 2002, p. 131).

The physical structure has also an important role in stimulating the students' creativity ability. Taking advantage of visual stimulants appropriate to the educational topics, making use of puppet play, ... can provide a suitable structure for creative activity of students and teachers.

Educational-teaching structure: It is one of the most important aspects of teacher performance. By making use of creative methods and strategies of education, a competent teacher can creatively teach even inappropriate contents, and provide a creative space in the classroom.

After getting familiar with the different aspects that can be effective in maintaining a creative atmosphere in classrooms, and active and creative education, different examples in various courses are provided in terms of different aspects and structures. In the final section, some examples will be provided.

Objective of the study:

Evaluating the effect of creativity education program (creativity growth model) in providing the skills of creative teaching was one of the main objectives of the study.

Education skill: Education is defined as the interaction between the teacher and student in order to learn and behavioral change. The skills of creative teaching were the skills which provide the opportunity required for students' creativity education. The skills were then evaluated using a questionnaire).

Research hypothesis:

Creativity education program will lead to an increase in creative teaching skills of teachers.

Samples and study population:

Study population was all teachers of primary school, in the 19 education regions of Tehran . 120 teachers were randomly selected from regions 2, 6, 9, 13, and 16, out of which 60 teachers were randomly assigned to experiment group and 60 to the control group.

Data collection tool:

The questionnaire to evaluate the skills contained 35 items, and was designed according to a 5-point Likert scale. The reliability of the questionnaire was determined to be 87% according to internal consistency of Cronbach alpha test. Moreover, considering the good theoretical basis and consensus of specialist, the face and content validity of the questionnaire was confirmed.

Methodology:

Both experiment and control groups filled the questionnaires. Afterwards, the experiment group participants attended a 70-hour educational course in one month. Then, after acquisition of skills, the experiment group members put the skills into practice, and in the next session reported their performance, and received feedbacks.

Subsequently, the two groups were given the final test to reveal the effect of creativity education program on teachers' skills.

Data analysis:

To test the research hypothesis, T-test was used for independent groups.

The following table demonstrates the results of independent T-test between the experiment and control groups in terms of skill.

Table 1: Mean comparison of skill test of experiment and control groups.

Test	Group	Mean	Sum	S.D.	T value
Before the course	Experiment	59.62	60	10.65	0.11
	Control	60	61	14.2	
After the	Experiment	68.64	60	10.57	

course	Experiment	68.64	60	10.57	2.53
	Control	60.62	61	14.1	

T= 2.65

Table 2 provides the results of independent T-test between the experiment and control groups in terms of skill. Concerning the results at the d.f.=119 and the confidence interval=99%, the T-value determined to be 2.65, which is greater than the T-value of the statistical table (T=2.33). Therefore, the experiment and control groups are not significantly different in terms of skill. As can be observed in this table, the T-value obtained before the course (T=0.11) was smaller than the T-value of the statistical table, which implies that the two groups were not significantly different before the test. However, in the post-test, the obtained T-value (T=2.53) was greater than the T-value of the statistical table, indicative of a significant difference.

Table 2: Did the educational course increase your teaching skills?

Statistical index	Extremely	Quite a bite	Moderately	Slightly	Rarely	Total
Frequency	53	7	0	0	0	0
Percentage	88.3	11.7	0	0	0	0

Discussion and conclusion:

As it was shown, the educational program and creativity growth model (Hosseini, 1998) increased the skills of creative teaching in teachers.

One reason for the success of the model was considering the different effective elements in education and teaching. Considering the affective, cognitive, social, and physical aspects of the classroom besides the mental aspects provide a suitable opportunity for teachers to be able to employ creative teaching methods more appropriately.

Responding an open-ended question on the effect of the model on their teaching skills, they considered that after getting familiar with this model, they promoted a creative atmosphere in their classrooms. This resulted in the

participation of students in classes and the class activities with a higher motivation, such that students preferred to stay in their classroom even in the break time, and continue their activities.

All teachers stated that by attending the course, their classes moved away from teacher-centered classes toward the classes on the basis of learners' activities, and this made students very enthusiastic.”

“By passing the course, my class was completely moved away from teacher-centered class, and students take control of the class. The class became such sincere and highly motivated that students did not pay attention to the break time...”

“Learning lessons by creative performance was very joyful for all students, even for slow-witted ones. Employing this method, all were very interested in learning, and participate in lessons and discussions.”

“This course created a new view point toward the way of teaching ... a vivid and enthusiastic relationship is created between teacher and student, such that students are thirsty for finding the answers.”

Teachers state that:

I find the students thirsty for finding the answers.

My classroom is full of motivation.

Now, I am trying to employ more innovation in teaching lessons.

The students do not care for the break time anymore.

Parents of students explain that their children are got better toward the nature and their surroundings.

Bashful and stuttering students became active in class, and they can explain what they want.

The things I learned from the students are two times of the things they learned from me in previous years.

This method evolved the children and introduced me as a successful teacher.

Now, the students are able to imagine and create what I say.

In general, from the teachers' point of view, the effects of this course were as follows:

a) Teacher

- Moving away from the frameworks and clichés.
- Moving away from teacher-centered classes.
- Enjoyability of teaching for teachers.
- Changing the attitude toward teaching and managing the classroom.
- Using qualitative evaluation methods.
- Increasing the power of thought and innovation.
- Employing various heuristic methods.
- Providing psychic security in classrooms, such that students can ask any questions.
- Creation of a deep respect and emotional relationship with the students.
- Elimination of competition, and not comparing the students with each other.

b) Students:

- Thinking beyond the class hours.
- Enjoying the class hours.
- Students' activity.
- Proposing various answers.
- Increased self-confidence.
- Sincere cooperation among students.
- Deeper learning of lessons.
- Better social relationship.

- Improving the imagination and creation abilities.

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LeME_x, Learning Medical Expertise

A longitudinal follow-up study on learning medical expertise during undergraduate medical studies

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LeMEx, Learning Medical Expertise

A longitudinal follow-up study on learning medical expertise during undergraduate medical studies

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Keywords: Medical education development, Research based evaluation, Follow-up study

Abstract

The goal of medical education is to assist students to become knowledgeable, responsible physicians for clinical work and research. Therefore, better understanding about the ways in which students learn is vital. LeMEx project aims to investigate the learning of medical students and to develop medical teaching and teaching methods so that they satisfy the needs of the students and their future patients.

Research problems: What kind of a study orientation do students have? How does medical knowledge become organized into wholes? How does the thinking of students develop? How can the learning follow-up data be used for continuous quality assessment in medical education?

The study cohort (N = 343) consists of students who began their education in the fall 2006 at the medical faculties of the Universities of Oulu and Turku in Finland. The same cohort of students is followed up over the period of their studies and the progress is tracked by conducting annual evaluations.

Methods: IGSO-measurement is used to investigate the study orientation of students. A concept map is used to investigate the student's ability to organize knowledge into wholes. A case assessment is used to investigate the ability to apply medical knowledge and skills to practice, and to comply with professional ethics and enacted regulations in patient encounters.

This study provides longitudinal scientific knowledge about the development of students' learning outcomes and it has relevance when developing learning-based quality assessment methods. It serves also as an example of a research based evaluation process and it gives globally applicable tools for researchers.

1. Introduction

LeMEx is a research project aiming to investigate the learning of medical students during the medical education, and to develop medical teaching methods. LeMEx is a longitudinal follow-up study and its sample consists of students who began their education in the fall of 2006 at the medical faculties of the Universities of Oulu and Turku in Finland. Research groups of the study are multidisciplinary where medical and educational expertise meet.

1.1 Background

Every year in Finland a growing number of students begin their studies in medicine. Between 1997 and 2005, the number of study positions increased by 70% [1]. This reality has forced universities to pay more attention to the content and quality of medical education. The increasing student group-size and the growing need to renew teaching methods are challenges for the development of medical education. The renewal of basic studies has also been at the forefront of discussions in medical faculties. As a result, the number of optional studies has increased [2] and further emphasis has been placed on learner perspective, early patient contact, communicative skills and multi-professional co-operation. The continuous growth of medical knowledge sets great challenges for education. Over the last few years, integrated and interactive forms of teaching have partly replaced the previously predominant teaching mode of discipline-specific lectures.

1.2 State of medical education research

During the last decade medical education research community has debated strongly about the role of research in the field [3], [4]. Although medical education research has experienced tremendous growth [3], most studies are still small and carried out within a single medical school [5]. Other significant problem is that the research is mainly based on the biomedical tradition where the goal is often to prove that for instance a drug is effective [6]. Therefore many researchers are not familiar with existing theories, and that can restricts their analysis to a descriptive level. It is common that methods are taken from clinical research into the domain of social sciences, without questioning the impact. [3]

It is noteworthy that typically clear minority of papers published in the journals of medical education have any theory basis. Even if theories have been used they can be seen as justification for an approach, not as assumption to be proved or disproved by experiment. Therefore theories remain inert and no growth of knowledge occurs. [7]

In medical education research the top four areas of interest have been curriculum and teaching related issues, skills and attitude relevant to the professionalism, individual characteristics of medical students, and the evaluation of students [4]. As highlighted in all notable medical education journals there is a need for change. Research should help to determine how or why things work educationally rather than simply aiming to prove that they work. It has frequently been pointed out that the most effective ways to improve medical education research are multiprofessionalism, co-operation between multiple institution and adding variety to the perspectives on research [3], [6]. At the same time there is a need for high quality research that can exploit and promote relevant educational theory, and improve patient care [8]. In addition no longitudinal research information exists about the development of the students' thought processes

and knowledge during medical studies. Nor are there any tools applicable to the follow-up study of Finnish medical education.

1.3 Challenges of medical education

The purpose of medical education is to assist students in becoming responsible medical professionals and researchers. A high standard of learning during basic education is a prerequisite for the development of expertise and a sense of professional responsibility. Instruction in the field of medicine is especially challenging, because medical knowledge is renewing itself rapidly and the students may find the amount of the knowledge included in the degree programme overwhelming [9]. Several studies have pointed out that, owing to the complexity of medical knowledge, misunderstanding and misconception of the taught content are not infrequent among medical students [10], [11]. Some of the misconceptions may even endanger patients.

Ideally, the study orientation of medical students should be directed towards insightful learning and enhancement of the depth of knowledge and understanding throughout their studies. Internalized knowledge accumulates into knowledge structures, increases as studies proceeded, and is not promptly forgotten after exams and courses. It is applicable and lays a foundation for flexible and creative expertise [12]. Moreover, in-depth learning enhances student motivation and the development of a sense of control [13]. Internalized knowledge also manifests itself, as studies progress, in the development of the student's medical thinking and ability to make clinical inferences.

The demand for depth in medical education sets challenges for curriculum planning and the choice of teaching methods and modes of student work. Problem-based and evidence-based teaching methods over the past ten years have provided the tools for deep learning. Moreover, there is a growing tendency to use the concept mapping method [14] to support insightful learning [15-17]. Concept maps have also been used with success in the evaluation of medical learning. [18-20] Ideally, the development of medical education should be based on contextual research data about the processes of medical learning [21]. From the basic education development point of view, it is crucial to inquire into the quality of the learning processes and the accumulation of insightful knowledge when studies proceed. Such follow-up inquiries should be conducted not only in connection with exams, but also every term or academic year to obtain an overview of the situation. To accomplish this, relevant tools are needed.

The theoretical framework to be applied to medical education must draw more effectively on the biopsychosocial approach, which advocates a holistic view of the individual and consequently required from physicians, good interactive skills and ability for holistic thinking. More attention must be paid in medical education to the teaching of all above skills.

2. Aims of the study

The purpose of this study is to investigate the development of professional competences, thought processes and accumulation of medical knowledge during the education and to develop teaching methods so that they satisfy the needs of both the students and their future patients. Furthermore, we want to inspect medical students' study orientations in order to find out the methods of supporting the students in the insightful learning process.

Research problems:

1. What competences do medical students possess and in what stage of education these competences develop?
 - How does medical knowledge become organized in wholes during the course of medical education?
 - How do the student's medical thinking develop in the course of the studies?
 - How do the students see, at different stages of their education, their role and duties in the doctor-patient relationship?

2. What are the study orientations like and how do they develop during undergraduate studies?
 - What is the study orientation of medical students like at different stages of medical education?
 - What does the study orientation tell about a progress of the studies at different stages of medical education?
 - What is the meaning of the socio-cultural background on their study orientation?
 - What kind of support the students need during their education and in what way they can be answered?

3. How can the collected data be used as a tool for continuous quality assessment in medical education?

3. Subjects and methods

The need for longitudinal learning outcome follow-up studies is generally acknowledged, but such studies are difficult to accomplish [22]. LeMEx pilot study was conducted in 2005. The longitudinal study design was adopted for the current main study, which began in 2006.

3.1. Subjects

The study sample consists of students who began their education in the fall 2006 at the medical faculties of the Universities of Oulu and Turku in Finland. At the University of Oulu, 125 students began their studies in the degree programme for the Licentiate in Medicine degree, while 47 students began in the Licentiate in Dentistry degree programme. At the University of Turku, the figures were 125 and 23. In addition, 23 students in Turku began studies to be retrained from nurses to physicians. The total number of the study population was 343.

3.2. Methods

Student progress is tracked by conducting annual evaluations. An initial evaluation of the relevant aspects of the medical students' learning processes was performed in the first week of their studies.

Aim 1) What competences do medical students possess and in what stage of education these competences develop?

- The method consists of applied projective techniques [23]. Sample patient cases are used to investigate the students' ability to draw on organized bodies of knowledge, to apply medical knowledge and skills to practice, and to comply with professional ethics and enacted regulations in patient encounters. A case assignment is performed in the fall term of the first year of study and at the end of each academic year. The content of the assignments is modified for the various stages of the evaluation process according to a plan.
- A concept map is used to investigate the student's ability to organize medical knowledge into wholes at different stages of medical education. A concept map assignment is performed in the fall term of the first year of study and at the end of each academic year. The content of the assignments is modified for the various stages of the evaluation process according to a plan.
- Medical students will name five characteristics that best describe the characteristics of a good physician. Assignment is performed in the fall term of the first year of study and at the end of each academic year.

Aim 2) What are the study orientations like and how do they develop during undergraduate studies?

- The IGSO (Inventory of General Study Orientation) instrument is used to measure the study orientation of medical students. An awareness of the student's study orientation at different stages of education enables a better understanding about the studying process and emergent problems [24]. IGSO measurement is conducted in the spring term of the first, third and sixth year of study.

3.3. Data processing and analysis

Both qualitative and quantitative methods are applied to the processing and analysis of the research data. For the processing of the study orientation inventory data, explorative factor analysis (primary component analysis, rotation; Varimax normalized) are used. Concept map data is processed through qualitative phenomenographical analysis. Patient cases and characteristics of a good physician are inspected with content analyses method.

4. Expected results and the significance of the study

In the report "Oppimisen ohjaaminen yliopisto-opetuksessa" (Guiding Learning in University Education), is pointed out that "for the university to be able to perform its basic task, a seamless integration of research, teaching, and studying is needed. The primary criterion for successful planning, implementation and evaluation of teaching are the students' learning and the development of their scientific thought processes." [25] In LeMEx study an attempt is made to apply the above principle. This study is a rare process, in which the learning and development of the same students are followed up at regular intervals from the beginning of the studies until graduation. At the same time, the study is part of the regular teaching development process and will produce a wealth of knowledge about the development of medical competences in long-term

education. In addition the data attained from this study has relevance when developing learning-based quality assessment methods.

5. Research group

LeMEx research group is multidisciplinary and consists of researchers from the fields of medicine, education, computer science and nursing science.

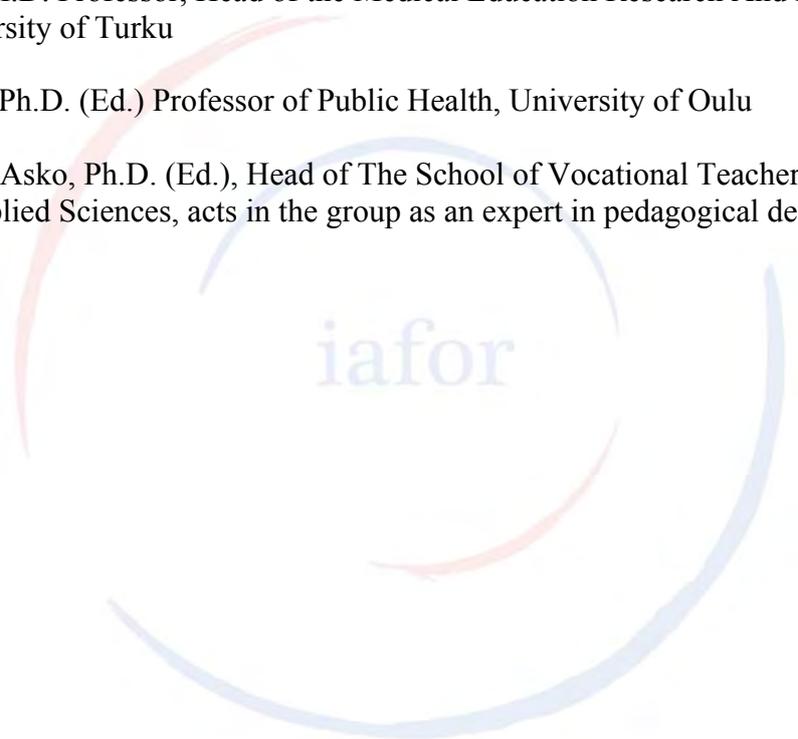
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KARJALAINEN Asko, Ph.D. (Ed.), Head of The School of Vocational Teacher Education, Oulu University of Applied Sciences, acts in the group as an expert in pedagogical development and research

The logo for iafor is centered on the page. It features the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by several overlapping, curved lines in shades of blue and red, creating a circular, abstract design that resembles a stylized globe or a network of connections.

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The Role of Aesthetic Congruity on Visual Design Education in Hong Kong

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Abstract

Visual design is defined as the development of a relationship between visual forms and the receiving individuals. It is challenging to educate students on ways to determine the appropriate combination of non-verbal forms of presentation, such as color, proportion, and design principles which are able to elicit an intended response from the targeted audience. Therefore, it is important to train students to have visual sensitivity and educate them to ensure that they understand and recognize the necessity of structural (physical form) and communicative requirements (symbolic meanings) in designing visual presentations. However, the degree of aesthetic congruity in students can influence the level of understanding and creativity in the development of visual displays. Through the grounded theory method and practice activities that involved visual displays, 130 Hong Kong university students who were enrolled in a fashion visual communication course were observed with particular attention on their aesthetic congruity and development of visual display designs. The result shows that both design and non-design major students have a high level of tendency to look for design elements with high aesthetic congruity to create visual displays that makes their ideas look similar to each other. To enhance the visual sensitivity of these students and lessen the impacts of their aesthetic congruity, a new practical approach was developed. By assigning students with situations that are unrelated to the display theme, it is found that the impacts of aesthetic congruity are lessened when they create a visual design to attract different consumer segments through fashion preferences, brand identity, market positioning, and mood. In addition, the aesthetic cognitive knowledge of the students has also been widened. This research contributes new insights to design education by taking into consideration, students who have a strong sense of aesthetic congruity and strong perceptions towards the symbolic values of design elements.

Research Background

Design Education

Stimulating student creativity in design related subjects is always a challenge. It is argued that to inspire a number of new ideas and possibilities for a problem, brainstorming is highly recommended (Aleinkov, 2002). However, the method has been criticized in that new ideas may be generated, but the best idea will still be unknown (Fogg, 2003). Corepley (2001) suggested that a hierarchical technique can point out the attributes of a problem and generate many new solutions at the same time. However, the number of ideas depends on individual aesthetic perception and the impact of his/her surrounding environment (Dewey, 1929). West (1991) suggested that the best way to generate, select and organize new ideas is through visualization. Thus, mind-mapping is commonly adopted to capture and organize concepts, by linking different ideas together and presenting them on a map (Buzan, 2000, Rittuel, 1984). Apart from determining the best ideas through organizing them in a systematic manner, Bulter and Kline (1998) suggested that stimulation of student creativity can be realized through the association of different aspects towards a problem. The construction of a new idea through relating unrelated aspects helps to come up with unexpected options. It also stimulates creativity through divergent thinking (Cave, 1997). Gordon (1961) also shared similar thoughts in unrelated association with reference to an analogical thinking process to create new ideas. However, the success of the method relies on the ability of the creator to link and explore existing and previous components, and how they are put forth into a new direction (Dewey, 1958). Even though there are various creative-thinking methods, the critical factor of generating a creative idea lies in the creator himself/ herself. The challenge to maximizing creativity is to change the habitual thinking paradigm (Boden, 1993) and understanding the emotional drive that creates exciting intuitions in the mind (Osborn, 1948).

Aesthetic Congruity

Human beings respond differently towards the cognitive understanding of design elements (e.g. line, proportion, color, etc.). The different response is controlled by the internal processing algorithm of perceived aesthetics of different cultural groups (Veryzer, 1993; 1999) towards the understandings of the elements. Lauer (1979) proposed that the elements include various design principles. He argued that design preferences are learned from daily life and not innate. Also, there is a direct affiliation between design preference and aesthetic congruity. People tend to prefer design elements that are congruent to his/ her aesthetic algorithm and therefore, unconsciously use it to judge design (Veryzer, 1999). However, the perceived symbolic meanings behind an object itself also intensify the process, evoking either positive or negative responses that determine the final response to the object (Bloch, 1995). Of course, the response of humans to aesthetics is not absolute; it is subject to change when one interacts with different aspects in life (Kreuzhauer & Malter, 2005). The affective responses generated by environmental stimuli can further affect cognitive judgment towards the aesthetic elements of an object (Eagley & Chaiken, 1993).

Chinese Perception on Aesthetics

Creativity is not associated with individuality in Chinese society; it has to cater to societal expectations (Rudowicz and Yue, 2002). It is very important to consider social harmony

by paying attention to general aesthetic preferences when creating something new among the Chinese (Dunn, Zhang and Ripple, 1988). However, it is also necessary to be innovative at the same time (Rudowicz and Yue, 2002). Both views are important to the Chinese, making the creative process different from the West which emphasizes on individual expression. For instance, Fan (2000) determined that there is uniqueness in terms of the interpretations of the symbolic content of design elements. Social perceptions and creative traits affect the evaluation of creative work (Csikszentmihalyi, 1988; Yang and Wang, 1999). Also, the uniqueness of aesthetic preferences is highly associated with the perceived symbolic messages of the applied design elements (Li, 1994). These preferences provide a sense of vagueness in standards. Liu (2006) suggested that the Chinese conceptualize human life as a free state whereas the West takes on a cognitive-rational spirit in interpreting beauty.

The literature states that Chinese people not only focus on individual expression, but also the degree of expected social acceptance towards the design elements during the creative process. Thus, they may rank aesthetic congruity as an important factor while selecting a combination of aesthetic elements for creative work. However, this has not been thoroughly studied in research on design related education. Thus, this study aims to study how aesthetic congruity influences the creative process by applying unrelated aspects to stimulate the analogical thinking of students. It is anticipated that the findings will contribute to the current knowledge in design related education.

Methodology

In order to investigate the impact of aesthetic congruity on the level of creativity, the grounded theory method (Strauss and Corbin, 1990) was selected and experiments were carried out. Subjects were divided into groups and instructed to complete two visual display assignments, based on the same theme to generate visual data for assessing aesthetic congruity. A combination of design elements (e.g. color, design principles, apparel styles) were compared between the different types of work. To investigate and understand the rationale behind the selection of the design elements and their symbolic interaction with the students, focus groups were established. In this study, 130 students from the Hong Kong Polytechnic University enrolled in *Fashion Visual Merchandising* were invited to participate as a course credit. In order to evaluate the impacts of aesthetic congruity on creativity, students were instructed to set up two window displays. For the first task, all of them were asked to develop a window display with a certain type of product. The students then participated in a discussion at the first focus group to share creative concepts and the rationale behind the selection of the design elements after completion of the task. After three months, the same student groups were required to set up a second window display with a specific theme – “casual wear for college students”. In the second task, unrelated aspects (Boden, 1993; Dewey, 1958; Osborn, 1969) were applied in setting the project brief. Apart from instructing the students to work on the casual wear window display, they were to go on a picnic with an assigned route. The students had to visit the assigned checkpoints and observe the details in the surrounding environment from the viewpoint of design elements. Photos were taken during the trip and all the design concepts were required to be linked with the selected design elements,

such as color scheme; display layout; form of the props; mannequin selection; set design; and fashion styling direction. Students had to explain the rationale behind the design element combination in the second display during the follow-up focus group. There is diversity in the aesthetic backgrounds among the participants, who range from fashion design, retailing to marketing majors. The differences made the findings comparable and all-rounded. Qualitative data were analyzed in accordance to the research process indicated by the grounded theory, including three phrases of coding: open, axial and selective (Corbin and Strauss, 1990; Strauss, 1987; Strauss and Corbin, 1990). The findings were categorized in an open-coding procedure; different codes were generated and relationships were formed to facilitate further data collection. Additional data collection was implemented in axial coding to obtain information with regards to the relationships previously formed. For the axial and selective coding, theoretical sampling was done in which the participants were selected based on the emerged concepts in previous coding. (McDaniel and Gates, 1998). Finally, the central concepts were developed from selective coding to wrap up the research.

Findings and discussion

A grounded theory analysis of the narratives from the ten focus groups among the 130 participating Hong Kong university students generated findings in two key areas in the selective coding stage. These two areas are the standardization of aesthetic form and the enrichment of aesthetic perception, respectively

The standardization of aesthetic form

Students were asked to set up a window display for a fashion store by applying design and color principles during a hands-on lesson. Focus groups followed to collect the rationale behind the choice of design element combinations. The findings showed that there are standard aesthetic patterns that govern the selections. These patterns can be divided into two areas, namely, 1) contextual bounded aesthetics, and 2) form perception. For contextual bounded aesthetics, it was found that the need to perfectly match an occasion was very high in terms of the symbolic message of the props, color and design principles. Figs.1 and 2 are fashion displays for lingerie and children wear, respectively. They give a feeling of elegance and being high-end. The students tended to select materials and colors that exhibit lavishness, such as burgundy velvet, vintage wooden colored furniture, and a floral picture with a white female human form mannequin for the lingerie display. For the children's wear display, burgundy satin, paired with wine glasses and a glossy black backdrop were selected to present an elegant image. The students claimed that the selected materials were congruent to the requirements for the selected mood, and precisely matched the mood. Although the students were instructed to develop a creative display under a predetermined mood; that is, elegance, it was found that the students adhered to social interpretations of elegance and therefore, made the final decision based on general expectations. In terms of form perception, the adoption of vintage wooden furniture (lingerie display), and wine glasses (children's wear display) implies that subjects had a specific perception of elegance, which also governed the choice of props to a certain extent. Furthermore, it was found that the degree of creativity in the students was also governed by the perceived social response. This served as the standard or the marking scheme for their creative work. It was found that the students

greatly intended to meet perceived social standards due to the high expectations of “group face”. If the students went too far and came up with ideas that deviated from the perceived standards, they may be afraid that they might be criticized by the instructor or other classmates. The criticism will give them a feeling of “losing face” in public which is not desirable for Chinese people. Therefore, they tend to choose design elements and color schemes that are congruent to general expectations. Consequently, their creativity was suppressed.



Fig.1 Fashion display 1 (stage one)



Fig.2 Fashion display 2 (stage one)

Enrichment of aesthetic perception

The same groups of students were told to complete another window display at the end of the course. Unrelated aspects were integrated into the project, in which they were required to visit an assigned location, take pictures at the checkpoints and apply them to the final display. A theme was given to all of the students, which was to complete a display that sells casual wear for young college students. Figs. 3 and 4 are the final products. It is found that there is a significant difference from the first round of displays. For Fig. 3, the students were assigned to a location that has a beautiful seaside. For Fig. 4, the students were assigned to a location with many Chinese temples. The resulting work revealed that the students deviated from the general perceived image of a college student. Also, no campus-inspired props and backdrop, colorful or dynamic graphics were included in the display. The data collected from the field trip were transformed and adjusted in order to integrate with a casual and youthful feeling. It was indicated from the focus group that there is a difference in the cognitive understanding of the assigned location when unrelated aspects were used. As they were forced to integrate ideas from the assigned locations, the focus on matching contextual aesthetics was lessened and

shifted to the transformation and integration of ideas from the trip to match the college casual wear theme. Therefore, the semiotics and perception of the “right” design element combination for casual wear became less important. The aesthetic perception of the students was also enriched when they took the elements of the visited site into consideration for the youthful casual wear display. The shift of focus even allows the students to pay close attention to minor details on the trip and turn them into a core concept in the display. As a result, the students are not focused on the degree of aesthetic congruity and the expansion of ideas from the trip dominated the creative process of the window display.



Fig.3 Fashion display 3 (stage two)



Fig.4 Fashion display 4 (stage two)

Conclusion

Aesthetic congruity plays an important role among highly conformed groups such as the Chinese during the creative process. By applying unrelated aspects, the focus on fulfilling perceived aesthetic standards can be diverted. Unrelated materials taken from different surroundings have enriched the individual aesthetic perception of the students involved in this study, which helps to stimulate other possible views in the design process. Consequently, this leads to an improvement in creativity.

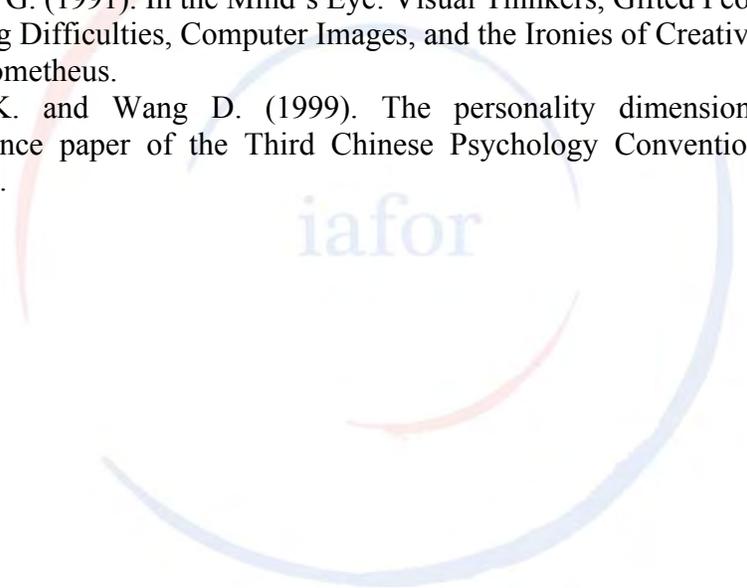
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The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is enclosed within a circular graphic element made of two overlapping, semi-transparent arcs. One arc is light blue and the other is light red, creating a ring-like effect around the text.

Technology Acceptance in an Academic Context: Students' Satisfaction in Using Wireless Internet

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Abstract

The first objective of this study was to present a conceptual framework based on technology acceptance model (TAM) to examine the students' acceptance of wireless internet incorporating two intrinsic motivation attributes, namely, computer self-efficacy and satisfaction. The second purpose of the study was to measure and validate the interrelationships among three exogenous constructs of the model – perceived ease of use, perceived usefulness and computer self-efficacy. A total of 285 students from five faculties (Education, Human Science, Economics and Management Sciences, Engineering and ICT) in the International Islamic University Malaysia (IIUM) were randomly selected using quota sampling technique. In this study, it was postulated that the Wireless Internet's perceived ease of use and perceived usefulness, in addition to students' computer self-efficacy, would positively influence students' satisfaction to accept it. Instrument reliability and validity were performed by Rasch analysis using Winsteps version 3.49. The results of the study were analyzed by Structural Equation Modeling (SEM) using AMOS version 18.0. The study revealed that while both perceived ease of use and usefulness exerted a direct positive influence on satisfaction, computer self-efficacy indicated an adverse influence on it. The results also demonstrated significant positive interrelationships among the three exogenous constructs of the proposed framework.

Introduction

Since the development of the concept of the Internet in 1968, when the US Department of Defense connected four sites via a computer link, its use has increased by leaps and bounds from an estimated three million in 1990 to approximately 50 million in 1998 (Garland *et al.*, 1998) to 800 million in September 2004 (Internet World Stats, 2004). According to Dinev & Koufteros (2003), it has got widespread use in economic and social arena and brought forth immense benefits to the users as evidenced in job productivity, information access, and technology updates, as well a surfeit of social networks. Now getting increasingly used for educational purposes, it has had significant impact on learning both at school and at home ((Jonasson, 1997; Hamer, 2001) involving learners using technology to learn (Forsyth, 1999), thereby changing the very nature of society (Agarwal, 2000).

According to Roblyer (2006), educational technology comprises a combination of the processes and tools involved in addressing educational needs and problems with an emphasis on applying the most current tools such as computers and other electronic technologies. This was echoed by Baek, Jung, and Kim (2006), who argue that emerging educational technology would usher in one of the most exciting areas of change in education; some of these emerging trends will be manifested in wireless connectivity, merged technologies, handheld devices, artificial intelligence, virtual systems (Roblyer, 2006). Integration of these emerging trends into conventional learning environments, according to Kingsley (2007), may improve learning, facilitate problem solving and stimulate creativity. This will also help the educational institutions address many of the barriers encountered by those willing to pursue higher education (Duhaney, 2005).

There are three main categories of technology usage in educational environments: (a) instructional, (b) productivity, and (c) administrative (Roblyer, 2006). Many of the emerging educational technology tools address functional areas such as drill and practice, tutorial, simulation, instructional games and problem solving. The research conducted by Woods, Baker, and Hopper (2004) suggests that instructors primarily use the online learning system (OLS) as a non-interactive course management and administrative tool to transfer information. Of late, the usage of emerging educational technology, according to Bernard *et al.*, (2004), embraces an increased application of collaborative learning. And, Debevec *et al.*, (2006) opine that the practice of such technology has increased to a great extent in visual presentation, simulation, accessing course materials and World Wide Web resources.

Wireless Internet in IIUM Context

In a survey conducted in different universities in Australia, Oliver and Towers (2000) observed that according to students, about 80% of their university teachers used technology in regular ways as part of the teaching and learning program. In Malaysia, the implementation of technology in teaching and learning activity has attracted great interest from the practitioners in the higher education institution (HEI), which have started to adopt and implement information and communication technology (ICT) solutions as a source for flexible teaching and learning process (Azizan, 2010). This helps students surf the internet and get its access through their laptops, personal computers, mobile phone and PDA. In line with this technological development, International Islamic University Malaysia (IIUM) has also provided the infrastructure of wireless internet to its community, thereby helping the learners in getting access to their subject related materials and keeping up with the current information updates.

Despite the benefits that such increased technological options can provide, there are still many barriers to the successful integration and usage of emerging educational technology such as Wireless Internet within educational environments (Roblyer, 2006; Wozney *et al.*, 2006). Though widely adopted, there are many aspects of the usage and implementation of this technology that need to be studied and empirically documented. While Wireless Internet access has been provided for quite some time now at IIUM, there are some barriers that need to be addressed for its smooth implementation. First among these relate to the connectivity for the infrastructure. The second factor is the speed of the internet, and the third is its accessibility, which of course varies according to the areas and individuals. Finally, the lack of adequate facilities for the adoption of the infrastructure is also considered for this study to determine its implementation and use as experienced by the students.

The broad objective of the study was to examine modeling of IIUM students' satisfaction in accepting wireless internet. It would further measure and validate the interrelationships among the three exogenous constructs of the model, namely, perceived ease of use, perceived usefulness and self-efficacy. For this purpose, technology acceptance model (TAM) was used as the theoretical framework; this model and the various constructs used in the study were described in the next section.

Technology Acceptance Model (TAM)

Extensive research has been conducted investigating the variables associated with technology acceptance in a wide variety of settings (Agarwal & Prasad, 1998; Dillon & Morris, 1996; Taylor & Todd, 1995b). As a result, several theoretical models have been developed to explain both users' intention to use technology, and actual technology use (Venkatesh *et al.*, 2003). The Technology Acceptance Model (TAM), proposed by Davis (1989), is one of the most profound frameworks frequently used to explain computer-usage behavior and constructs associated with acceptance of technology.

The model affirms that the adoption of a technology is determined by the user's intention to use, which in turn is influenced by his or her attitudes towards the technology. It is very likely that the variability in these attitudinal and behavioral constructs depends on the user's perceptions—perceived usefulness (PU) and perceived ease of use (PEU) (Ahmad *et al.*, 2010). While PU indicates the extent to which the use of the technology will improve his or her performance is promising to advance one's work, PEU represents the degree to which the technology seems to be free of effort (Davis *et al.*, 1989). This model postulates that behavioral intention mediates the effects of PU and PEU, the two constructs of extrinsic motivation as shown in Figure 1.

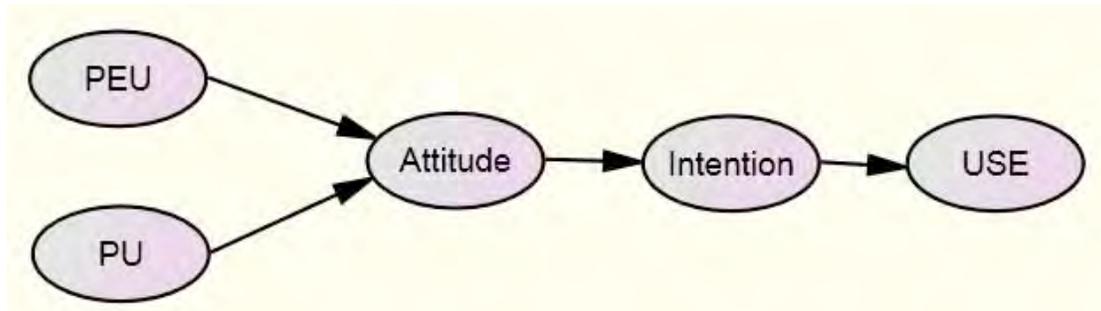


Figure 1: Constructs in the Technology Acceptance Model (TAM)

As TAM is reasonable, simple, and robust (Venkatesh & Davis, 2000), the study on TAM has been receiving continual interest from decision-makers, practitioners and researchers. While it has received extensive empirical support through validations and applications for its power to predict the use of information systems (Davis, 1993; Taylor & Todd, 1995b; Venkatesh & Morris, 2000), recent meta-analyses suggest that the understanding in this area could further be enhanced if several overriding issues are addressed (Ma & Liu, 2004; Schepers & Wetzels, 2007; Yousafzai *et al.*, 2007).

According to Thompson *et al.*, (2006), perceived usefulness and perceived ease of use are not the only valid factors related to technology acceptance, especially with newer technologies. There is the need for TAM to incorporate additional factors or integrate with other IT acceptance models for improvement of its specificity and explanatory utility (Agarwal & Prasad, 1998; Mathieson, 1991). Further research into the generalizability of factors associated with technology acceptance and refinement of acceptance models has been recommended (Sun & Zhang, 2006; Thompson *et al.*, 2006). Previous studies also recommended that Technology Acceptance Model (TAM) should be modified to comprise additional components required to explain more than 40 percent of technology acceptance and use (Legris *et al.*, 2003). Therefore, in this proposed hypothesized model as shown in Figure 2, two other intrinsic motivation attributes – satisfaction and self-efficacy – were incorporated into the original TAM.

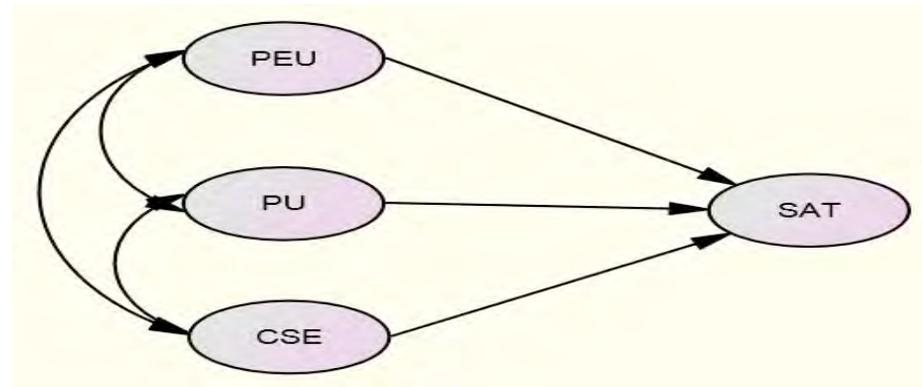


Figure 2: The Proposed Hypothesized Model of Wireless Internet

Perceived ease of use – Satisfaction

The significance of perceived ease of use in technology adoption is highly pronounced in the technology acceptance model (TAM) proposed by Davis *et al.*, (1989). Langeard *et al.*, (1981) observed that in choosing between available service delivery options, the customers deem the effort expended in utilizing service delivery to be essential, with the superior the service delivery, the greater the customer satisfaction (Churchill & Suprenant, 1982). In their respective studies, Szymanski & Hise (2000) and Dabholkar & Bagozzi (2002) considered convenience and ease of use to be important antecedents of e-satisfaction. In other related studies, Shamdasani *et al.*, (2008) regarded ease of use as one of the dimensions of service quality and explored its impact on consumer satisfaction in using self-service internet technologies. Along this line, Huang (2008) found the impact of e-consumers' perceived ease of use mediated by their behavioral attitude on their satisfaction statistically significant. As such, this study posits:

H1: Perceived ease of use exerts a direct influence on students' satisfaction in adopting wireless technology.

Perceived Usefulness – Satisfaction

In the extant literature, there have been a no. of studies done vis-à-vis the effect of perceived usefulness on consumer satisfaction (Anderson *et al.*, 1994). According to Huang (2008), perceived usefulness is observed to have an impact on consumer satisfaction mediated by their behavioral attitudes. Clemons and Woodruff (1992) stated that perceived value might directly translate into the formation of overall feelings of satisfaction. In their study, McDougall and Levesque (2000) corroborated this argument by noting that perceived value is a significant driver of customer satisfaction. It is thus hypothesized that:

H2: Perceived usefulness positively influences students' satisfaction in their acceptance of wireless technology.

Self-efficacy – Satisfaction

According to Bandura and Schunk (1981), self-efficacy is defined as one's judgments about how well one can perform various courses of actions in different prospective situations fraught with many unpredictable and stressful elements. This was echoed by Aiken (1993), who opined that self-efficacy stands for a person's expectation of his/her capability in learning or performing certain behaviors that will translate into desirable outcomes in a particular situation. In the learning process,

it conveys students' judgments about their cognitive capabilities to accomplish a specific academic task or particular goals (Schunk, 1991a). In the context of Internet use, it denotes to a user's belief in his/her capabilities to organize and execute courses of Internet actions required to produce given attainments. This, Eastin & LaRose (2000) asserts, is a determining factor in efforts to close the digital divide between the experienced Internet users and the novices.

Research confirms propositions that self-efficacy influences the choice as to whether or not to engage in a task, the effort made in performing it, and the level of persistence required in accomplishing it (Bandura, 1977; Bandura & Schunk, 1981; Delcourt & Kinzie, 1993). It influences how people feel, think, and behave (Bandura, 1986: 393). According to Ahmad *et al.*, (2010, p. 271), the inclusion of self-efficacy as an intrinsic motivation construct offers 'deeper and richer understanding of why and how the technology is used'. Self-efficacy beliefs have been extensively reported as a prime factor in gauging the success or the lack thereof in the usage of computers by individuals (Cassidy & Eachus, 2003).

In their study, Compeau & Higgins (1995) empirically tested a 10-item measure of computer self-efficacy (CSE) and found significant relationship between CSE and outcome expectations and use. In a further empirical validation of the CSE instrument developed in this study, Compeau *et al.*, (1999) reaffirmed the evidence that CSE influences an individual's behavioral orientations toward information systems (IS). According to a study performed among university students, Agarwal & Karahanna (2000) found CSE to be a key antecedent of perceived ease of use and was strongly influenced by an individual's ingenuity with IS. Along this line, Havelka's (2003) study perceived significant differences in CSE among students in different areas of academic discipline. In light of such findings, it is imperative on the part of the researchers to assess students' self-beliefs about their academic capabilities as well as the acknowledgement of this aspect as being instrumental to their motivation and academic achievement (Pajares, 2002).

From various prior studies performed on the relationship between CSE and behavioral intention to use or infusion (Wu *et al.*, 2008; Ahmad *et al.*, 2010) and the latter with individual satisfaction (Huang, 2008; Shamdasani *et al.*, 2008), it is inferred that there is a relationship between CSE and satisfaction through the mediating effect of an individual's behavioral intention. Against this backdrop, one purpose of the present study is to validate an extended technology acceptance model (TAME) by incorporating computer self-efficacy and satisfaction as two intrinsic motivation attributes in the proposed model. In so doing, the study examines the direct and indirect effects of computer self-efficacy on students' satisfaction in their acceptance of this wireless technology. It is thus hypothesized as:

H3: computer self-efficacy positively influences students' satisfaction in accepting wireless technology.

Methodology

The data for this study were obtained through a survey questionnaire administered on students of a comprehensive public university in Malaysia. A total of 285 students from five faculties (Education, Human Sciences, Engineering, ICT and Economics) were randomly selected using quota sampling technique with the students having laptops as well as wireless connection. Since all the students are from the same university, the researchers were able to collect it from the students residing at various students' hostels. Follow-up procedures were made to the respondents in case of any undue delay felt by the researchers.

The sample size was deemed adequate for the application of structural equation modeling (SEM) to address the research objectives. Data analyses were performed with SPSS version 16.0. In

order to analyze the structural relationships among the various constructs, AMOS software version 18.0 was applied.

Research Instrument

A questionnaire consisting of items validated from prior studies that measured four constructs of interests, namely, perceived ease of use, perceived usefulness, computer self-efficacy and satisfaction in adopting wireless internet were developed and modified to address the research hypotheses. A five-point Likert-type scale asking the respondents of the extent of their agreement/disagreement to the items constituting the constructs in the questionnaire was used.

Perceived Ease of Use (PEU) and Perceived Usefulness (PU)

Items for perceived ease of use and perceived usefulness in the survey were updated and measured by an instrument developed and validated by Davis (1989) and Chen *et al.*, (2002) and Venkatesh and Davis (1996).

Computer Self-efficacy (CSE)

Items for computer self-efficacy in the questionnaire were modified by combining survey items developed and validated by Compeau and Higgins (1995).

Satisfaction

Items for satisfaction were adopted and modified by an instrument developed and validated by Chen and Wells (1999).

Reliability and validity of Instrument

In order to measure the reliability and validity of the instrument, Rasch analysis was performed using Winsteps version 3.49. The results of Rasch analysis indicate that (i) items and persons measured reliably ($r = .99$ and $.88$ respectively), (ii) all items measure in the same direction (pt measure corr. > 0.25), (iii) most items show good item fit and construct a continuum of increasing intensity. The results also demonstrate that the majority items Infit and Outfit MNSQ were acceptable range (0.50 to 1.5). Table 1 presented the list of the valid items, their mean, standard deviation, and Cronbach's alpha .

Table 1: Measurement of the variables of the hypothesized model

Constructs	Items	Item Measure	Loadings	<i>M</i>	<i>SD</i>	α
	PU2	Using the Wireless Internet enables me to download learning materials from the internet	0.61	3.729	1.031	

Perceived Usefulness	PU2	Using the Wireless Internet enables me to download learning materials from the internet	0.61	3.729	1.031	0.741
	PU7	Wireless Internet helps me access online database to enhance my research	0.63	3.656	1.031	
	PU8	Using Wireless Internet allows me to obtain multimedia facilities	0.59	3.512	1.019	
	PU9	I can use Wireless Internet free-of-charge at the campus	0.56	3.961	1.059	
	PU10	Using Wireless Internet allows me to brows different website, e-mail, and chat with others	0.63	3.824	0.970	
Perceived ease of Use	PEU4	With Wireless Internet, I find it easy to access online database to do research	0.54	3.361	1.134	0.677
	PEU5	It is easy for me to become skillful in navigating the Internet using Wireless facility	0.63	3.473	1.053	
	PEU9	Wireless Internet allows me to access learning materials from LMS	0.65	3.736	1.029	
	PEU10	Wireless Internet is easy to use	0.55	3.305	1.163	
Computer Self-efficacy	SE1	I am capable of using Wireless Internet	0.53	4.045	0.912	0.771
	SE4	I have the skills required to use Wireless Internet to enhance the effectiveness of my learning	0.69	3.915	0.945	
	SE5	I know how to save and print journals/articles from online database using Wireless Internet	0.84	3.926	0.999	
	SE6	I can easily go through the steps of downloading software	0.80	3.782	1.028	
	SE10	I can do blogging using Wireless Internet	0.35	3.624	1.105	
Satisfaction	SAT1	IIUM Wireless Internet is beneficial to my learning process	0.50	3.550	1.151	0.729
	SAT2	Overall I am satisfied with the Wireless Internet service provided at the university	0.77	2.582	1.118	
	SAT4	I am satisfied with wireless service provided by the ITD	0.72	2.743	1.178	
	SAT5	I am satisfied to access Wireless Internet from the Mahallah	0.60	2.203	1.138	

Results

Confirmatory Factor Analysis (CFA) was run for each of the 4 measurement models namely, CFA-1 (PEU), CFA-2 (PU), CFA-3 (CSE) and CFA-4 (SAT); in each case, a few items were removed due to the violation of estimation. The revised 4 CFAs for each of these latent constructs showed an adequate fit to the empirical data [CFA-1: (χ^2 (df=2) = 5.132; p = 0.077; RMSEA = 0.074; CFI =

0.981; TLI = 0.944); CFA-2: (χ^2 (df=5) = 13.969; p = 0.016; RMSEA = 0.079; CFI = 0.966; TLI = 0.933); CFA-3: (χ^2 (df=5) = 18.228; p = 0.003; RMSEA = 0.097; CFI = 0.969; TLI = 0.938; CFA-4: (χ^2 (df=2) = 3.751; p = 0.153; RMSEA = 0.056; CFI = 0.993; TLI = 0.979). The Confirmatory Factor Analysis (CFA) for 4 measurement models is shown in Figure-3.

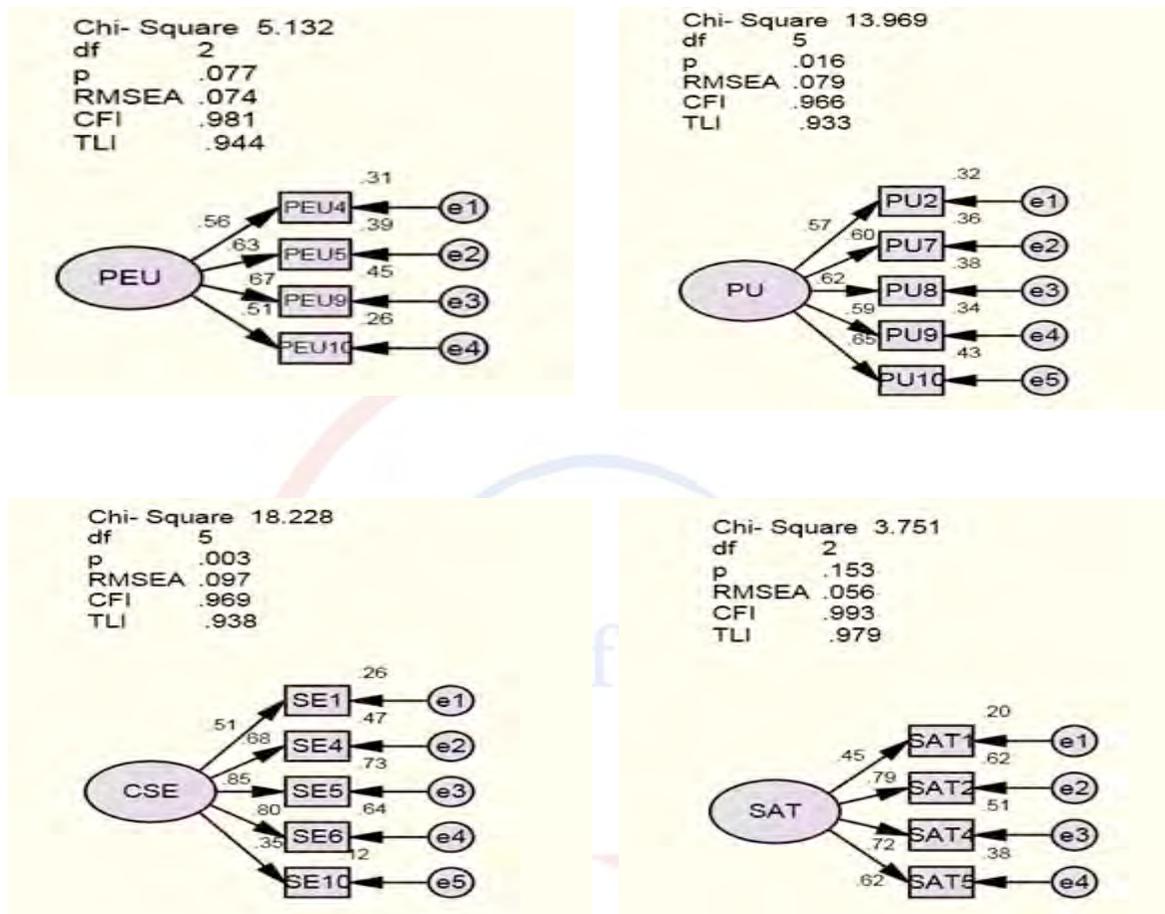


Figure-3: Confirmatory factor analysis for 4 measurement models

Estimating the Hypothesized Wireless Internet Model

The structural equation modeling was adopted to examine the hypothesized model, which integrates the four measurement models of the latent constructs, namely, perceived ease of use (PEU), perceived usefulness (PU), computer self-efficacy (CSE) and satisfaction (SAT). In this model, the majority of the items exhibited a loading greater than 0.60, with the highest and the lowest being 0.84 and 0.50 respectively. The overall statistical analyses demonstrated a satisfactory fit of the hypothesized model to the empirical data: Chi-square, χ^2 (df=84) = 151.803; p < 0.001; RMSEA = 0.053; CFI = 0.941; TLI = 0.926. However, the model requires revision due to negative path coefficient between CSE and SAT ($\beta = -0.10$) contradicting with the hypotheses. Further, p was found to be significant, as shown in the Figure-4.

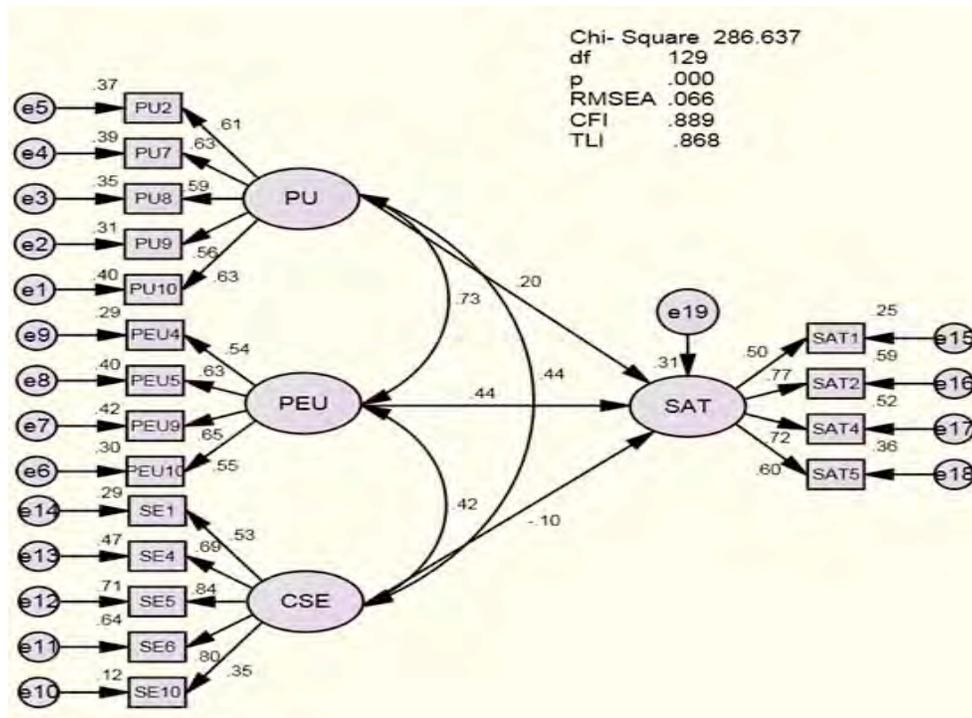


Figure-4: Hypothesized Model

The Revised Wireless Internet Model

In the third stage, the hypothesized model was revised and estimated in order to examine its overall adequacy. The results indicated that the parameters of the revised model were free from offending estimates. The overall goodness-of-fit statistics of the model showed a satisfactory fit to the data: the Chi-square was statistically non-significant, χ^2 (df=86) = 154.962; $p < 0.001$; RMSEA = 0.053; CFI = 0.940; TLI = 0.926.

The model was evaluated according to the standardized path coefficients, as shown in figure - 5. As expected, hypotheses H1 and H2 were supported with both perceived ease of use ($\beta = 0.32$, $p < 0.001$) and perceived usefulness ($\beta = 0.21$) demonstrating significant influence on students' satisfaction. In addition, the interrelationships among the exogenous variables were tested in the structural model. The relationship between perceived ease of use (PEU) and perceived usefulness (PU) was found to be very significant ($\beta = 0.74$). The other two relationships, namely, between computer self-efficacy (CSE) and PEU, and CSE and PU, had also statistically significant influence ($\beta = 0.40$, and $\beta = 0.43$, respectively). In addition, all path coefficients of the casual structure were statistically significant at 0.001 levels, and were of practical importance, while the strongest value of the standardized path coefficient of perceived ease of use on satisfaction was 0.44. The data demonstrated that perceived ease of use was moderately more influential than did the perceived usefulness in affecting the students' satisfaction in using Wireless Internet.

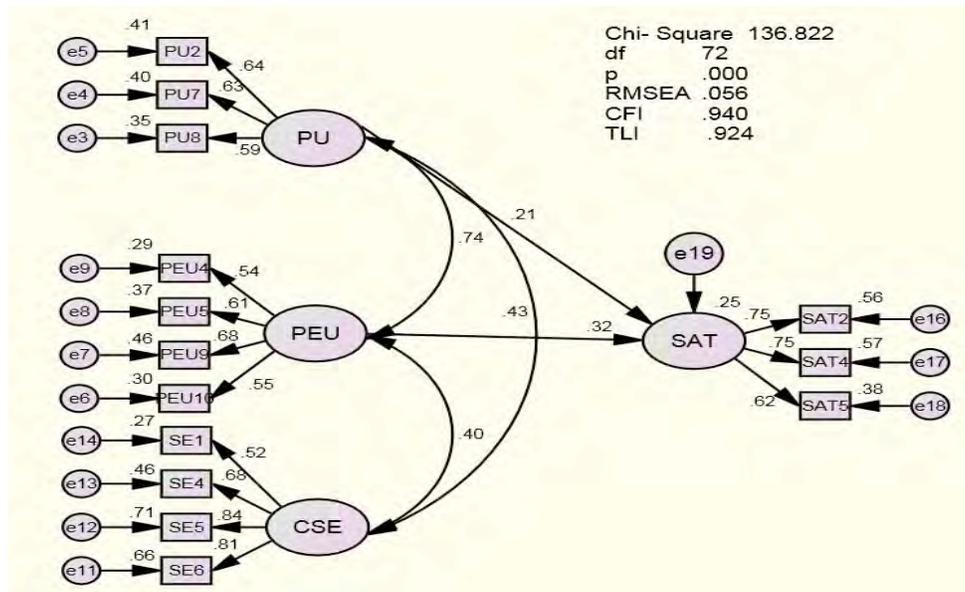


Figure-5: The Revised Wireless Internet Model

Discussion

The findings of the study have expanded the existing body of knowledge on TAM in several ways. First, the hypothesis that perceived ease of use having a positive direct influence on satisfaction stands validated. This comes in line with earlier studies (Szymanski and Hise, 2000; Dabholkar and Bagozzi, 2002), which found convenience, similar to the construct ease of use, to be a prominent factor in e-satisfaction. However, in their study, Shamdasani *et al.*, (2008) observed that ease of use mediated by service quality did not show a high influence on satisfaction.

With the revised model, the influence of perceived usefulness on satisfaction was found to be slightly above that of the hypothesized model, crossing the threshold value of 0.20. This was congruent with the prior study done by Shamdasani *et al.*, (2008) where they considered the perceived value as perceived usefulness with a positive direct influence on satisfaction. In another study, Huang (2008) discerned a significant impact of perceived usefulness on consumer satisfaction mediated by their behavioral attitude toward the acceptance of B2C websites.

As regards the effect of computer self-efficacy on satisfaction, it was revealed in an adverse direction ($\beta = -0.10$), thereby invalidating the hypothesis. However, its impact on satisfaction might be reflected through its interrelationships with the other two latent constructs, i.e., perceived ease of use and perceived usefulness.

As evidenced from the revised structural model, the influence of perceived ease of use on students' satisfaction was captured in terms of their easy access to getting technical support from Information Technology Division (ITD) and learning materials from Learning Management System (LMS), online course registration and in using wireless internet without having to take recourse to any user manual. However, the study revealed that some barriers still persist; these were manifested in the inadequate speed experienced by the students in downloading the materials from the internet and accessing research materials from online research database. Besides, it was not easy to getting connection to and registration for wireless facility as perceived by the students.

Regarding the influence of perceived usefulness on satisfaction, it was manifested in students getting access to downloading materials from the internet, to obtaining multimedia facilities and to

online database to further their research. However, in this study, students articulated their limitations vis-à-vis slower speed compared to the LAN as well as getting wireless internet access from anywhere and anytime in the campus.

Conclusion

As information technology is increasingly used in education, its integration to learning has had immense significance in fostering technology-based education among the students of a university. By extending the technology acceptance model (TAM), this study examined the impact of the acceptance of wireless technology among the IIUM students' satisfaction. Two new latent constructs, namely computer self-efficacy and satisfaction were incorporated in the original framework of TAM. While the study validated two hypotheses – positive impact of perceived ease of use and usefulness on satisfaction, it did not support the third one between computer self-efficacy and satisfaction. The results demonstrated significant positive interrelationships among the three exogenous constructs of the proposed framework.

Limitations and Recommendations

The research findings have some important implications for the wireless internet service provider at IIUM. The study exhibited a few difficulties in using wireless internet for learning in terms of speed, connectivity, downloading the materials, accessing online research database, and registration facility. The service provider would do well to address these issues to better cater to the needs of the students, thereby enhancing their satisfaction in using wireless internet.

This study was conducted among the students of five faculties of IIUM. In order to generalize the findings, it thus calls for inclusion of a larger sample size comprising all the faculties of the university; that would make the study more comprehensive in nature.

Future research on cross-validation of the model could be done to shed light on the moderating effects of various demographic attributes on students' satisfaction. The gender, faculties, and nationalities of the students might be explored in this regard.

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**Asian Conference in Education 2010
Application for Conference Proceedings**

Name: Rose Stockwell (0205)

Title: The impact of extending the school day - Attitudes of staff, students and parents at a girls' high school in the Gulf

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INTRODUCTION – CONTEXT AND CURRENT PRACTICE

The strategic plan of a Gulf Nation's education council, unveiled in June 2009 outlined a range of reform initiatives. Their aim was to promote a bilingual, critical thinking approach to learning in secondary schools and so better prepare pupils to enter university where English is the language of instruction. 'Being able to communicate effectively in both English and Arabic isn't a luxury, it's a necessity' (Council Director 2009).

Only 6.5% of grade 12 students achieved the prerequisite score for direct entry into regional universities this year (May 2010). The remaining students need to attend foundation English courses. The cost 'bleed[s] 30 per cent of the budget of higher education institutes annually. This has been going on for 15 years. It is time to address this and solve it' (Council Director - 29/06/2009).

As a result, a project (PP - Professional Partnership) was introduced in 2008 whereby local staff in grade 10-12 public schools work with overseas trained teachers to deliver (in English) inquiry-based learning schemes in Science, Maths, IT and English. The aim is to expose students to university style education at an earlier age. At the end of June 2009, an initiative was introduced to extend the school day by 90 minutes (EDI = Extended Day Initiative) to allow for more rapid improvements.

'The point is not about keeping kids in school for longer hours, but giving them more time with their teachers. Teachers need to focus on problem solving and developing students' analytical skills, not rushing through the syllabus. This is about less time on exams and more time on learning skills' (Spokesperson - 29/06/2009)

Press reports suggested the EDI was guided by feedback from a parents' survey and after studying the number of instructional hours in other OECD countries.

The research question posed in this study is:

- 1) How has the EDI impacted on the lives of the teachers who work at, students who attend and families whose children attend a girls' grade 10-12 public school in the region?

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

There is little published literature on the impact of the vast array of reforms currently underway in the Gulf education system and no published literature on EDIs in the region. Most existing literature on school time structure hails from the US.

To understand the implications of the EDI in the public school system, it is necessary to explore the political, educational and cultural backdrop, as well as to establish a working definition of 'extended day' as it is understood in this context.

This review is approached from a social constructionist perspective. It questions systems 'in which western ways of seeing the world are automatically assumed to be the right ways, which

[are then] impose[d] on others' (Burr 1995:7), systems whose policies are 'market driven' (Corson 2002:5-8) and which emerge from 'humans attempting to promote their individual or collective visions of what they wish their worlds looked like...to package [them] as [a] neatly manageable solution to so called language problems' (Morgan & Ramanathan 2007:450).

Political → Educational → Westernised models

'The [Gulf region] has accommodated globalisation...within a policy of linguistic dualism whereby English is associated with business, modernity and internationalism and Arabic is associated with religion, tradition and localism'. According to Kazim (2000), because of a lack of governmental accountability, 'Language education policy and planning decisions [are] liable to be a hit-and-miss affair' (in Clarke 2007:584).

Although Arabic is the national language in the Gulf, it is not spoken by the 85% of its workforce (Heard-Bey 2005:360). The 'extreme reliance on hiring....mostly Western or Western orientated expertise has resulted in an uncomfortable dependence on the English language and meant that ...the production of local knowledge [is] severely stifled' (UNDP in Karmani 2005:91).

There has been much speculation about what will happen to the region's economy as the oil resources dwindle. Much of the discussion surrounding its competitiveness within the global arena revolves round educating its youth.

Local education systems have been frequently criticised by internal and external sources (Kazim in Clarke 2006:226). The MENA World Bank Development Report in 2008 attacked the emphasis on 'rote memorisation'... 'If [students] are rewarded for copying...they have no practice in producing new ideas... Since innovation and novelty dominate competition in the business world, this anachronistic memorisation-based curriculum must be abolished' (Crotty 2010).

In the face of such disparaging comments, Karmani (2005) feels that government agencies have been duped by international speculators to 'unwittingly give rise to a virulent self-serving mercenary culture' (p91). Nowhere is this more evident than in the educational sector.

Overseas 'experts' bring overseas models of education. For some, it is too early to measure their success, for others they have been a 'disappointment because foreign experts failed to consult with [local educators]'. This has 'created a passive resistance with nothing being implemented because the reform [is] perceived as foreign' (Research spokesperson 10/04/2010)

School day structure → Extended day → Teaching staff → School environment

Falling student achievement levels are the concern of education councils around the world. As a result, large scale reform efforts proliferate; with school day structure forming an integral part.

Historically, adaptations to the school day have taken three forms:

1) Altering the length of the school year - *Year round schools, summer programmes, 9 weeks study followed by 3 weeks off*

The school calendar in the US has remained static since the 19th century. The standard 6.5 hours linked to an agrarian system and the long summer breaks, a legacy of wealthy city dwellers' demands. Whilst the US continues to trial radical models involving year round schooling, the summer vacation suits the needs of many residents in the Gulf region who use this time to visit family in their countries of origin.

2) Transforming the time structure - *block scheduling (double periods), guided study hall electives and school advisories*

Some teachers in western educational settings worry that block scheduling (double periods which allow for more time to focus on literacy and numeracy skills) narrow the curriculum to core academic subjects at the expense of others. Western education provides timetabled slots for drama, music, art, PE and self-study periods in the senior years. Other than PE, no provision for these subjects is made in grade 10-12 Gulf public schools. The school gyms are ill equipped and the lessons are often 'snagged' by teachers of other subjects.

3) Extending the day - *increasing the length of time students spend in classes at school, whether they be mainstream or remedial* (National High School Center 2007).

In its basic form, this means adding more hours to the school day but it is crucial to differentiate between 'types' of time

Allocated school time	Hours set by school requirements but includes assemblies, recess and other non instructional activities
Allocated class time	
Instructional time	Hours devoted to formal instruction or learning, although much of this time could be lost to poor quality teaching and student inattention
Academic learning time	The time in which students are actually engaged in learning.

(Types of time - adapted from Silva 2007:2)

The correlation between time and student achievement gets stronger with more engaged time. Studies show more allocated school time results in no or only a slight improvement compared with those students who receive less (Silva 2007, Fisher 1970, Karweit and Slavin 1981).

In addition, a great deal of classroom time is lost to interruptions and test preparation (Smith in Silva 2007); of particular significance in the Gulf where, historically, between 30-40 days a year are lost to exam-scheduling.

Student engagement and teacher training

When the focus is on 'engaged' time (Silva 2007, Pennington 2006, Bussard, 1999), a key consideration is the professional development of teaching staff. The expectation that local teachers in the Gulf will use progressive approaches when they have not experienced this kind of teaching or teacher training is a leap of faith.

In his work with teacher trainees in the Gulf, Clarke (2006:231) noted a number of binary oppositions when it came to 'traditional and 'modern' approaches to teaching:

Traditional	Modern
teacher centred	learner centred
passive	active
learners as homogenous	learners as heterogeneous
low motivation and self esteem	high motivation and self esteem
teaching as easy	teaching as complex

The majority of teachers currently in Gulf schools fall into the 'traditionally' trained sector. In-house/on the job professional development provided by PP colleagues can assist here. Pennycook, (Hall 2000:98), however, says communicative language activities are not 'empirically preferable' but 'cultural preferences...and this means the classroom becomes a site of cultural struggle over preferred modes of teaching and learning'.

Another important factor is that many teachers in the area are expatriate Arabs and on yearly contracts. The perceived/real threat to their jobs from western trained teachers can make them: a) ready to take on any reform initiative in the hope of guaranteeing their contract renewal, b) insecure in their personal and teaching career and/or c) unwilling to invest their energy in a system where they are considered actors, not agents of change (Troudi 2010:115, Karmani 2005:93/94)

Environmental factors

The financial outlay required to action a country-wide reform is huge, however, the awareness of associated expenditure is often not fully realised. Under-functioning work environments contribute to low morale and lack of enthusiasm to action initiatives (Silva 2007:8). Students in local public schools are expected to study for 6.5 hours in environments which lack basics such as effective air-conditioning systems, computers, libraries, Internet and canteen facilities.

Culture (Community, Parents and students) → Education → Consultation

‘National governments are deemed irresponsible’ if they fail to provide students with adequate provisions for learning the language of ‘global opportunity – now universally perceived as English’. Yet, many inhabitants in the Gulf perceive the influx of ‘western’ teaching staff as a ‘threat to indigenous beliefs and traditional social hierarchies’ (Morgan & Ramanathan 2007:455)

With this in mind, the curricula have been further re-designed to incorporate teaching materials aimed at honouring the region’s heritage and culture. Whilst this might go some way to acknowledging what Holliday (1999) refers to as ‘large culture’; ethnicity, national and geographic boundaries, tradition, religion, language and their effects on people’s everyday lives, Corson writes that, generally, ‘There is little consultation with parents or teachers apart from the carefully chosen few who share in the government’s ideologies’ (Corson 2002:8).

This lack of consultation can impact heavily on ‘small culture’; ‘any kind of cohesive behaviour and shared constructs within a social group’ (Troudi 2005:9, Hammersley and Atkinson in Holliday 2007:39). Issues surrounding transportation, food provision, family routines, sleep patterns, homework schedules, social occasions and holiday periods are important factors here in this region.

Consultation

Research on successful extended day projects in the US shows that all involve staff and parent consultation, evaluation and review. Without these, the schemes are met with resistance (MacGibbon 2010, Wrobel 1999, Silva 2007).

METHODOLOGY

This exploratory study is approached from a critical social constructionist perspective and employs survey methodology.

The research group consists of 16 teachers, 4 parents and 98 students at a grade 10-12 girls’ high school (403 students: 40 teachers). I worked for two years as a full time member of the teaching staff at the school; for one year before the extended day initiative was introduced and, during the first year of the extended day initiative. I am closely linked to the participants and the situation under investigation.

The study incorporated two research methods, 1) survey methodology; one teacher and one student questionnaire. Several questions were open-ended and respondents were encouraged to answer in Arabic.

2) Semi-structured interviews were incorporated to provide a ‘more fine-grained analysis’ (Cohen 2007:96).

Participants and Procedure

Ethical protocols were implemented prior. Students from all sections and grades were targeted but participants within those grades were randomly selected. All teachers present were given the opportunity to complete the questionnaire (34 in total).

Both student and teacher questionnaires were piloted, responses noted and adaptations made. Initially, the questionnaires were in English. It was clear, however, that bilingual questionnaires would render broader and more heartfelt responses.

Findings and data analysis

Prior to this research study various information was gathered from both the education council and at a school level. It is worthy of mention as it provides a valuable context.

The extended day was brought about because the country under investigation ranked substantially lower than the OECD average for instructional hours (Spokesperson 2010). PISA results show, however, the number of instructional hours a student receives does not necessarily correlate to student achievement.

Parent meetings at the beginning of the school year (September 2009) were dominated by a strong vocal reaction towards the introduction of the EDI. The mothers, 56 in total, voiced their anger over non-consultation and mentioned the negative impact lengthening the school day would have on their family life.

Student questionnaires distributed by the education council in March 2010 asked 5 yes/ no questions unrelated to the extended day. Below there was a space for ‘other comments’. 88.8% of students voiced their concerns over the EDI. They commented on inadequate lunch provision, exhaustion and depression due to the hours spent at school. They also requested the last period be used for homework and for the length of the school day to return to its 2009 finish time of 2.15pm.

These findings are in keeping with the analysis of data gathered in the student and teacher questionnaires compiled for this study and further validated by the findings from the semi-structured interviews conducted with both students and parents.

Students

Seven students were interviewed. Four students spoke in either Arabic or Arabic/English. Three students spoke in English. Several common themes emerged and these were coded.

Understanding the rationale behind the initiative

Generally, the students understood that the EDI had been introduced by the education council to increase the hours of maths and English study and so better prepare them for university.

Some students saw no benefit in the initiative. Two students felt their level in English had improved, although they put this down to the student-centred teaching strategies employed by their teachers rather than the extended day (S0014 A & B).

S0012 pointed out that other subjects might be more important to students wanting to get into university:

‘ And maybe they make the [the extended day] to make our English level better, [and] it is a good thing. But when it is related to go in a university...that is not a good thing because we are just not depending on the English in our life. We have so many different subjects to study. I have many subjects where my level has gone down....I am in the science grade so I have to study the science subjects but I don't have time to prepare them for the next lesson and that is why my marks have decreased’ (S0012).

Impact of the initiative on school life

A key issue for the girls was the fact that they felt continually tired and could not study effectively in the last two periods of the day; period 8, 2.10-2.50pm and period nine, 2.50-3.30):

‘I notice in periods 8 and 9 the students...are unable to concentrate... and the next day they will ask the teacher to repeat what she said and this makes a delay in the syllabus’ (S007).

‘[In periods 8 and 9] even the teachers do not make us study anything. They can see our batteries are flat’ (S008).

The air-conditioning units in the classrooms are noisy and ineffectual. It is impossible to hear student contributions unless standing close by. Classroom temperatures average between 25 - 29 degrees centigrade and temperatures outside, where the girls spend their break time, average 42 degrees C in May and June.

When asked about what happened in periods eight, approximately half of the respondents said they studied just like the rest of the day; with the remaining half saying they were too tired to study. In period nine, however, 90% of students said they were too tired to study.

A contributing factor to the tiredness appeared to be the lack of nourishing food available for the girls at the school canteen. Bread rolls filled with labneh(cream cheese) zaatar(a mixture of thyme, sesame seed and olive oil) with sliced black olives and a sugary fruit juice drink were the only food choices. This selection did not vary during the school year with juice and water the only canteen options available during the second short prayer break at 1.10pm. The facilities

lacked refrigeration which meant any food could not be stored safely. ‘We don’t like to eat the same items day after day. If they [the students] eat it daily, they start to feel bored and they say away from those items and this will affect their health’ (S007)

Some students said they had lost weight as a result (S0011). Others said that if they needed to go to speak to a teacher at the beginning of break, they would find the food had sold out by the time they arrived. ‘We are waking up at 5 am and that’s a very long period; five and a half hours I didn’t eat (S0012). First break is at 10.30am

When asked to rate their enjoyment of coming to school on a likhert scale pre and post-extended day, 4.10% chose the lowest score (1) pre-extended day. Post-extended day 46.57% of students made this choice.

Impact of the initiative on home life

In the past, the inadequacy of the canteen provision was not an issue because students would eat lunch with their families at home. Lunch the main meal of the day in the region is eaten around 2pm. It is more an institution than a meal. It is a time for families to reconnect; to discuss their school and work day. Culturally, there is an added dimension, for a person of Arabic background feels absolutely no pleasure in eating or drinking alone (Lipson J & Meleis I 1983).

The late school finish has had far reaching consequences for the family unit. ‘[The extended day] has affected my life with my family a lot. There are conflicts between us. I come home and they are all sleeping. I have to eat alone so sometimes I don’t eat’ (S008).

‘The effect of [the extended day] on my family is also very clear. Last year when I used to return home at the same time as my family we used to come together at the table....After, we used to sit together and everyone would talk about their day. Now when I come home I eat alone it makes me feel alone and I’m not happy with this situation’ (S007).

‘I get home at 4.30pm and I’m very tired. My family has eaten without me...They can’t wait until I get home...Last year I ate with them.... Now, my mother and father miss me, “Where are you my daughter? We don’t see you properly this year.” ...I only talk with them at the weekends’ (S0012).

Another issue was to the disruption to prayer times. Muslims pray five times each day. The school day ends when it is time for *asr* prayer. This means that the first priority for a student when they get home is to pray. For some students, however, they are too hungry and tired so they do not say *asr* at the allotted time but wait and say *asr* and *maghrib* (*evening*) prayers together. This practice is acceptable according to Islam, however, those who pray at the allotted prayer times receive the most rewards. (S0010, S007)

Difficulty in meeting assignment deadlines was mentioned by all students. They said they frequently missed out on sleep to complete their homework; going to bed at 11.30 and much later if there was an impending exam (Aysha; a student's mother).

'Eleven thirty is the maximum because my eyes will be closed after that actually! And then I wake up at 5' (S0012).

'As for other girls, their level has gone down due to getting home later and the reduced time for home study' (S0010).

For those who did not manage to get their homework done, they tried to do it when they arrived at school; with the implication that it was rushed and possibly copied from a friend. Teachers were spending more class time going through homework tasks in class because so many of the students had not completed them. Some students said that teachers allowed them to do homework in their classes if they were double periods or if it was period 9 (S008 & S0010) but some 'do not take time into consideration; that we have a lot pressure and projects to finish.'

Although some girls had noticed an improvement in their English marks and thought that more time spent at school gave students the opportunity to achieve a 'high percentage for entry to the specialisation of their choice' (S007), others had made no significant improvement in their marks and considered the decision:

'[It's] all negative and there is not one advantage and I always ask myself why did they make this decision?' (S0010 & S0011)

Teachers – Impact on School life

Sixteen teachers responded to the questionnaire. They came from a cross section of faculties at the school and had been teaching between 3-31 years; with a mean of 11.6 years' experience.

87.5% of teachers said they had changed their teaching style to accommodate the girls' inability to focus on their studies due to fatigue. Strategies included: allowing students to do their homework in class; especially in double periods and having students prepare and present parts of the class.

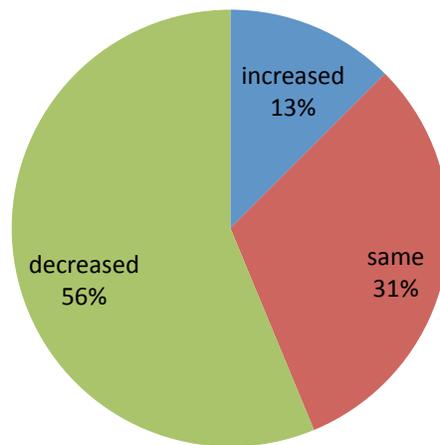
One teacher said, 'The homework levels this year have 'overheated' the students but we try to approach tasks and activities the best way we can.' Another said, 'I don't make my lessons demanding because the students can't concentrate'.

The introduction of the education reform has seen an influx of 'licensed teachers' from overseas. Their role is to teach classes rather than to work in consultation with staff. Expatriate Arab teachers whose contracts come up for renewal annually clearly saw this as a cause for concern. Slightly under a third of teachers felt they did not have security in their job. 'Continual changes in education always mean the renewal process for teachers in uncertain'. Another teacher

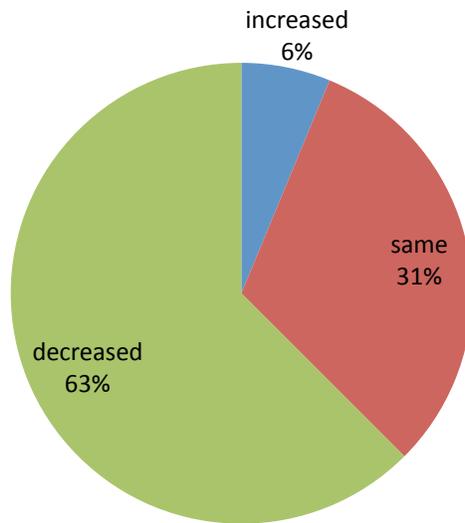
commented, 'I used to love teaching and did a lot for my career, recently, I have lost interest due to pressure'.

Fifty percent of staff had taken more sick leave than the previous year. Reasons cited were tiredness, fatigue, physical and mental pressure caused by the extended day. The pie charts below illustrate how the extended day has impacted on teachers' willingness to undertake activities other than face-to-face contact time with their students.

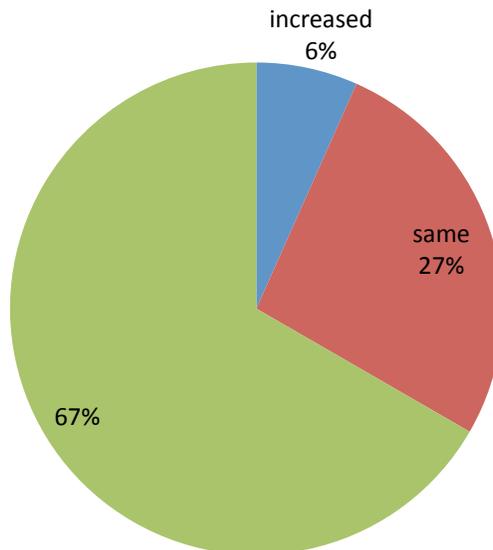
To what extent has the extended day affected your willingness to do your job?



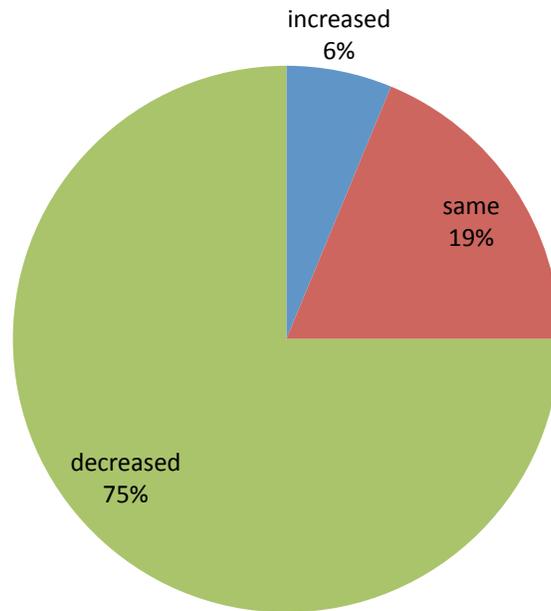
To what extent has the extended day affected your willingness to contribute to other school projects such as continuous professional development?



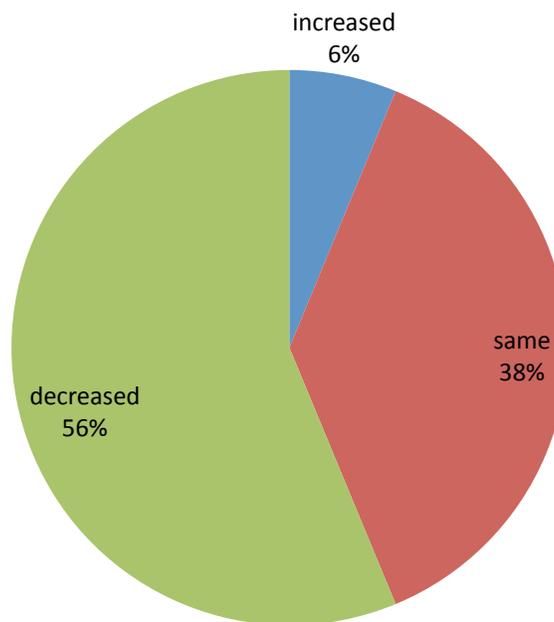
To what extent has the extended day affected your willingness to contribute to other school projects such as departmental meetings?



To what extent has the extended day affected your willingness to attend ESL training?



To what extent has the extended day affected your willingness to work with the overseas provider's staff?



Teachers - Impact on Family/home life

Half of the respondents were parents as well as teachers; with an average of 3.29 children. Of the teachers who had maids, 28.6% said they relied on their maids 'more' and 28.6% 'much more' than the previous year. They expressed their concern that they were leaving the upbringing of their children to their maids. One teacher said, '[When I came home] I saw that my maid had hit my son but there is no other choice [than] to have her look after my children at the moment.'

Of the three teachers who responded to the questions on the impact of the extended day on their children in grade 10-12 schools, all said it had impacted negatively on their children's family routines, homework routines and well-being. Two said there had been a negative impact on their child's academic progress and one said it had remained the same. One said there had been a positive impact on their child's attitude to prayer; with two noting a negative impact.

When asked to comment on the impact of the extended day on their personal/family life all sixteen respondents commented that it had proven detrimental to maintaining and building healthy family relations. '[The extended day] has disrupted the continuity of family life. Now it is very frustrating and painful. Our existence lacks meaning.'

Parents – Impact on family life

In an interview with the parent council leader, Aysha, she said many mothers had noted a decline in their daughters' overall health and well-being since the introduction of the extended day. Issues cited included, increased prevalence of headaches, lack of appetite and insomnia together with a craving for sleep.

She said the 'parents are tired because of their kids' tiredness. Their nerves are frayed. The extended day has given us problems that have no beginning and no end. Everyone is tired, whether they are the mother, father; whether young or old'.

'Before the family would come together for lunch and supper. Now, in a family of seven members you find only three sitting together. I am saying this now so that they find a solution for this extended day in the future. Can I see any benefit? No, it has harmed both; as students and parents'.

In April 2010, the school was inspected by an external UK monitoring agency. During this time the inspection team spoke to Aysha. She said they told her they would mention the opinions of the parents in their final report to the education council. Aysha said that whilst she thought the council respected the parents, it should have consulted them first before introducing a reform with such far-reaching consequences; 'Nobody asked us...to see whether we agree or disagree'.

As parents' council leader Aysha had frequent contact with parents at the school in the study and other schools. 'Parents ask me why you didn't go to X, (the council headquarters) to talk about the long day?'

'I [have] take[n] many names and many numbers. I need to take a big group with me, not a small group to [let the council] know all the people didn't like the long day....If we are

going, I can bring a group from each school. Never mind; for our children I can do anything. I am not afraid from anyone, only from Allah. I can meet with any supervisor’.

She said that many parents wanted to blame the arrival of overseas school providers for the fact that the students’ standards in Arabic had declined and to say that they were here to weaken the religious commitment of the people in the region. She had a very strong message for those who adhered to this belief. ‘If you want to put your brain under your feet and mimic everything on the internet and the TV that means it is you who are lost. You are not using your ‘wazei’ (religious compass). ..If you find a boy or girl is lost, it is happening from the upbringing in the house itself not from outside influences’.

Others have said that the late finish to the day interferes with the students’ ability to say the ‘asr’ prayer. Again, Aysha intimated that students needed to have more self-discipline and not to blame western influences; ‘if kids want to pray, they pray’.

Even though she was happy to acknowledge the positive impact of English usage in primary schools; ‘now my son who is in grade 4 knows words that I didn’t know at secondary school’, she and the other parents interviewed had seen no real improvement in their children’s marks since the introduction of the extended day.

‘My daughter has improved in English but she was always good in English. Maths not too much [of an improvement]. Other subjects have gone down [geology and physics]’.

‘Maths is already OK and no sign of improvement in English’ (Maryam - parent).

IMPLICATIONS AND RECOMMENDATIONS

Students

Students currently study core curriculum subjects for 6.5 hours a day. The introduction of practical subjects such as drama, music, art, PE and options for autonomous study could prove more conducive to developing students’ creativity, critical thinking and problem solving skills.

Teachers

Teachers feel the continual changes being made to their profession are being done to them rather than for, by or with them. This is leading to tacit and sometimes open resistance.

Extensive professional development opportunities should be made available to all teachers.

Temporary teachers could be employed whilst full time teachers participate in short-term full-time accredited courses in a university environment. Once up-skilled, the teachers would return to the school; value-adding expertise which would be led at a local, grass roots level.

Parents

Although over four thousand parents were surveyed by the education council in early 2009, none of the questions broached the subject of the extended day. An invitation to parents to air their concerns, thoughts and suggestions would be one way that the council could demonstrate its respect for the families of the children who attend its public schools.

Environment

Malfunctioning school equipment, inadequate cooling systems and canteen facilities together with lack of books in the library, computers and other essential teaching and learning resources are hindering the day to day running of this public school and many others like it. The school infrastructure needs improvement before educational reforms can be effectively implemented.

External assessment

An external assessment instrument currently used by the education council to assess student improvement shows little difference in marks for grade 11 students before and after the extra 26.30 days of teaching and learning the students received as a result of the extended day.

	Difference in mean standardised score 2009 - 2010
Arabic Reading	23.49
Arabic Writing	-7.86
English Reading	0.85
English Writing	-0.68
Mathematics	0.92

An extra 90 minutes a day has added 26.30 school days to the school year (based on a 6.5 hours contact time per day). Yet, 45 days a year are given over to exam scheduling. If the exam timetable took 9 days each semester, the earlier school finish time could be reinstated and the amount of contact time remain the same; ($45.0 - 26.3 = 18.7$ days).

Evaluation

How do we know if this initiative has made a difference to student achievement and the development of critical thinking? In the interests of transparency, findings to evidence the efficacy of the extended day initiative should be made available.

CONCLUSION

Results of this research highlight the need for extensive consultation with all stakeholders prior to the implementation of educational reforms based on overseas models.

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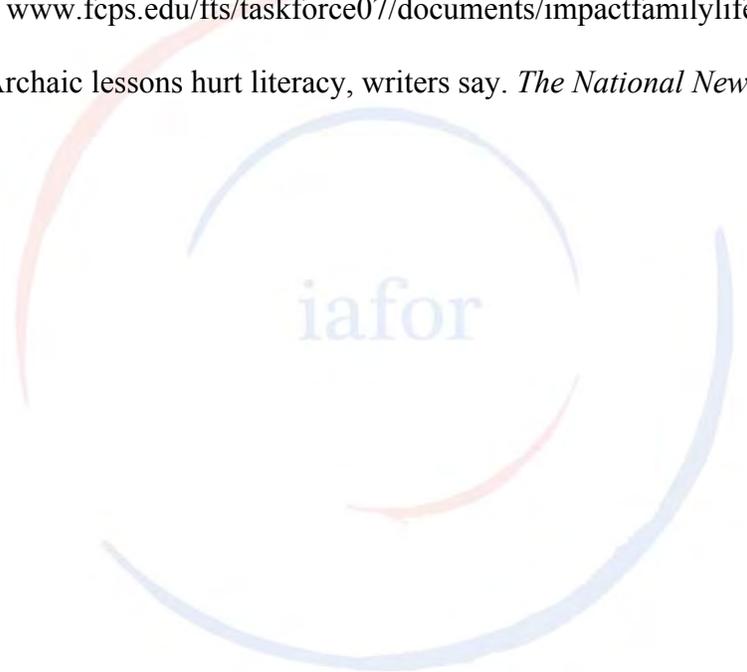
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The logo for the International Association for Educational Research (IAFOR) is centered on the page. It features the word "iafor" in a lowercase, blue, sans-serif font. The text is surrounded by two concentric, circular arcs. The outer arc is a light blue color, and the inner arc is a light red color. The arcs are not complete circles, with gaps at the top and bottom, creating a stylized, open circular frame around the text.

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Power of the Test of One-way Anova

After Transforming with Large Sample Size Data

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Abstract

The purposes of this study of One – way ANOVA were to investigate the power of the test of One – way ANOVA after transforming with large sample size data by using Real Data and used 5 sample sizes of 60, 90, and 120 students to see if there were any difference among the tests and which method yields to the most suitable result and at which sample sizes. The samples consisted of 3,600 Mathayomsuksa students in Thailand by using the Multi – Stage Random Sampling. The instrument for the study included the questionnaire of democratic child-rearing that score reliability was 0.719. The findings were explained what the factor effecting power of the test of One – way ANOVA.

Keywords: power of the test; One-way Anova; data transformation; large sample size

1. Introduction

The probability of a Type I error began in medical research, such as testing on a newly developed medicine, where researchers were trying to avoid the error. In order to achieve this, the researchers must define the level of statistical significance as low as possible. The probability of a Type II error would then be considered next. In addition, it was found that in the behavioral science or social science, researchers tend to avoid Type I error by defining low level of statistical significance too. Nonetheless, there are people who argue that the restrictiveness on the level of statistical significance may contribute to test error. It was because independent variables may have actual influence on the dependent variables. However, the researcher may not be aware of the influence due to low level of statistical significance. In some situations, they should pay more attention to the Type II error but less on the Type I error so as to obtain a suitable level of power of the test (Hays, 1994: 283 – 285). Howell (1992: 204) stated that the design of experimental research that restrict the level of statistical significance or define low level of statistical significance will increase probability of Type II error and reduce power of the test. (Ong-ard Naiyapat, 2001: 4 - 5) said that at low level of statistical significance, researchers would find difficulty in obtaining the results for the experiment. Researchers should design research with power of the test that is suitable and consistent with the condition of the research rather than placing emphasis on the level of statistical significance.

Cohen (1988) was the first statistician who gave attention and emphasis on power of the test in behavioral science or social science researches. Cohen indicated that power of the test statistics is the probability that Null hypothesis will be rejected when the

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null hypothesis is false. Moreover, it is also the most important part of the information on test statistics that can be applied to research data. The Power of the test refer to the probability that null hypothesis will be rejected, which can be written as $(1 - \beta)$. The power of the test has relationship with the Type I error or level of statistical significance, represented by (α) , which is the probability that null hypothesis will be rejected when the null hypothesis is true. The Type II error, represented by (β) , is the probability that Null hypothesis will be accepted when the null hypothesis is false. The power of the test is useful when making research plans such as creating criteria for determining sizes of a sample or defining level of statistical significance. Power estimation can be divided into two types which are priori and posteriori power analysis. The priori power analysis can be done by studying documents and related researches. This will indicate effect size which is an index that measures the influence of independent variables on dependent variables. The result will be used for determining the size of the sample which is based on the effect size. The posteriori power analysis can be evaluated by using several programs namely SYSTAT, SAS, SPSS, GPOWER and UCLA (Myer & Well. 2003: 212 – 215).

The abovementioned facts showed that power of the test is important to the hypothesis testing of test statistics and research design. As there are very few information, documents and researches related to power of the test in the country, the concept has not been highly regarded or widely recognized among researchers. Thus, the objectives of this research are to study influence of the power of the test in theoretical aspect so as to promote the knowledge of the concept in a wider circle and show that the power of the test is important to the experimental research in the behavioral science or social science. The result of the research would be presented as an alternative for other researchers to adopt accordingly. The power of the test depends on three factors (Ong-ard Naiyapat 2001: 6 – 7; Stevens. 2002: 195 - 196) which are level of statistical significance (α - Level), sample size and effect size. There are many ways to enhance the power of the test including flexibility in determining level of statistical significance; increasing the sample size. The basic assumption of one way analysis of variance are 1) data must be obtained from the population with normal distribution, 2) data must be obtained from sampling method, 3) experiment must adopt sampling method, 4) variance of data in each level of experimental process must be equal and independent. These basic assumptions of the statistical parameters are very important because the estimation of the statistical value is related to the sample, sample distribution and population. Sir Ronald Fisher, the inventor of "analysis of variance" method, had explained the relationship among average, variance and normal distribution that normal distribution has two important characteristics which are average and variance. Average value would measure the bias of the estimator. Variance would measure accuracy of the data. When the data distribution is skewed or non-normal, the average value will not reflect the actual value. It is concluded that if the basic assumption of statistics is violated, the obtained statistics would be a poor parameter. (Ho Yu. 2005: Online) In order to prevent this problem, it is important to use normal distribution. The method that can transform data into data set with normal distribution is data transformation. It would also allow researcher to analyze variance of small-size sample group without violating the basic assumptions.

There are many statisticians who give detailed definition and explanation of data transformation namely (Kirk. 1968: 63) who defined data transformation as change of set of scores with definite characteristics. Kirk explained that the three main reasons for data transformation in variance analysis are 1) to obtain homogeneity of variance, 2) so that the data will be normal distribution, 3) increase effect size of the experiment. Data transformations consist of 1) Square – root Transformation, this method is used

when the average and variance in the sample group are proportional, 2) Logarithmic Transformation, this method will be used when the average and standard deviation is in proportional. 3) Reciprocal Transformation, this method is used when the square average and standard deviation of the sample is proportional. Angular or Inverse sine Transformation, this method is used when average and variance is proportional and the data set has binomial distribution.

Moreover, the new generation statisticians, such as Myers; & Well (2003: 223 – 224), and Maxwell; & Delaney (2004: 117) gave their concept of data transformation as process that transform data set from non-normal distribution to normal distribution and reduce heterogeneity of variances by applying logarithm and square root in the calculation. Nonetheless, the disadvantage of data transformation is the difficulty in interpretation. It can be summarized that data transformation can transform data set which has a skewed distribution into normal distribution and reduce heterogeneity of variances. In addition, data transformation also has effect on power of the test by increasing its value. Monte Carlo simulation based researches showed that test statistics, which was obtained from analysis of transformed data, gave higher power of the test statistics than using raw data and non-parametric statistics. (Rasmussen; & Dunlap. 1991: 809 – 820, Freeman; & Modarres. 2003: online) and Nopparat Krataithong (1999) conducted studies on format of data transformation that can transform data into a data set with normal distribution. The best format was considered on percentage of null hypothesis that was accepted. Their studies were based on Monte Carlo simulation and actual data.

From various documents and related researches, the researcher realized that a good experiment design must considered many related factors such as level of statistical significance and sample size for instance. Researchers have to determine appropriate value of sample size and effect size in order to obtain a suitable level of power of the test. In order to obtain appropriate point, the researcher aims to use secondary data which is an actual data so that the researcher can see various situations simultaneously and obtain the best condition. With SPSS program, we will determine whether different data transformation methods, power of the test of one-way analysis of variance at different level of statistical significance and sample size would have different values or not. The objectives of this research are to study power of the test of one-way analysis of variance by using actual data under the following conditions 1) when the sample sizes are different, while the data transformation method and level of statistical significance remain constant; 2) when different data transformation methods are used, while the sample size and level of statistical significance remain constant; 3) when there are different level of statistical significance, while the sample size and data transformation method remain constant.

2. Research Methodology

This research would study on the problem with actual data which is secondary data taken from the report on “The Causal Model of some Factors Affecting Critical Thinking Abilities” (Natcha Mahapunyanont. 2010). The scopes of the information for this research are;

2.1. *Variable for this research are student level variables:*

2.1.1. *Independent variable*

Independent variable is prior achievements in term of grade point average. In this regard, the researcher has divided prior achievements into three groups which are high-score group (student with GPA from 3.50 and above), medium-score group (students

with GPA between 2.41 – 3.49), and low-score group (students with GPA between 0 – 2.40).

2.1.2. *Dependent variable*

Dependent variable is non-academic learning outcome or variable of the democratic child rearing practices as perceived by students.

3. Population and Sample

1. Population that were used in the research on “the Causal Model of some Factors Affecting Critical Thinking Abilities” were students who are studying in the 7rd thru 12th grade of the basic education institutes under the Office of the Basic Education Commission, the Ministry of Education. The total number of population was 1,184,048 students (230,704 students from the 3rd grade level and 953,344 students from the 4th grade level).

2. The sample that was used in the research on “the Causal Model of some Factors Affecting Critical Thinking Abilities” was obtained from Multi - Stage Sampling in 90 schools under the Office of the Basic Education Commission for the year 2008. The sample consisted of 3,600 students (40 students from the 3rd grade level and 20 students from the 4th grade level from each school).

In this research, the data collected by the researcher are student-level data from 3,600 students. The data set has skewness of 0.258 and kurtosis of -0.526. The tool for measuring level of the democratic child rearing practices as perceived by students which is used as variable in the test is 4-levels rating scale which consistent with Cronbach (α coefficient) that is equal to 0.719.

4. Research Procedures

1. The population is a fake population taken from the secondary data collected from actual source. The specified sizes of the sample group are 60, 90 and 120.

2. There are three types of data transformation methods which are logarithm, square root, and reciprocal transformation and the use of raw data.

3. Using specific one-way analysis of variance to calculate test statistics. There are 3 implementation levels. There is equal experimental unit in each level.

4. Conduct test on assumption at .05 and .10 level of statistical significance.

5. Using SPSS program to calculate test statistics.

5. Experimental Implementation

1. Determine size of the sample group for the study (conduct study on only large-size sample groups). Sizes of the sample group are 60, 90 and 120.

2. In order to obtain desired size of the sample group, a sampling of data that was collected from the actual source was made on 10 sample groups. The data set has a skewness of about 0.258 and a kurtosis of about -0.526. The researcher used SPSS program to conduct sampling by using the menu “Data→ Select cases” then choose “Random select of cases”.

3. 30 sets of data were transformed through three data transformation methods, and raw data were used for the research.

For square root transformation, the formula is $X' = X^{1/2}$.

The formula for logarithm transformation is $X' = \log_{10}X$.

The formula for reciprocal transformation is $X' = 1/X$.

4. Test whether the data set has a normal distribution. If the curve is asymmetry, the researcher would conduct data sampling again from the original data set.

5. Test for homogeneity of variance. After the data has been transformed by four transformation methods, the researcher will test for homogeneity of variance. If the data lack homogeneity of variance, the researcher would conduct data sampling again from the original data set.

6. After testing for homogeneity of variance, the researcher would conduct F-test by simultaneously conduct one-way analysis of variance and analysis of power of the test. Then the researcher would change level of statistical significance from .05 to .10 and the size of the sample group. This process is repeated for all 30 sets of data.

6. Research Result

The result of investigated power of the test of one-way analysis of variance when sample sizes were different but the transformation methods and the level of statistically significant were constant.

Table 1 Power of the test of one-way analysis of variance with real data.

sample sizes	alpha .05				alpha .10			
	RAW	SQRT	LOGT	RECT	RAW	SQRT	LOGT	RECT
n = 60	0.555	0.589	0.553	0.540	0.644	0.646	0.646	0.637
n = 90	0.721	0.732	0.743	0.736	0.812	0.821	0.832	0.824
n = 120	0.837	0.847	0.856	0.861	0.893	0.902	0.908	0.913

RAW = raw score

LOGT = logarithmic transformation method

SQRT = square – root transformation method

RECT = reciprocal transformation method

From table 1, it was found that at the .05 level of statistical significance and when the size of the sample group is 30; power of the one-way analysis of variance test that is obtained from reciprocal transformation has the lowest value of 0.540. It is also found that at the .10 level of statistical significance and when the size of the sample group is 120, power of the analysis of variance tests that were obtained from reciprocal transformation has the highest value of 0.913.

The research results are as following:

1. At the .05 level of statistical significance and when the sizes of the sample group are 90, and 120; power of the test that are obtained from the three data transformation methods and raw data increase in rather close amount. However, when the size of the sample group is 60, power of the test that is obtained from square root transformation has the highest value. Powers of the test that is obtained from logarithm and reciprocal transformation have slightly lower values than the other methods. At the .10 level of statistical significance and when the sizes of the sample group are 60, 90 and 120; power of the test that are obtained from the three data transformation methods and raw data increase in rather close amount. In this regard, when the sample sizes are 60 and 90, the powers of tests increase noticeably.

2. At the .05 level of statistical significance and when the sizes of the sample group are 90 and 120; power of the test that are obtained from the three data transformation methods and raw data increase in rather close amount. However, when the size of the sample group is 60, the power of the test that is obtained from square root transformation has the highest power. Meanwhile, powers of the test that are obtained

from logarithm and reciprocal transformation and raw data have close values. At the .10 level of statistical significance and when the sample sizes are 60, 90 and 120; power of the test that are obtained from the three data transformation methods and raw data increase in rather close amount. When the size of the sample group is 120, power of the test that is obtained from raw data has the lowest value. Nonetheless, the figure is close to the value obtained from the other three data transformation methods.

3. When the level of statistical significance increases and the sizes of the sample group are 60, 90 and 120, power of the test that are obtained from raw data increase slightly. When the level of statistical significance increase and the sample size are 60 and 120; power of the test that are obtained from square root transformation increase slightly. Meanwhile, when the sizes of the sample group are 90 powers of the tests increase noticeably.

4. When the level of statistical significance increases and the sizes of the sample group are 120; power of the test that are obtained from logarithm transformation increase slightly. However, when the sample sizes are 60 and 90; power of the test increase noticeably. When the level of statistical significance increases and the sample sizes are 120; power of the test that are obtained from reciprocal transformation increase slightly. However, when the sizes of the sample group are 60, 90; power of the test increase noticeably.

According to the research result, it can be summarized as

1. When the size of the sample group increases, while data transformation method and level of statistical significance remain constant; the power of the test would increase in accordance with the first hypothesis.

2. When different data transformation methods are used, while size of the sample groups and level of statistical significance remain constant; powers of the test are indifferent. The results are consistent with the second hypothesis.

3. When the levels of statistical significance increase, while size of the sample group and data transformation method remain constant; the power of the test would increase in accordance with the third hypothesis.

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Students' Awareness on Plant Cultivation Learning in Technology Education

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Abstract

The purpose of this study was to investigate students' awareness on plant cultivation learning in technology education. One hundred fifty-three 7th graders participated in the questionnaire. The results of analysis of the collected data indicated that students who had many experiences of plant cultivation tended to have a higher awareness about pleasure, interest, effectiveness and importance on plant cultivation learning. Also indicated that students who had the experience within one year tended to have comparatively high awareness. Based on these findings, it was concluded that the continuations of plant cultivation learning had an influence on students' awareness through elementary and junior high school.

Keywords Technology education, Plant cultivation, Students' awareness level, Junior high school

Introduction

Cultivation that grows and manages the plant spread in technology education regardless of the school kind. It is the valuable opportunity for children and students to practice the cultivation with sowing, sprinkling water, transplantation, bud picking. In general, it is understood that the plant cultivation is indispensable for children and students as learning chance of the growth of sensibility. In plant cultivation learning, children and students observe the plants at close range. Also they check the knowledge about biology and agriculture, through the practice. Such an approach is valuable because they can deductively deepen thinking and understanding. There were several studies on plant cultivation learning (Hosotani et al., 1999; Ishida et al., 2001; Ishii, 1990; Potter, 1994; Sasaki & Nishiuchi, 2005; Takemura, 2009; Toyama, 2009). These studies, however, did not looked deeply into students' awareness connected with their experiences of plant cultivation. For teachers, it should be vital to know what students were aware of on plant cultivation, given that flexible lesson plans are necessary to reflect students' actual state. The aim of this study was to investigate students' awareness and experiences on plant cultivation learning in technology education.

Method

Subjects

In February 2010, a survey was conducted with 153 7th graders (first-year junior high school students). All those students were on the register in one junior high school at Osaka prefecture.

Instrument

In the survey, we defined 4 words to questionnaire items for awareness on plant cultivation: Pleasure; Interest; Effectiveness; Importance. These form was a multiple-choice single response with five options: Definitely yes; Probably yes; Uncertain; Probably no; and Definitely no. We also defined the items on experience of plant cultivation.

Procedure

Students were asked for the survey by their technology education teachers during technology class. For computation, a 5-point scale was used to score every response: i.e., 5 points for “Definitely yes,” 4 points for “Probably yes” and so on in order.

Results and discussion

The means of all students for awareness level on plant cultivation is shown in Table 1. On all items, students' awareness levels were more than score of 3. Table 2 shows the students' experiences of plant cultivation. The number of students by number of experiences of plant cultivation is shown in Table 2-1. The number of students by recent experience of plant cultivation is shown in Table 2-2. Table 3 shows the students' awareness by experiences of plant cultivation. The difference of students' awareness on number of experiences of plant cultivation is shown in Table 3-1. The difference of students' awareness on recent experience of plant cultivation is shown in Table 3-2. Table 4 shows the number of students who experienced cultivation on each plant (Top 40). Table 5 shows the plants in order of number of students who experienced cultivation. The plants on open field cultivation are listed in Table 5-1 and 5-2. The plants on container cultivation are listed in Table 5-3 and 5-4. Figure 1 shows the result of cluster analysis.

Table 1

Means of all students (N=153) for awareness level on plant cultivation

	Pleasure	Interest	Effectiveness	Importance
\bar{X}	3.856	3.412	3.693	3.660
SD	0.973	1.218	1.012	1.043

Table 2

Students' experiences of plant cultivation

Table 2-1

Number of students by number of experiences of plant cultivation

Number of experiences of plant cultivation	Number of students
10 or over	39
9	14
8	17
7	20
6	19
5	20
4	16
3	6
2	2
1	0
0	0
Total	153

Table 2-2

Number of students by recent experience of plant cultivation

	Number of students
Within 1 year	81
More than 1 year ago	72
Total	153

Table 3

Students' awareness by experiences of plant cultivation

Table 3-1

*Difference of students' awareness on number of experiences of plant cultivation:
"10 or over" or "up to 5"*

	Pleasure		Interest		Effectiveness		Importance	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
10 or over	4.308	0.852	4.051	0.932	4.308	0.722	4.154	0.921
Up to 5	3.568	0.986	2.727	1.231	3.432	0.863	3.318	1.061
t	3.589**		5.401**		4.919**		3.762**	

**=p<.01

Table 3-2

*Difference of students' awareness on recent experience of plant cultivation:
"Within 1 year" or "More than 1 year ago"*

	Pleasure		Interest		Effectiveness		Importance	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Within 1 year	4.025	0.955	3.716	1.157	3.852	0.995	3.716	1.157
More than 1 year ago	3.667	0.957	3.069	1.194	3.514	1.000	3.597	0.892
t	2.296*		3.376**		2.078*		0.711	

* =p<.05, ** =p<.01

Table 4

Number of students who have experienced plant cultivation: Top 40

Plant (Alphabetical order)	School				Home			
	Open field cultivation		Container cultivation		Open field cultivation		Container cultivation	
	Number of students (N=153)	Rate	Number of students (N=153)	Rate	Number of students (N=153)	Rate	Number of students (N=153)	Rate
Asparagus	1	0.7%	0	0.0%	3	2.0%	1	0.7%
Balsam	13	8.5%	28	18.3%	1	0.7%	2	1.3%
Basil	0	0.0%	0	0.0%	2	1.3%	5	3.3%
Bell pepper	3	2.0%	1	0.7%	1	0.7%	2	1.3%
Bitter melon	12	7.8%	1	0.7%	7	4.6%	4	2.6%
Broccoli	1	0.7%	0	0.0%	2	1.3%	3	2.0%
Cabbage	3	2.0%	0	0.0%	1	0.7%	0	0.0%
Cactus	0	0.0%	2	1.3%	1	0.7%	12	7.8%
Carrot	1	0.7%	1	0.7%	4	2.6%	1	0.7%
Corn	2	1.3%	2	1.3%	2	1.3%	0	0.0%
Cosmos	4	2.6%	0	0.0%	1	0.7%	3	2.0%
Cotton	2	1.3%	1	0.7%	2	1.3%	2	1.3%
Cucumber	16	10.5%	6	3.9%	6	3.9%	7	4.6%
Eggplant	9	5.9%	3	2.0%	8	5.2%	3	2.0%
Gourd	20	13.1%	2	1.3%	0	0.0%	0	0.0%
Green soybean	0	0.0%	0	0.0%	1	0.7%	3	2.0%
Haricot	3	2.0%	6	3.9%	1	0.7%	2	1.3%
Hyacinth	0	0.0%	7	4.6%	0	0.0%	2	1.3%
Japanese white radish (Daikon)	4	2.6%	0	0.0%	5	3.3%	0	0.0%
Loofah	47	30.7%	5	3.3%	1	0.7%	1	0.7%
Marigold	8	5.2%	19	12.4%	1	0.7%	1	0.7%
Mint	0	0.0%	1	0.7%	2	1.3%	3	2.0%
Morning glory	11	7.2%	90	58.8%	2	1.3%	12	7.8%
Okra	4	2.6%	5	3.3%	0	0.0%	4	2.6%
Pansy	5	3.3%	8	5.2%	2	1.3%	5	3.3%
Pea	3	2.0%	1	0.7%	1	0.7%	0	0.0%
Perilla	2	1.3%	0	0.0%	0	0.0%	4	2.6%
Potato	10	6.5%	0	0.0%	4	2.6%	2	1.3%
Pumpkin	7	4.6%	1	0.7%	0	0.0%	1	0.7%
Radish	0	0.0%	1	0.7%	0	0.0%	5	3.3%
Rice plant	42	27.5%	28	18.3%	1	0.7%	4	2.6%
Rose	0	0.0%	1	0.7%	3	2.0%	6	3.9%
Spinach	0	0.0%	0	0.0%	2	1.3%	3	2.0%
Strawberry	3	2.0%	7	4.6%	9	5.9%	19	12.4%
Sunflower	7	4.6%	7	4.6%	3	2.0%	9	5.9%
Sweet potato	33	21.6%	0	0.0%	4	2.6%	1	0.7%
Tomato	14	9.2%	36	23.5%	9	5.9%	35	22.9%
Tulip	12	7.8%	34	22.2%	5	3.3%	8	5.2%
Watermelon	2	1.3%	0	0.0%	5	3.3%	1	0.7%
Welsh onion	0	0.0%	0	0.0%	3	2.0%	7	4.6%

Table 5

Plants in order of number of students who experienced cultivation:

*Top 15 in each of situations***Table 5-1***Open field cultivation at school*

Rank	Plant	Number of students (N=153)	Rate
1	Loofah	47	30.7%
2	Rice plant	42	27.5%
3	Sweet potato	33	21.6%
4	Gourd	20	13.1%
5	Cucumber	16	10.5%
6	Tomato	14	9.2%
7	Balsam	13	8.5%
8	Bitter melon	12	7.8%
8	Tulip	12	7.8%
10	Morning glory	11	7.2%
11	Potato	10	6.5%
12	Eggplant	9	5.9%
13	Marigold	8	5.2%
14	Pumpkin	7	4.6%
14	Sunflower	7	4.6%

Table 5-2*Open field cultivation at home*

Rank	Plant	Number of students (N=153)	Rate
1	Strawberry	9	5.9%
1	Tomato	9	5.9%
3	Eggplant	8	5.2%
4	Bitter melon	7	4.6%
5	Cucumber	6	3.9%
6	Japanese white radish	5	3.3%
6	Tulip	5	3.3%
6	Watermelon	5	3.3%
8	Carrot	4	2.6%
8	Potato	4	2.6%
8	Sweet potato	4	2.6%
12	Asparagus	3	2.0%
12	Rose	3	2.0%
12	Sunflower	3	2.0%
12	Welsh onion	3	2.0%

Table 5-3*Container cultivation at school*

Rank	Plant	Number of students (N=153)	Rate
1	Morning glory	90	58.8%
2	Tomato	36	23.5%
3	Tulip	34	22.2%
4	Balsam	28	18.3%
4	Rice plant	28	18.3%
6	Marigold	19	12.4%
7	Pansy	8	5.2%
8	Hyacinth	7	4.6%
8	Strawberry	7	4.6%
8	Sunflower	7	4.6%
11	Cucumber	6	3.9%
11	Haricot	6	3.9%
13	Okra	5	3.3%
13	Loofah	5	3.3%
15	Eggplant	3	2.0%

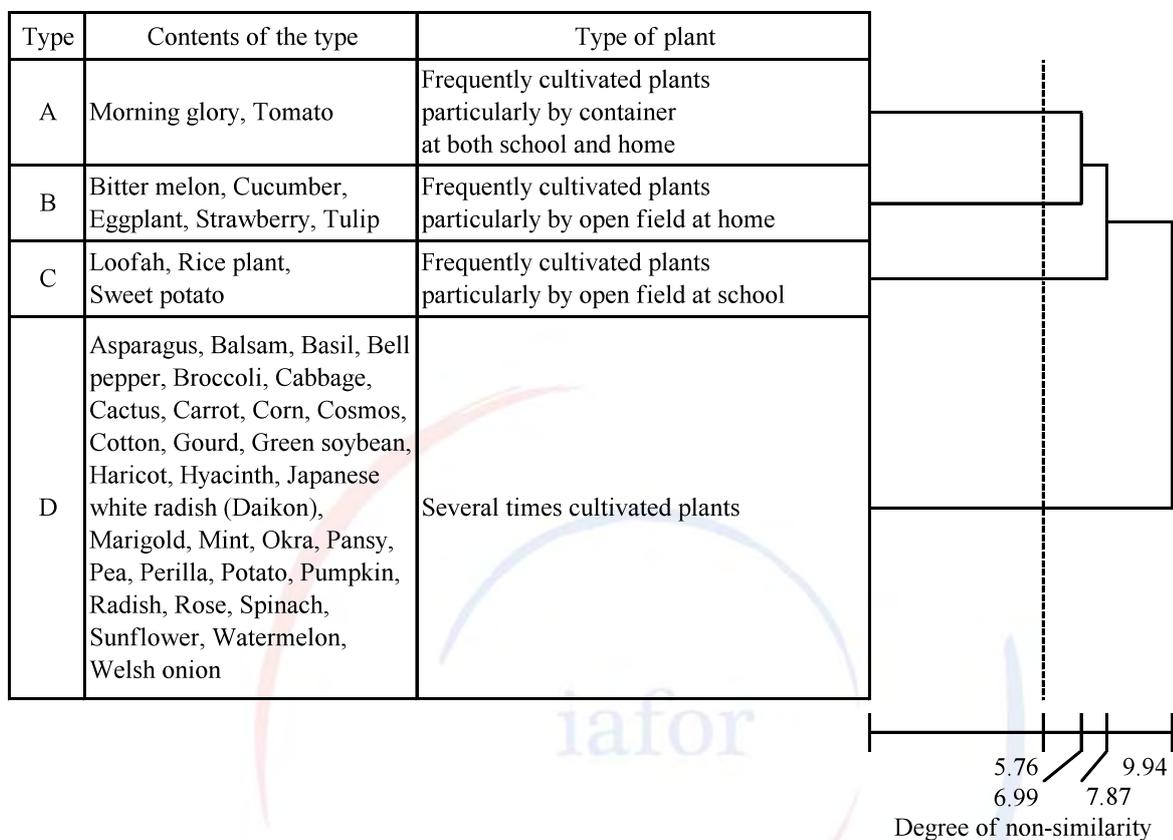
Table 5-4*Container cultivation at home*

Rank	Plant	Number of students (N=153)	Rate
1	Tomato	35	22.9%
2	Strawberry	19	12.4%
3	Morning glory	12	7.8%
3	Cactus	12	7.8%
5	Sunflower	9	5.9%
6	Tulip	8	5.2%
7	Cucumber	7	4.6%
7	Welsh onion	7	4.6%
8	Rose	6	3.9%
9	Basil	5	3.3%
9	Radish	5	3.3%
9	Pansy	5	3.3%
13	Rice plant	4	2.6%
13	Okra	4	2.6%
13	Bitter melon	4	2.6%
13	Perilla	4	2.6%

Figure 1

Result of cluster analysis:

Types of plants by number of students' experiences of cultivation



Using a t-test, the difference between the two groups was tested for each item. Against any item that did not show a uniform variance of the mean value in magnitude, a Welch's t-test was performed. On all items, the awareness of students whose number of experiences of plant cultivation was 10 or over were significantly higher than that of students whose number of experiences of plant cultivation was up to 5 (Table 3-1). As a result, it was indicated that students who have many experiences of plant cultivation tended to have a higher awareness about pleasure, interest, effectiveness and importance on plant cultivation. The awareness of students who experienced plant cultivation within one year were significantly higher than that of students who experienced plant cultivation more than 1 year ago, on 3 items: pleasure, interest and effectiveness (Table 3-2). It was therefore indicated that students who had the experience within one year tended to have comparatively high awareness.

Because experiences of plant cultivation had an influence on students' awareness, we determined to grasp the structure of these plants. A cluster analysis by Ward's method was performed on the collected data through standardization (mean=0, standard deviation=1). Consequently, 40 plants were classified into 4 types. Figure 1 shows the plants that each type

includes. The A Type cluster included the plants, such as Morning glory; Tomato. Accordingly, the A type cluster could be explained as “Frequently cultivated plants particularly by container at both school and home.” The B Type cluster included the plants, such as Bitter melon; Cucumber; Eggplant; Strawberry; Tulip. Accordingly, the B type cluster could be explained as “Frequently cultivated plants particularly by open field at home.” The C Type cluster included the plants, such as Loofah, Rice plant, Sweet potato. Accordingly, the C type cluster could be explained as “Frequently cultivated plants particularly by open field at school.” The D Type cluster included the others. The D type cluster could be explained as “Several times cultivated plants.”

Conclusion

This study surveyed and analyzed students' awareness on plant cultivation learning in technology education. Our conclusions were given below:

1. It was indicated that students who had many experiences of plant cultivation tended to have a higher awareness about pleasure, interest, effectiveness and importance on plant cultivation.
2. Also indicated that students who had the experience within one year tended to have comparatively high awareness.
3. Forty plants that students had cultivated were classified into 4 types: the A type “Frequently cultivated plants particularly by container at both school and home;” the B Type “Frequently cultivated plants particularly by open field at home;” the C Type “Frequently cultivated plants particularly by open field at school;” the D Type “Several times cultivated plants.”

These findings demonstrated the need for the continuations of plant cultivation learning had an influence on students' awareness through elementary and junior high school. In next studies, we wish to examine the problem of cultivation skill of students in technology education.

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Study on required abilities of interpersonal communication in manufacturing industries in Taiwan

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1. Introduction

1.1 Motivation

What the interpersonal communication refers is the transmission of thoughts and ideas, and the behavior of understanding each other. In all occasions, when human beings have interaction, different opinions could happen. That's why we need negotiations. Good negotiations come from good communication competencies.

Chao (1995) pointed out that the twenty-first century is a "communication age." Gaps between people would be resolved by communication; the distance between countries would be also shortened by communication; and from interpersonal relationships to international negotiations or world trade, everything requires effective communication.

"Interpersonal communication" has become an academic subject in the modern workplace. Interpersonal relationships play a significant role. If there is no good interpersonal communication, interpersonal relationships are definitely poor.

Wood (2002) and Montgomery (1988) pointed out that relationships are the product of interpersonal communication, and the way of communication depends on the quality of interpersonal communication, Wang (1996) also found that interpersonal communication competencies will influence interpersonal relationship, and Cheng (2007) pointed out "meta-communication" in his book, *Interpersonal Communication in the New Theory - the Principles and Techniques*. He thought that all verbal or nonverbal communication acts include the side of "meta-communication", which means "read between the lines."

Interpersonal relationships and interpersonal communication are influential, when used in the workplace, the influence is evident. Whether getting together, different opinions, or communication with each other, we must rely on basic competencies such as listening, speaking, reading, writing and integrated abilities. Scholars from everywhere focus on this issue, and Devito (2007) also believed that the competencies of communication and of getting together with each other are very important among human beings. It is because that we need to communicate with ourselves and even to communicate with others. They are both important parts of developing interpersonal relationships.

Detroit and Mich (1999) had the sample of 1,000 employees from international interpersonal decision-making, interpersonal resources and global management companies. The results found that more than 30% people thought what a good director needs is have basic competencies, interpersonal competencies. Steers (1994) have suggested from his studies that

how important is effective communication as following four reasons:

- (1) Let our feelings and emotions be attached to the human body.
- (2) Affect the ideas, attitudes and behavior among people.
- (3) Through the use of formal communication channels, it helps strengthen the formal organizational structure.
- (4) Tools about activities to provide, receive, and exchange information with each other.

In brief, we have learned that interpersonal communication in the workplace employment is basic competencies. Therefore, the study will base on the concept of high-level technical practical employees in the manufacturing industries and discuss what communication competencies they need. The conclusions will provide institutes to cultivate talent pool in mechanical manufacturing industries and the indicators of communication competencies for freshmen.

1.2. Aims of the study

In this study, we will discuss senior technical staff of employment in machinery manufacturing industries whose interpersonal communication competencies required for the actual mechanical manufacturing industries by the practice-oriented concept of high-level technical employees, therefore, the purposes of the study include as the follows.

- (1) Find the meaning of interpersonal communication, and discuss the importance of interpersonal communication in the workplace.
- (2) Propose the required interpersonal communication competencies of high-level technical employees in machinery industries.
- (3) Induce the items and targets of required interpersonal communication skills for high-level technical employees in machinery manufacturing industries.

2. Literature

2.1 The theory of interpersonal communication competence

Spitzberg and Cupach (1984) mentioned that the individual not only effectively achieve his communication goals, but also rely on information conveying appropriate social behavior in the model of interpersonal communication competence theory. Therefore, the timing of communication between people is the key to achieve effective communication. Spitzberg and Cupach (1984) gave the definition of interpersonal communication competence as communication motivation, communication knowledge and communication skills of three parts; communication motivation and communication knowledge belong to personal inner competencies; and communication competencies belongs to the external behavior competencies. Also, Spitzberg and Cupach's (1984) model of interpersonal communication

competence theory mentioned communication motivation, communication knowledge, and communication skills need to take into account what the individual's internal needs and what the situational factors are. The communication goals must suit benefits to each other as well.

2.2 The definition of interpersonal communication

Spitzberg (1993) thought that people constantly change in the social environments, and work hard in maintaining relationships with each other. The success or failure of relationships is the competencies of interaction. Therefore, the better communication competencies people have, the better listening comprehension people have. Chen (2004) thought interpersonal communication is a meaningful process of communication. For individuals or groups in the communication process it is presented as an interaction and it exists a responsibility and significance in the process of communication. Sie (2002) mentioned interpersonal communication is the process of sending, and receiving and received information. Shu-Li Wang (2000) thought interpersonal communication is the appropriate use in the appropriate context. Daniel & Michael (1998) expressed the competency of communication is determined by the decision of each other, which involves knowing how to communicate, how to control the correct communication behavior, and who to react.

2.3 The motivations of interpersonal communication

Schutz (1966) believed the reason why people interact is to satisfy interpersonal needs, so he thought there were three motivations of interpersonal communication.

- (1) Control: the reason why people communicate is to influence others and to maintain personal power.
- (2) Inclusion: the reason why people communicate is to have more satisfying partnership and interaction.
- (3) Affection: the reason why people communicate is to maintain each other's love, worship and enthusiasm. People need to care about or be concerned about, to guide others or be mentored, and to deliver or receive emotions.

Because people have different experiences for the motivations mentioned above, Schutz (1966) combined personal differences in order to predict the situations for same people in different environments.

2.4 The types of interpersonal communication

According to the definitions of communication studies, we can induce the views of various scholars as the follows (quoted from Wang, 2000).

- Types of communication: include self-communication, interpersonal communication and

organizational communication; self-communication is the communication of talking oneself, and the basis of one's own cognitive activities; interpersonal communication is also called dyad. Everyone has opportunities to give feedback in the communication circumstances. It is also the most convincing one; and organizational communication aims to achieve the common goal of individuals and organizations, and to benefit to each other. The object is suitable for the formal collective communication behaviors in a large group.

- The number of persons in communication: include intrapersonal communication, mass communication, and interpersonal communication; intrapersonal communication refers to self-talking, self-suggestion and self-comforting and so on; mass communication refers to proceeding in large groups and the object is the general public; interpersonal communication refers to communicate in one to one or in small group.
- Happenings of feedback: include one-way communication and two-way communication; one-way communication means no response or feedback between each other and the point is the communicator emphasizes on delivering information or doesn't get information back after the reaction; and two-way communication means getting response or feedback between each other and the point is the communicator emphasizes on delivering and receiving information for others.

2.5 Principles of interpersonal communication

Rudolph & Kathleen (translated by Duan-Jhen Zen, Ling-Min Zen, 2000) thought interpersonal communication included four follows.

- Continuity of interpersonal communication: the communication can be verbal and nonverbal, and it often continuously deliver message which people inferred or defined.
- Coding of interpersonal communication messages: the interpersonal communication between people is purposive, however, when communicators were aware of the purpose is different from each other.
- The purpose of interpersonal communication: the chat between people is a purpose, whether it is meant to be noted by those who communicate.
- The relationship of interpersonal communication: the interaction involves two levels. One is present in the emotions; the other is who the controller is. People decide who gets more power in the communication.

Therefore, one may dominate the communication when the other is dominated. When a person wants to control, the other could ensure his own power. Or when one wants to give up power, the other doesn't want to take responsibility. Through verbal and nonverbal communication behavior, it defines and clarifies the relationship of complementary or symmetrical nature. Complementary relationship happened less conflict, but the symmetrical relations happened more equal power.

2.6 Functions of interpersonal communication function

As above mentioned, Wilmot (1987) pointed out that interpersonal communication contains five features:

- (1) The main function of interpersonal communication is to achieve self-expression, interpersonal relationships and instrumental goals.
- (2) Interpersonal communication allows us to define ourselves in the eyes of others.
- (3) Interpersonal communication provides a social structure. Through interaction, people created standards of behaviors, the system of interpersonal role, and criteria to assess the standards of behaviors.
- (4) Interpersonal communication can link to other social systems. Messages can be conveyed through different media, and one of the important medium is interpersonal communication.
- (5) The main purpose of interpersonal communication is to suit interpersonal needs. Needs is the main desire of our lives, and the involvement of others becomes our social needs.

A complete function of interpersonal communication is listening, speaking, reading, writing and integrated abilities. They are all close to our life. In any workplace, communication must rely on the above features. We can cultivate a good relationship by adjustment and practice.

2.7 The criteria to assess interpersonal communication

We induced many views of various scholars in the literature about communication, and found that the following three criteria which get the greatest support from theoretical and empirical researches are suitably applied to interpersonal situations, and they are representatives about communication competencies. The three criteria assessment as follows (Rebecca, 1997; Stephanie, 1998):

- Appropriateness: the degree which communicators achieve goals through the appropriate Interaction.
- Effectiveness: to achieve the purpose of conversation.
- Adaptability: the abilities of changing behaviors and aims to meet needs. It includes six elements as appropriate disclosure, wit, articulation, social composure, social experience and social confirmation.

2.8 Relations between workplace and the competencies of interpersonal communication

In many studies, all of them have expressed similar literature, such as Luo's (2005) "research on the playfulness and interpersonal communication competence of the accountants in elementary schools" indicated that the accountants had above the average level of

playfulness and interpersonal communication competence. The accountants were found to have higher-than-average playfulness and good competencies in interpersonal communication. In the playfulness survey, respondents got the highest scores in the statement “find pleasure in it” and lowest scores in “retaining a childish heart and having fun.” In the survey for interpersonal communication competencies, the highest scores went to “articulation” while the lowest went to “wit.” Non-full-time staffs presented better “composure” and “articulation” than full-timers. “Overall playfulness” and “appropriateness” presented a highly direct relevance and “overall interpersonal communication competencies” and “physical and mental relaxation, being humorous and carefree” presented a highly direct relevance. The relevance between “wit” and “physical and mental relaxation, being humorous and carefree” was evident. “Physical and mental relaxation, being humorous and carefree” was the most effective factor in predicting the levels of “appropriateness,” “wit,” “ferventness,” “maturity,” and “overall interpersonal communication competencies.”

Zong-Ting Zuo’s (2007) “the relationship between interpersonal communication competence, conflict management styles and training needs among semiconductor industry employees” showed that “interpersonal communication competence” and “conflict management styles and training needs” showed a significantly negative relevance.

Gan-Chieh Fan’s (2007) “an investigation study for the required academic insurance knowledge and personal abilities for staffs in insurance company” concluded that not only keep learning in professional skills, but soft skills are just important as professional skills. The top 5 soft skills are communication, AQ, positive attitude, EQ and ability to work as a team. Appropriate classes such as professional moral behavior, EQ, emotional behavior are suggested to offer in school. And top 5 licenses are Investment-Linked Insurance Sales Agent, life insurance agent, property insurance agent, underwriting & claim committee of life insurance, and financial planner. However, entry level in actuarial license is higher, it is not necessary for insurance consultants. On the other hand, if insurance consultant is able to obtain such license, his/her career will excel others in very short time.

Tz-Yu Lin’s (2008) “a study on the relationship among degree of expertise, interpersonal communication and creativity—with academic institute researchers as an example” showed it had partially relationship between “expertise and creativity”, and “interpersonal communications and creativity”, so postgraduate ought to enhance their expertise and interpersonal communications, then their creativity should be risen.

2.9 Foreign definition about interpersonal communication competence

Effective communication is essential to workplaces, communities, and families. Employees with positive communication skills contribute to organizational productivity, enhance interpersonal relationships with coworkers and clients, and create opportunities for promotion and advancement (ITAC). According to various literature reviews, we can develop

communicative indicators for high-level technical employees by the principles of interpersonal communication, functions, criteria, and types. This study uses core competencies of ITAC as references.

Ohio Department of Education proposed integrated technical and academic competencies (ITAC) which career-focused education needs in 1999, integrating academic, technical, getting-a-job knowledge, skill, and attitude. Core ITAC includes six standards, each of which has competencies and key indicators, and “communicating effectively” is included of them. Here are competencies of “communicating effectively” (ITAC, 1999):

- Application of basic communication skills
- Application of oral communication skills
- Application written communication skills
- Writing Applications Technology
- Application of listening skills
- Application of a speech or presentation skills
- Application of graphic communication skills
- Communication skills of Applied Arts
- Application of Multimedia Presentation
- Build graphics and charts
- To establish a personal relationship

Besides, Carnevale, Gainer, and Meltzer said, “on the job, workers spend an average of one and a half to two hours per workday reading forms, graphs, charts, schematics, manuals, and computer terminals” (1990). Whether included as an extension of recognized basic skills (Herman, Bramucci, and Litman, 2000; SCANS, 1991) or as an essential skill in its own right (Carnevale, Gainer, and Meltzer, 1990; HRDC, 2001), the skill people use when they work with workplace graphics such as charts, graphs, tables, forms, flowcharts, diagrams, floor plans, maps, and instrument gauges (the Work Keys Locating Information skill) is increasingly recognized as a basic skill. Under the “Reading” basic skill of the Secretary’s Commission on Achieving Necessary Skills (SCANS), the skill “locates, understands, and interprets written information in prose and documents--including manuals, graphs, and schedules--to perform tasks” is included. In addition, the report states that the skill includes the ability to use “tables, graphs, diagrams, and charts to obtain or convey quantitative information” (SCANS, 1991). In their “list of categories of academic and employability knowledge and skills identified as part of the NSSB Common Framework,” the National Skills Standards Board (NSSB) states that part of the reading skill is the ability to “understand and use written information that may be presented in a variety of formats, such as text, tables, lists, figures, and diagrams...” (Herman, Bramucci, and Litman, 2000).

According to the literature views, this study induced five categories which are listening,

speaking, reading, writing and integrated abilities. We could find good communication skills are positively related to good working emotions, ability of getting along with others, and working effectiveness from above literature. Also, if employees have good listening, speaking, reading, writing and integrated abilities, they work effectively in the workplaces.

3. Method

This study focused on understanding required interpersonal communication competencies in workplaces. We used some approach as follows:

- Document analysis: according to the purposes of the study, we emphasized on literature about interpersonal relationship competencies in workplaces to collect, analyze and synthesize.
- Focus Groups: it is the most effective way to use the discussion of the group to collect information by the group leader. Hence, inviting experts to focus on communication competencies in manufacturing industries is the most effective way to build up competencies and indicators of communication. We invited six members in the group that includes two experts in academic institutes of vocational education, two experts in manufacturing industries and two experts of linguistics. First, explain the purpose of this study and give related information by a brief description; secondly, ask experts to discuss and correct interpersonal communication competencies and key indicators in listening, speaking, reading, writing and integrated abilities; finally, integrate experts' opinions and suggestions to confirm interpersonal communication competencies and indicators.
- Delphi Technique: The Delphi Technique was originally conceived as a way to obtain the opinion of experts without necessarily bringing them together face to face. First, we must determine the topics, and then develop the questionnaire by the literature and topics. The study wants to build up the competencies and indicators by the Delphi Technique.

4. Findings

We invited six members in the forum that includes two experts in academic institutes of vocational education, two experts in manufacturing industries and two experts of linguistics. The forum was held to determine how to define what abilities of interpersonal communication employees need in the workplace. The summary of the forum is as table 1.

Effective communication is essential to workplaces. If employees have positive communication skills, they will contribute to organizational productivity, enhance interpersonal relationships with coworkers and clients, and create opportunities for promotion and advancement. Therefore, most experts focus on abilities of "comprehension" of listening and reading, abilities to make a summary which belong to writing, and abilities to speak clearly and correctly; the abilities almost include that comprehending supervisors' or

customers' needs, clarifying messages received, selecting proper communication language and tools, conveying correct information to the target person, communicating basic messages in a language other than Chinese, and overcoming communication barriers and so on.

Table 1

The summary of the forum

communication competencies	
A	<ol style="list-style-type: none"> 1. Abilities of communication and coordination with customers 2. The main barrier of communication is to "comprehend" what customer needs. 3. Employees need adequate abilities to read manuals.
B	<ol style="list-style-type: none"> 1. Employees should have abilities of "reading comprehension" about projects and manuals. 2. Employees should have abilities of "listening comprehension" about what technical terms supervisors give. 3. The parts of "listening" and "reading" should be provided for basic staff, and the parts of "speaking" and "writing" should be provided for management staff. 4. Cultivating patience of listening is required.
C	<ol style="list-style-type: none"> 1. Employees should have abilities of using graphics and charts to explain professional data. 2. Employees should have own abilities of listening, speaking, reading and writing. 3. Reading and writing belong to the linguistic part, and listening and writing belong to operation in practice.
D	<ol style="list-style-type: none"> 1. Listening, speaking, reading and writing should be defined to two parts. One is for face-to-face, and the other is through the media. 2. Effective communication is to achieve consensus.
E	<ol style="list-style-type: none"> 1. Listening, speaking, reading and writing are all-round education. 2. Listening, speaking, reading, writing and integrated abilities should emphasize on respect, listening, and styles of speaking. Speaking skill is required. 3. Employees should have abilities to write down the key points and make a summary of what people say, and clearly express the content or edit the brochure from the information.
F	<ol style="list-style-type: none"> 1. Employees should have abilities to explain the steps of operation. 2. Employees should have abilities to speak out and read out technical terms in foreign language on manuals.

5. Conclusions

In this study, we used document analysis and interviews for the purpose of this study, and discussed related required interpersonal communication competences for high-level employees in workplaces. We found communication competencies should include listening, speaking, reading, and writing abilities. We also developed the following abilities of high-level technical employees after experts' discussions:

- Listening: high-level employees should have abilities to correctly evaluate, organize, identify, and master the content, process and steps of operating functional equipment. Besides, employees should have abilities to get the points from listening to machinery and equipment manuals or briefs; of course, foreign technical terms should be followed.
- Speaking: high-level employees should have abilities to correctly express and explain content of the manuals including foreign technical terms, characteristics and life cycles

of equipments, and details of management.

- Reading: high-level employees should have abilities to correctly read devices, related professional terms, papers, and manuals; of course, foreign technical terms should be followed.
- Writing: high-level employees should have abilities to correctly draw procedures of operation and motors, to use technical terms, to edit working plan, to decide what graphics, diagrams, and drafts to illustrate content of work, and to present products by papers.

6. Recommendations

Interpersonal relationship and communication has significant influence to the practical work from the literature reviews. The better people interpersonal communication competencies are, the better interpersonal relationships are. Thus it may be known that if employees want to have good performance in workplaces and get supervisors' identification, you must have good communication competencies.

Currently there are no communicative indicators for high-level technical employees in manufacturing industries. The study expects to provide communicative indicators to check if new employees have such basic competencies, and to guide courses of academic institutes as references.

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Models of English Teaching Design for Future Employees in China's Petroleum
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Models of English Teaching Design for Future Employees in China's Petroleum Production Industry

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[Abstract] Models of English teaching in non-native English speaking countries are very important in English Education, especially in the discipline of teaching English as a second language. In China, English is widely used, therefore English teaching design requires more specificity, especially for special purposes such as teaching English for industrial workers. A number of successful models used in western countries are good references for English teaching in Chinese petroleum production areas. Experience indicates that the “1+1 model” is an effective approach for teaching future oil field workers.

Here the “1+1 model” means a two-year college English study; in which the first year is designed for acquiring basic knowledge, the teaching form being mainly classroom teaching and the second year designed for site training and practices in oil fields. The model follows four basic principles: establishing a target, cultivating standards, designing and following a process, and effective evaluation. Additionally, cooperative teaching and effective learning are encouraged in this model.

Transitioning to the “1+1 model” requires not only a change in teaching methods or means, but also a philosophical shift in the concept of English instruction, that is, a move toward the realization of a “student-centered” approach, emphasizing self-study and the acquisition of practical skills. The first part of the paper is the main theory of teaching models and briefly discusses some teaching models in other countries, such as Australia's Technical and Further Education, Competency Based Education, etc. The second part describes the design of the “1+1 model” for the teaching of English to oil industry workers. The third part details the conditions the model needed for implementation and describes a method for evaluating the model.

[Key words] Petroleum Production Industry; Future Employees; Models of English Teaching;

1. Theory

China's petroleum production industry is flourishing quickly, with increasing interest in communication with foreign countries, versatile persons especially who can grasp foreign language are needed urgently. That needs a good teaching system, English teaching design comes first.

1.1 Definition of models

A model is an example of the target language a teacher shows learners to help them notice language patterns, or to encourage them to imitate. This could be a sentence, a model of an intonation pattern, or an entire text, such as an example of a writing genre

[1]. A model of teaching is a description of a learning environment, including our behavior. These models have many uses, ranging from planning lessons and curriculums to designing instructional materials, including multimedia programs^[2]. The model here means a two-year college English study; in which the first year is designed for acquiring basic knowledge, mainly with the form of classroom teaching and the second year designed for site training and practices in oil fields. The model observes four basic principles: establishing a target, cultivating standards, designing and following a process, and effective evaluation. Additionally, cooperative teaching and effective learning are encouraged in this model.

1.2 Some teaching models in other countries

1.2.1 The Australia's Technical and Further Education, TAFE

Australia's technical and further education (TAFE) system, which offers a wide range of courses providing education and training for employment at the operative, trade, and paraprofessional levels, as well as general education and literacy programs^[3]. Individual TAFE institutions (usually with many campuses) are known as either colleges or institutes, depending on the state or territory. TAFE colleges are owned, operated and financed by the various State and Territory Governments. This is in contrast to the higher education sector, whose funding is predominantly the domain of the commonwealth government and whose universities are predominantly owned by the state governments^[4]. The characteristics of TAFE is practicability, short term and low tuition fee, curricula cover all areas and with flexibility. The most important is that its curricula can fit in with the need of the market; it symbolizes the most advanced technological requirements; state government' supports make it have great advantages to guarantee the teaching quality.

1.2.2 Competency Based Education, CBE

Competency-based Education is defined as an instructional system in which competency training is at the top place, it aims to provide students with the knowledge and skills. It focuses on learner performance in reaching some specific objectives. Competency Based Education focuses on outcomes of learning. CBE addresses what the learners are expected to do rather than on what they are expected to learn about. CBE emerged in the United States in the 1970s and refers to an educational movement that advocates defining educational goals in terms of precise measurable descriptions of knowledge, skills, and behaviors students should possess at the end of a course of study^[5]. CBE is a functional approach to education that emphasizes life skills and evaluates mastery of those skills according to actual learner performance. It was defined by the U.S. Office of Education as a "performance-based process leading to demonstrated mastery of basic and life skills necessary for the individual to function proficiently in society" (U.S. Office of Education, 1978). The superiority over other approach is its competency meanwhile its emphasis on students' self study and evaluation. Although the above two each has its own background, it also has something in common, that is, practice comes first.

2. "1+1" model of English teaching design

2.1 Training goal and requirements for future employees in China petroleum

production industry

In broad sense, training goal is to transport qualified students to enterprises or companies. Qualified students here mean that they are not only qualified for their major but also for the second language, English. It is a professional training model in campus or classroom. Teachers or instructors pay more attention to their competence or ability training in their future job on the base of grasping their basic knowledge. In some way, we can say the training goal is a double aim, which symbolizes both professional knowledge and ability. Training requirement is a kind of quality control. “*University English Curriculum Teaching Request*” (issued by Department of Higher Education of China, 2007) stipulated explicitly that the purpose of university English teaching is to cultivate students’ ability to use English, especial in listening and speaking, so that they can use English effectively in their future study, work, while enhancing their self study ability and literacy level to adapt to China’s social development and international communication; to cultivate students’ ability to read, write and translate so that they can use English to exchange information. That is to say, as a student, you need to learn how to use English and can communicate with others in English. Different stages have different requirements. There are three-level requirements, elementary level, intermediate level and the advanced level requirements. These three requirements include English language knowledge and practical skills, learning strategies and cross-cultural communication and other aspects. Students are required to improve their listening comprehension, oral expression, reading comprehension, writing ability and translation. Take Daqing Oil Field (Heilongjiang Province) as an example, Daqing is the biggest oil field in China, is also one of the few largest sandstone oil fields in the world. Daqing Oil Field insisted on talents’ first, science and technology is at the top of its developmental strategy; human resources achievement as its first resources. One of the developmental strategies to construct international competitive transnational enterprise groups is talents’ training. According to survey, Daqing Oil Field has a set of talents’ training system, for example, it has “professional instructors” mechanism, professional instructors are experts in oil field; sign training agreement with young technicians; different training subjects, etc. It works well, but in some way, it is a big cost, it can not satisfy all the needed posts, especially the post related to using English language. University and enterprise cooperation is a good choice. It paves a good way to English teaching design. Not only does Daqing Oil Field need talents with excellent English, but also other oil fields need talents for their development. China petroleum industry needs someone who knows not only his career, his specialty, but also his English proficiency.

2.2 “1+1” models

2.2.1 Definition

In most universities in China, the subject, English is taught through all the four years, two-year-basic English, two-year specialized English. “1+1” models here mean one-year the basics of English learning which including listening, speaking, reading and writing; one-year language training, two years study and practice is a cycle. The first year is module 1 and the second year module 2. According to the syllabus in our

university, students need to fulfill requirements in general level during the first year; teachers pay more attention to students' basics of English. The second year is to improve their comprehensive ability to use the language. It cycles. The third year is a new start, but it has differences in curriculum. It comes to a higher level, the fourth year, the highest level.

2.2.2 Training process

From general level to the highest level, training process is very important. Module 1 is mainly carried out in classroom. According to the requirement for future employees, we need to establish corresponding teaching models. First, we establish experimental class A and B at random; meanwhile choose some control classes to contrast. Experienced teachers are chosen to become an experimental team. The curriculum of experimental class A and B is set according to training modules, which feature with task-based, double-targeted language teaching.

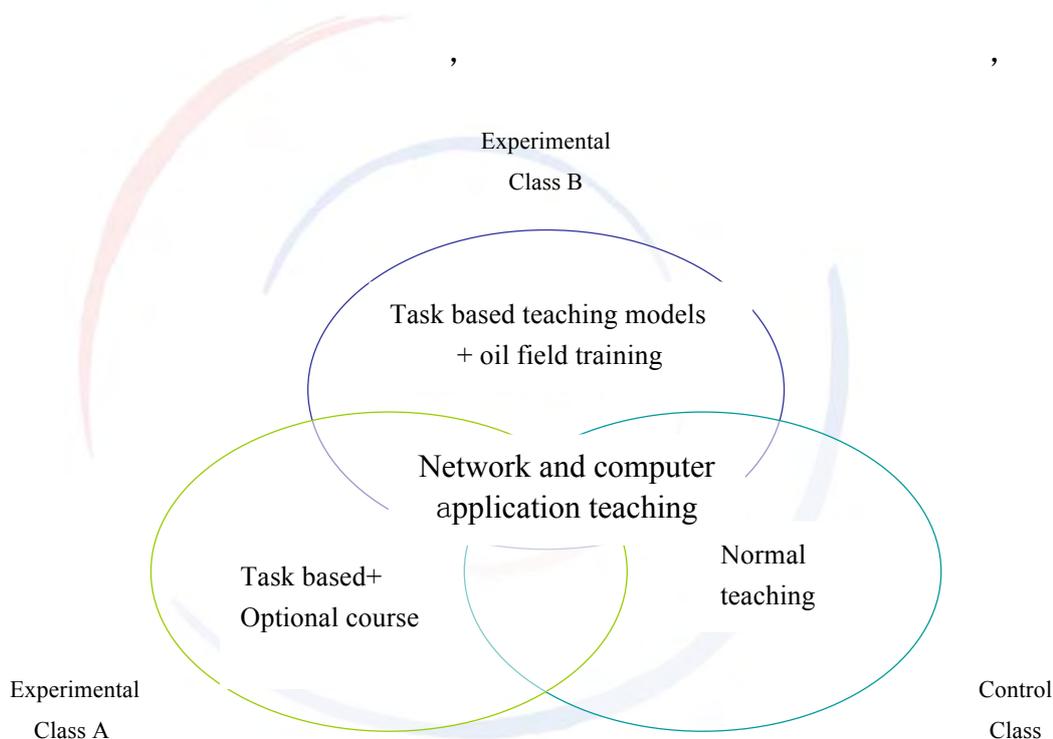


Figure 1

Computer Networks and Internet have been growing rapidly in China. They play a key role in all aspects of modern society including, of course, language education. In Figure 1, no matter in which class, networks and computer application teaching method is used, which makes language teaching more efficient. In control class, normal teaching model is used as other normal classes, in which computer networks and internet are not used in teaching. The advantages of using networks and computer application teaching are that students and teachers are free to log on the course at any time and anywhere. In experimental classes, language learning is divided into two

parts: one is viewing, listening and speaking; the other is reading, writing and translating, all the learning activities and practices can be done in campus local area network. We use front text books which online courses are included, students become the center of the class. In experimental class A, there is an optional course for students; in experimental class B, students have access to training in oil fields. Then we set up a set of files for each student, then compare the experimental results, meanwhile set up a set of teaching system, which including students' study, self-assessment, evaluation from faculty, teaching effects and training effects, etc. Module 2 is mainly stressed on the cooperation between campus and enterprises. The key point is to establish a set of cooperating mechanism. Selecting a training center in Daqing oil fields, a series of teaching and training criterion, quality control and evaluation system are built according to enterprise personnel standard and evaluation criterion. For example, language training in experimental class A is mainly hold in site for extemporaneous translation and language laboratory simulation training; but in class B, there is .only language laboratory simulation training. Procedural and terminating evaluation is used here. So teaching design is critical to the whole teaching process. Teaching design needs to act according to the different knowledge type and different class to carry on. The modern cognition psychology summarizes the knowledge for declarative knowledge, procedure knowledge and strategic knowledge, different knowledge type need different teaching design. It is critical that teachers train first.

2.3 Implemental condition and evaluation

2.3.1 Implemental condition

It is critical that school authorities support the program, with the supervision and support from school and the active participation of enterprises, the oil field teaching modules can be guaranteed. Most of all, experimental classes should be equipped with experienced teachers who are trained in advance. We chose 4 teachers of different age group, two of them have site translation experiences; one is good at oral expressing; one has the experience of studying abroad. The four are all good at language theory and computer networks.

2.3.2 Teaching assessment

Teaching is a complex and personal activity that is best assessed and evaluated using multiple techniques and broadly-based criteria^[6]. Teaching assessment is a broad term that includes testing, it is an assessment of whole teaching activity. Effect on teaching is mainly discussed here, which is carried out by formative assessment and summative assessment. Formative assessment of teaching can be carried out by teachers and instructor in site, for example, put questions to students in classroom, give students assignment regularly, a quiz, unit examination, etc. The purpose of assessment is for instructors to find out what changes they might make in teaching methods or style, course organization or content, evaluation and grading procedures, etc., in order to improve student learning^[6]. Summative assessment is to measure learners' achievement. The purpose is to form a judgment about the effectiveness of a course. In our university, each academic term should have a test. We design different assessing ways in general, such as appraisal designs between students, students to teachers, student's self-appraisal, teacher's self-appraisal, enterprise to university. The

most important is to react positively to the feedback from all the assessment.

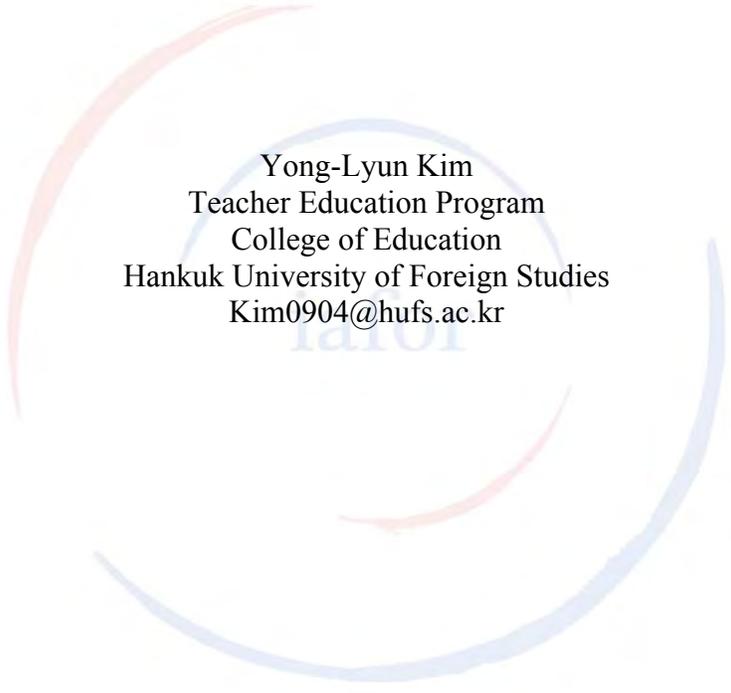
3. Conclusion

“1+1”model of English teaching design is just a point by contrast to education. It is a try to design oil-field teaching models in university. It can connect campus and enterprises together. Other countries success in training talents enlighten us that education is a big project, it needs government’s support and participate, it needs support from different communities.

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Tacit Learning for Women's Career Development to the School Superintendency



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Career development can be defined in two primary ways: 1) as the type of formal education and preparation a person receive, and 2) as the type of informal learning (tacit learning) a person gains through career experiences and professional relationships. Using these definitions, the purposes of this study are: 1) to investigate the effect of career mobility factors on women school administrators' career development and 2) to identify how the relationship between the factors and women's career development varies across two participant groups – aspiring and non-aspiring women central office administrators for the superintendency. For the data analysis, this study employs Structural Equation Modeling (SEM) statistics. As a conclusion this study confirmed that tacit learning from direct job experience and indirect experience gained from professional relationships has a greater effect than formal education and training on women's career development. This effect of the factors, however, varied according to their aspiration to the superintendency.

The literature focused on gender issues in the school superintendency has been growing for two decades. Tallerico (1999) divided studies of women and the superintendency into three categories: profiles, patterns, and practice. These categories respectively identify the 1) disproportionate numbers of women to men superintendents, 2) different career pathways (pipelines) of women superintendents as contrasted with their men counterparts, and 3) limitations facing women who wish to be superintendents. With the issue of women in the superintendency many studies have produced findings related to job characteristics, leadership styles, and the professional perceptions of incumbents rather than issues related to career development to the superintendency (Maienza, 1986; Brunner & Grogan, 2007). In particular, studies that identify the relationship between determinant factors and women's career development are rather unusual.

Kim and Brunner (2009) found that women travel career pathways to the superintendency are different from men's pathways. While many men administrators work in line-role positions and move vertically up to the superintendency, women generally travel through staff roles and their career mobility patterns are more often horizontal. Discussions of the different career paths taken by women begin to touch on the topic of career development, but rarely do these discussions note the variations in the women's preparedness for career development such as formal and informal learning. With a blind eye toward the question of what constitutes superior preparation, differences between one who are in the superintendency and the other who are school administrators (except superintendents) could result in explicit variation in preparation profiles and candidates' capacities for superintendency positions. In order to provide fuller explanations regarding whether variation in career mobility patterns affect women's movement into the superintendency, research must be focused on factors of career development and their possible relationship to superintendency access.

Career development can be discussed in two primary ways: 1) as the type of formal education and preparation for a career that a person receives; and 2) as the type of informal learning related career experiences—experiential, or tacit learning—a person encounters (Nestor-Baker & Hoy, 2001; Reber, 1989; Wagner, 1987; Wagner & Sternberg, 1985). Formal learning, such as educational credentials is generally assumed to have a positive impact on career development, especially on entry levels of career mobility (Bills, 1988; Spilerman & Lunde, 1991; Useem &

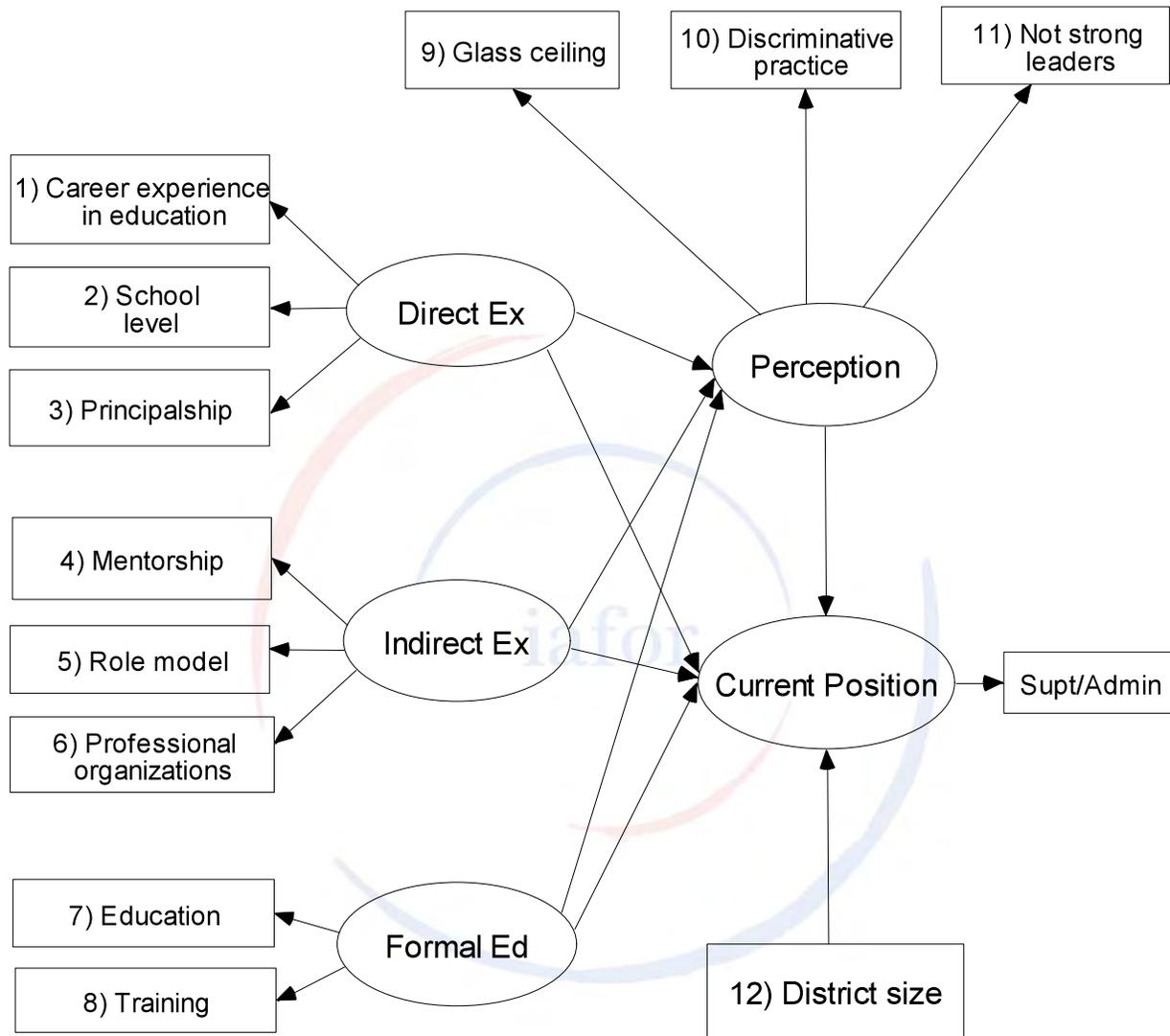
Karabel, 1986; Wernick, 1994). However, it is not clear whether this factor has a consistent impact on the processes of career mobility toward top leadership positions such as school superintendency.

As informal learning, the acquisition of tacit knowledge has been perceived to make a difference in the effectiveness of leadership practices as well as the process of career development (Bjork & Mueller, 2006; Reber, 1989; Wagner & Sternberg, 1985). The focus of the studies has been to confirm the sources and means of the acquisition of tacit knowledge; how tacit knowledge could be acquired from real-world experiences (Bjork & Mueller, 2006; Nestor-Baker & Hoy, 2001; Reber, 1989), rather than tacit knowledge itself; what kind of tacit knowledge is exactly needed for leadership practice and career development. This study also consider the acquisition process of tacit knowledge as one way of informal learning which constructs a knowledge structure with regards to career development.

This study aims to investigate what kinds of preparation and experiences (career mobility factors) make a difference between women superintendents and women central office administrators (including aspiring and non-aspiring women administrators to the superintendency) in their career development. In addition, this study identifies how the relationship between career mobility factors and women's career development varies across the women's groups whose aspirations to the superintendency differ. For this purpose, career developmental factors will be investigated by comparing women superintendents, first, to aspiring women central office administrators, and second, to non-aspiring women central office administrators. The analysis of this study employs four conceptual career mobility factors: 1) *direct career experiences on the job*, 2) *indirect career experiences from professional human relationships* – these two career mobility factors concern tacit learning, 3) *formal education and training* – this factor relates to formal learning, and 4) *personal perceptions of discrimination in the selection and hiring processes*¹ – this is a factor which may or may not mediate the relationship between other mobility factors above and women's career development.

¹ For distinction from general descriptions, career mobility factors and indicators of this study are marked with italics throughout the whole paper.

Figure. Initial Model of Hypothesized Relationships between Career Mobility Factors and Women’s Career Development



Variable Label & Name

- 1) Career experience in education
- 2) School level of first administrative position
- 3) Principal experience
- 4) Mentorship
- 5) Role model
- 6) Professional organizations actively belong
- 7) Education - highest academic degree
- 8) Professional training experience
- 9) Perception of glass ceiling in selection
- 10) Perception that school boards do not actively recruit women
- 11) Perception of school boards that women are not strong leaders
- 12) District size

Data Source and Research Design

Data Collection

The database of American Association of School Administration (AASA) membership and Market Data Retrieval (MDR) were combined to ensure that the surveys reached both AASA members and non-members. The whole population of 2,500 women superintendents mailed surveys. In addition, 3,000 women holding (school district) central office positions of assistant superintendent or higher were randomly selected from the combined database and mailed surveys in August 2002.

Approximately 5,500 surveys were mailed to samples and 1,301 completed surveys were returned (23.7 percent of return rate): 723 superintendents (28.9 percent of return rate) and 578 central office administrators (19.3 percent of return rate). Nearly 30 percent of the total population of women superintendents is represented in this study, while approximately 20 percent of women central office administrators in the sample is represented.

Analysis and Hypotheses

This study investigates the relationship between career mobility factors and women's career development toward the school superintendency. Structural Equation Modeling (SEM) is used to identify the indirect effect which may occur via mediator factor (*personal perception of discrimination* in the study) as well as direct effect of the factors on women's career development.

The data collected from the survey was entered into the Statistical Package for Social Sciences (SPSS) 15.0 software for descriptive analysis, and the statistical software program of Analysis of Moment Structures 7.0 (AMOS) for inferential analysis. To compare group differences, the present study conducted three structural equation modeling (SEM) tests with the same predictors (the four conceptual factors and one controlling variable – district size) but with different dichotomous dependent variables, three combinations of women's groups: Group A includes women superintendents and overall central office administrators including aspiring and non-aspiring women administrators to the superintendency. Group B consists of women superintendents and aspiring women central office administrators, and Group C includes women superintendents and non-aspiring women central office administrators.

The research hypotheses are grounded in two primary assumptions about women's career development and the four conceptual (latent) career mobility factors. First, the study assumes that four conceptual mobility factors directly relate to women's career development. Second, the impact of the factors associated with learning preparedness could be influenced by personal perception of discrimination in the selection and hiring processes. Thus, women's personal perception functions as a mediator variable in the relationship between career mobility factors (learning preparedness) and women's career development. The hypotheses based on these assumptions follows:

Hypothesis 1. Direct effect – four latent factors are directly related to the current administrative position of women (being a superintendent or central office administrator).

Hypothesis 2. Indirect effect – the statistical effects of *direct experience*, *indirect experience*, and *formal education and training* on women's career development are mediated by *personal perception of discrimination in the selection and hiring processes*.

Hypothesis 3. Group differences – all relationships and effects of career mobility factors

vary across the three targeted groups of this study; superintendents, aspiring women administrators, and non-aspiring women administrators.

The result of CFA attested the validity and reliability of the model (Kline, 1998). CFA is generally used to determine the quality and dimensionality of scale and statistical model construct in terms of face validity, reliability, and internal consistency (Harms & Biocca, 2004). The CFA result of this study with 11 indicators revealed all acceptable values across the indices of the model fit: $\chi^2 (29) = 54.0$ ($p < .05$, Joreskog's value = 1.9)²; GFI = .99; NFI = .96; CFI = .98; RMSEA = .03. One thing that should be notified is that the indicator of *role model* is excluded from the analysis because of the low factor loading (-.2.5) that could cause serious damage to model construct validity. Finally, the 11 variables of the structural model were used for subsequent analyses in this study.

Results

For hypothesis 1, the model tested linear relationships between the career mobility factors and women's career development (being a superintendent or a central office administrator), controlling for *district size*. The same model but with different group combinations tested hypothesis 2 and 3. For hypothesis 2, both direct and indirect effects of the factors were checked across three model tests. As the last step of the analysis, hypothesis 3 was tested by comparing the group of women superintendents to aspiring and non aspiring women central office administrators.

Direct Effects of Career Mobility Factors

Hypothesis 1. Four latent factors are directly related to the current administrative position of women (being a superintendent or central office administrator).

All values of the model fit indices in this model test were acceptable: $\chi^2 (45) = 150.8$ ($p < .001$, Joreskog's value = 3.4); GFI = .98; NFI = .92; CFI = .94; RMSEA = .043. Examination of beta coefficients indicated that three career mobility factors, including *direct experience on the job*, *indirect experience from human relationships*, and *personal perception of discrimination in selection processes*, had significant direct effects on women's career development (see Table 2). More specifically, among the factors in this analysis *indirect experience* had the strongest positive effect on women's career development ($\beta = .18$, SE = .43, $p = .014$), whereas no significant effect of *formal education and training* was found ($\beta = .10$, SE = .13, $p = .101$). This result pointed out that the two groups (women superintendents and women central office administrators) had an obvious difference in terms of human relationships for career

² Note that a Chi-square statistics of 54.0 on 29 degrees of freedom in this CFA has a small p-value indicating some lack of fit. However, because the chi-square test of absolute model fit is sensitive to sample size of the input variables (Weston & Gore Jr., 2006), investigators often turn to various descriptive fit statistics such as NFI and CFI to assess the overall fit of the model. According to Joreskog (1969), one way to address the concern about chi-square being sensitive to sample size is to divide the obtained chi-square by its respective degrees of freedom, and the outcome should generally be less than 5. For this CFA model the calculation yielded the acceptable value (1.9). χ^2 s throughout the analyses in this study (the model tests for Group A, B, and C) have the Joreskog's values that are all less than five.

development (*indirect experience* which were measured by *mentorship* and *professional organization experience*). However, formal education measured by *highest degree* and *training experience* was not a significant factor in this study, which means that women central office administrators had about the same level of education and training experience as did the women superintendents, so this factor did not explain well the variation of career difference between the groups.

Thus, partial support was provided for hypothesis 1, where *indirect experience* and *direct experience* had positive effects on women's career development, while personal perceptions of discrimination had a negative effect on career development ($\beta = -.10$, $SE = .03$, $p = .000$). In more general terms, the more indirect and direct experience women administrators have, the greater their job opportunities for the superintendency, and the lower their perceptions of discrimination, the more likely they will gain the superintendency. Also, this study found no significant difference in *formal education and training* between the groups.

In addition, a strong negative effect of *district size*, the controlling variable, on the women's career development was found ($\beta = -.39$, $SE = .007$, $p = .000$), indicating that while women central office administrators generally work in large school districts, women superintendents have their current positions in comparatively small school districts. Finally, an examination of the squared multiple correlations ($R^2 = .291$) indicated that four career mobility factors and district size accounted for 29.1 % of the variance in women's career development (being a superintendent or a central office administrator) in this model test for Group A.

Table 1. Direct, Indirect, and Total Effects of Career Mobility Factors

	Variable Name	Direct Effects	Indirect Path	Indirect Effect	Total Effect
Group A	Indirect Experience	.177*	Indirect Ex → Perception → Current Position	-.014	.163
	Direct Experience	.128**	Direct Ex → Perception → Current Position	.000	.128
	Formal education	.102	Formal Ed → Perception → Current Position	.000	.102
	Personal Perception	-.102**			-.102
	District Size	-.393**			-.393
Group B	Indirect Experience	.099	Indirect Ex → Perception → Current Position	-.008	.051
	Direct Experience	.059	Direct Ex → Perception → Current Position	-.016	.084
	Formal Education	.087	Formal Ed → Perception → Current Position	-.002	.085
	Personal Perception	-.190**			-.190
	District Size	-.330**			-.330
Group C	Indirect Experience	.172*	Indirect Ex → Perception → Current Position	.001	.176
	Direct Experience	.175**	Direct Ex → Perception → Current Position	-.005	.167
	Formal education	.140*	Formal Ed → Perception → Current Position	.000	.140

Personal Perception	-.035	-.035
District Size	-.382**	-.382

Note: ** $p < .01$, * $p < .05$

Indirect Effects of OCM Factors

Hypothesis 2. The statistical effects of direct experience, indirect experience, and formal education and training on women's career development are mediated by personal perceptions of discrimination in the selection and hiring process.

The model tests for three women's groups also checked the indirect relationship between career mobility factors and women's career development, which were mediated by the *personal perception of discrimination in the selection process*. The result from the model test for Group A indicated that although *indirect experience* had a modest effect on personal perception ($\beta = -.014$, $SE = .55$, $p = .068$), no statistically significant indirect effects of all factors including *indirect experience* were found. In the similar fashion to the result of this model test, no indirect effects were significant in both model tests for Group B and C.

The factor of *personal perceptions of discrimination* slightly mediated the effect of the *direct experience on the job on the current position* (-.016 for Group B and -.005 for Group C), but both were not significant (see Table 2). This result suggested that women's formal and tacit learning preparation for career development to the superintendency did not have significant influence on their personal perceptions of discrimination in the selection and hiring processes, and these perceptions did not mediate the relationship between their learning preparation and career development. Thus, no support was provided for hypothesis 2 in these three model tests.

However, the result of the descriptive data analysis of this study illustrated a different aspect of women's perception of discrimination. The analysis yielded relatively high mean scores for corresponding survey questions asking about the personal perception across the three targeted groups (see the section of Perception of Discrimination in Table 3), which means that women in educational administration generally had strong perceptions of gender-biased discrimination in the selection and hiring processes. Finally, these two results supported the idea that although women, regardless their current positions, have strong and negative perceptions of discrimination in selection processes, these perceptions did not significantly explain the relationship between their formal/informal learning preparation and career development.

Table 3. Mean scores of variables

Variable Label	Mean (SD)		
	Super-intendents (n = 723)	Aspiring administrators (n = 203)	Non-aspiring administrators (n = 340)
Direct Experience			
1) Educational Experience	5.85 (1.46)	5.92 (1.55)	5.44 (1.78)
2) School Level of first administrative position	3.34 (1.99)	3.59 (1.95)	3.82 (2.04)
3) Principalship Experience	3.66 (1.86)	2.45 (1.84)	2.01 (1.53)
Indirect Experience			
4) Mentorship	.73 (.44)	.60 (.49)	.60 (.49)
5) Role Model	.24 (.43)	.37 (.48)	.39 (.49)
6) Professional Organizations actively belong	3.42 (1.44)	3.19 (1.48)	2.73 (1.31)
Formal Education & Training			

7) Education – highest academic degree	3.34 (.86)	3.30 (.87)	2.94 (.95)
8) Professional Training experience	4.32 (1.83)	4.07 (1.76)	3.83 (1.73)
Perception of Discrimination			
9) Perception of glass ceiling in selection	1.91 (.73)	2.15 (.73)	1.91 (.71)
10) Perception that school boards do not actively recruit women	2.02 (.73)	2.26 (.74)	1.98 (.75)
11) Perception of school boards that women are not strong leaders	2.91 (.76)	2.34 (.69)	2.13 (.76)
12) District size	3.44 (1.66)	4.67 (1.80)	4.89 (1.89)

Note. 1. Subtotal does not add up to 1301 (total) because of missing (35) in the question about aspiration to the superintendency.

Group Differences in the Relationships

Hypothesis 3. All relationships and effects of career mobility factors vary across the three targeted groups of this study; superintendents, aspiring women administrators, and non-aspiring women administrators.

The result of the model test for Group B indicated that some indices values did not meet the general standard of the model fit: $\chi^2(45) = 168.2$ ($p < .001$, Joreskog's value = 3.7), GFI = .97; NFI = .86; CFI = .89; RMSEA = .053. The values of NFI and CFI were below .90 and RMSEA was higher than .05, indicating a poor fit (Weston & Gore Jr., 2006). On the contrary, all indices values of the model test for the Group C were higher and better than the acceptable levels: $\chi^2(45) = 152.7$ ($p < .000$, Joreskog's value = 3.4); GFI = .98; NFI = .90; CFI = .93; RMSEA = .047. The squared multiple correlations (R^2) for current position (dependent variable) in this analysis were .187 for Group B and .333 for Group C. Compared to the model for Group A ($R^2 = .291$), the model for Group C had more power in explaining the relationship between career mobility factors and women's career development, while the model for Group B had less power in explaining the relationship than the models for Group A and C. Considered that the dependent variable had a dichotomous value in these model tests, these results regarding the model fit indices and the squared multiple correlations reflected that there were obvious group differences between superintendents and non-aspiring administrators (Group C) in terms of four career mobility factors, but relatively small differences between the group of superintendents and aspiring administrators.

Table 4. Comparison of Goodness-of-Fit Measures and R^2 s

Tests	χ^2 (df)	GFI	NFI	CFI	RMSEA	R^2
Test for Group A: (Supts + Aspiring + Non-aspiring)	150.8 (45) P = .000	.98	.92	.94	.043	.291
Test for Group B: (Supts + Aspiring)	168.2 (45) P = .000	.97	.86	.89	.053	.187
Test for Group C: (Supts + Non-aspiring)	152.7 (45) P = .000	.98	.90	.93	.047	.333

As an indicator of the direct effect, standardized regression weights (coefficients) of career mobility factors varied across the three targeted groups. In the model test for Group B, only *personal perceptions of discrimination* was the significant factor among the four career mobility factors. The coefficient value of *personal perceptions* increased by negative .088 from that of the model for Group A (see Table 5), which means that aspiring central office administrators generally more perceive glass ceiling, discriminatory practices, and gender-biased perceptions of school boards in selection processes than the group of superintendents. However, the coefficient

values of the other career mobility factors became diminished and not significant in the test for Group B, indicating that the factors of *direct experience*, *indirect experience*, and *formal education* were not significant factors in explaining the group differences between superintendents and aspiring administrators in their career development. Therefore, this result supported that these two groups had similar characteristics in terms of their learning preparation that included both formal and tacit learning for career development.

The result of the model test for Group C included an apparently opposite pattern to the previous analysis for Group B in the relationship of the factors. There were three significant career mobility factors: *indirect experience*, *direct experience*, and *formal education and training*, whereas *personal perceptions* was not significant in this analysis. This result demonstrated that the characteristics of non-aspiring administrators were typically different from those of superintendents in terms of these three career mobility factors pertaining to formal and tacit learning preparation for career development. Interestingly, the significance of *formal education and training* for Group C had changed from the models for Group A and B, which suggested that when comparing superintendents and non-aspiring administrators, *formal education and training* became a significant factor explaining group differences in women's career development. The impact of *personal perceptions* had also changed in this analysis. Non-aspiring women administrators generally perceive less gender discrimination in selection processes than do superintendents and aspiring women administrators. In addition, *district size* had a consistent and negative impact on women's career development across the model tests.

Table 5. Group Comparison with Standardized Regression Weights

Coefficients (Direct effects)	Group A	Group B	Group C	Critical Ratios		
				A - B	A - C	B - C
Indirect Ex	.177*	.099	.172*	.825	.056	.743
Direct Ex	.128**	.059	.175**	1.258	-.659	1.848
Formal Ed	.102	.087	.140*	.071	-.180	.237
Perception	-.102**	-.190**	-.035	1.444	-.1.524	2.884*
District Size	-.393**	-.330**	-.382**	-2.438*	-.884	-1.582

Note. If critical ratio is greater than or equal to 1.96, then the coefficient is significant at the .05 level.

Finally, partial support was provided for hypothesis 3, namely all effects of career mobility factors on women's career development vary across the targeted groups in this study. As far as indirect effects of three career mobility factors associated with learning preparation, no evident indirect effects of the factors mediated by *personal perception of discrimination* were found across the groups. Regarding the direct effects of the factors, the relationships and the strength of the factors' impacts were changed across the groups, especially, the model test for Group B had the diminished coefficients (direct effects) of all factors except *personal perceptions*. The group of aspiring administrators generally had similar characteristics to the group of superintendents in terms of formal and tacit learning experiences for their career development, but they had the strongest perceptions of discrimination in selection processes among the groups in this study. The model test for Group C, however, yielded apparently different results from the model test for Group B. The group of non-aspiring women administrators had different characteristics to the group of superintendents in formal and tacit learning preparation for career development, whereas there was no significant difference between the two groups in *personal perceptions of discrimination in selection and hiring processes*.

Conclusion and Recommendations

Conclusion

Tacit learning could be a way to explain why some people reach higher leadership positions, such as the school superintendency, than others. As this study affirms that women superintendents more likely learn successful know-how about their career management from professional relationships and job-oriented experiences, so tacit learning becomes more influential factor in women's career development to the top leadership position in educational administration than formal learning. However, this result does not necessarily mean that formal learning is unimportant in career development. Rather, this study implies that educational credentials and professional training are generally considered as required qualifications in the process of career mobility to top leadership positions.

Although some studies have proposed a positive and strong relationship between formal education and career advancement (Spilerman & Lunde, 1991; Useem & Karabel, 1986; Wernick, 1994), the outcome of this study reminds us the literature that affirms academic intelligence acquired through formal education tends to be overestimated in the evaluation of job performance, leadership effectiveness, and one's career management (Nestor-Baker & Hoy, 2001; Wagner & Sternberg, 1985). Meanwhile, tacit learning in contrast to formal learning has been underestimated, especially in the process of career mobility to top leadership positions. Indeed, considered that career development is a matter of well-balanced preparedness for future mobility, tacit learning, in addition to formal learning, should be one of the primary ways to achieve career goals.

When preparing for career development, therefore, it is necessary to think about how to strategically develop one's career by building an effective human network and accelerating job-related experiences as well as fulfilling required qualifications. For example, women's professional experience and knowledge in line-role positions such as principalships significantly helps to improve their practical knowledge and job opportunities for career development. In this respect, it is also important for educational service providers to ensure how to embed the components of tacit learning into the curriculum of educational programs (formal learning) for school leadership such as superintendent certificate courses.

Recommendation

Based on the findings of the present study and limitations of the data set, several recommendations may be helpful for future studies. First, the investigation of career mobility factors in this study was conducted with only women administrators. For gender comparisons, future research could include data for both genders to provide more gendered-information in relation to career development to the top leadership positions. Second, it is important to develop a well-rounded survey questionnaire that fits on the purpose of the study and contains appropriate questions (indicators) for career path/development. Using affluent and appropriate indicators enable a study to produce more reliable and accurate outcomes. Third, this study focused on the influence of tacit learning for one's career development. The future study could center more on how to facilitate tacit learning in the settings of formal education for school leadership and career development such as principal and superintendent certificate programs.

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Implicit, stand-alone or integrated graduate attributes for Undergraduates: an analysis of program outcomes

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Implicit, stand-alone or integrated graduate attributes for Undergraduates: an analysis of program outcomes

Abstract

The purpose of this paper is to measure the change in program outcomes that result from the introduction of an integrated approach to the teaching of graduate attributes in an undergraduate degree. Following on from two case studies taken between 2005 and 2009 (MacVaugh & Jones, 2009) in the UK university sector, the method applied here is a statistical analysis of grade distribution; pass rates, and progression of learners through their (various) management related degree programs within one of the two business schools between 2006 and 2010. This analysis exposes a clear divide in success between those who began with an integrated attributes program and the comparatively poorer performance of those who began with a stand-alone skills course. Given that this divide takes place within the same faculty, with learners from differing programs sharing core modules (providing something akin to a control group) the findings provide original quantitative evidence supporting the existing qualitative work in the field. The contribution of the paper is to highlight the measurable value of privileging academic skills in the curriculum planning process and the need to make these explicit for the learner.

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Introduction

In any end-of-term module, course or departmental meeting it is common to hear tutors bemoan falling standards in graduate attributes. Classic examples such as problem identification, thesis development and support, clear writing, answering set questions, oral presentation and communications, and appropriate referencing are among those most often critiqued. Of course poor ability in such skills is not for want of research and writing on the topic. For example, since the popularisation and expansion of higher education in the UK and elsewhere, there has been a parallel explosion in the number of pedagogic texts, journal articles and websites available offering advice on graduate attributes education. Given that many educators are now contractually obliged to engage with this research as part of staff or professional development, and given that many first year undergraduate students are often specifically taught academic 'skills,' it seems appropriate to evaluate the ways in which pedagogic research has informed teaching practice.

Graduate attributes have been referred to by a number of terms including graduate attributes, generic attributes, transferrable skills and core skills. Each term reflects a slightly different understanding of the concept. However, the term graduate attribute is used here to denote a broad range of skills, values and dispositions with which a student will leave university that are not specifically technical or disciplinary. Examples include critical thinking, various forms of literacy, interpersonal skills problem identification, thesis development and support, clear writing, answering set questions, oral presentation and communications, and appropriate referencing. These range from highly complex conceptual attributes to more concrete skills. The present paper focuses on foundation academic skills such as essay and report writing, formal presentations, desk research, critical reading and evaluation of media and other published materials, and teamwork/team building skills.

By examining the literature in this area, it is possible to see why an institution, faculty or individual educator may be drawn to one side or another of this well-trodden debate. On the one hand is the argument that graduate attributes are inseparable from the discipline in which they are enacted (Marginson, 1994). Some reasons include: that it is often difficult to remove performative skill from declarative content in many disciplines; that such removal reduces student motivation, and that research focused academics value such attributes less than discipline specific mastery. On the other is the argument that some skills such as critical thinking can be taught separately (for example Norris, 1992). This stems from the reasoning that such skills have an intrinsic existence that is separate from disciplinary content. Further it is argued that such skills have a transferable value in the workplace; and that some academics lack the experience and/or motivation to adequately teach academic skills alongside their subject specific knowledge. A consequence of this is the suggestion that 'stand alone' programmes are appropriate to support a diverse profile of higher education students,

The following sections debate the value of teaching academic skills via 'integration,' 'separation' or in some cases 'not at all.' In doing so the literature review argues for the need to develop a more grounded, understanding of graduate attributes and their teaching as academic skills. It suggests the need to situate the teaching of academic skills within the curriculum in a way that is informed by the local (institutional and departmental) culture and by the learning needs of students.

Following on from two case studies taken between 2005 and 2009 (MacVaugh & Jones, 2009) in the UK university sector, the method applied here is an analysis of module means, standard deviations, and the progression of learners through their

(various) management degree programs within one of the two business schools between 2006 and 2010. Changes in academic skills courses offered during the period of investigation are highlighted in table 1, and overviews of success indicators from core modules in the program are presented in tables 2-5.

The findings demonstrate that students who participated in an 'Integrated' skills program in their first year; one that has specifically set out to teach graduate attributes integrated with the learning outcomes of the modules making up the core curriculum of the faculty, have significantly higher performance in core modules shared with student who began with 'Not Integrated' skills courses (and those who took none at all). This illustrates the efficacy of the newer integrated design. The conclusions are written primarily for Educators and those involved with Higher Education management, who will find the analysis an appropriately robust defence of skills integration over the too common (and polar opposite) practices of skills being taught separately or in some cases, not at all.

The graduate attributes debate and the teaching of academic skills

Interest in the skills acquired by learners in higher education has increased in the last two decades. 'Graduate Attributes' are increasingly prominent in the modern university. They are becoming evident in the publication of statements of attributes that learners will achieve upon completion of their studies and in the inclusion of attributes in subject or course outlines. Despite this overt interest however, there remains conflicting research into the ways in which such attributes are conceptualised, located within the higher education curricula, and rendered explicit in such a way that they may be taught.

Universities regularly include lists of attributes on their web pages or prospectuses. These lists may include: cognitive, analytic and problem solving skills, rational inquiry, ability to confront unfamiliar problems; capacity for independent critical thought; and self-directed learning; openness to critiques of received wisdom; ability to express ideas orally and in writing; ability to participate as a team member. At a subject level, graduate attributes are frequently included in subject or course outlines or objectives, often as a mandatory institutional requirement and so are given significance in the curriculum. After more than ten years, graduate attributes are still of central interest in the higher education literature and many of the key issues remain unresolved (Barrie, 2004, 2006; Bath, Smith, Stein, & Swann, 2004; Butler, 2006; Gilbert, Ballatti, Turner, & Whitehouse, 2004; Kreber, 2003; Leggett, Kinnear, Boyce, & Bennett, 2004; Mills & Sharma, 2005; Phillips & Bond, 2004; Sumsion & Goodfellow, 2004; Tapper, 2004).

Bennett et al. (2000) discussing generic skills, defines them as those skills which can support study in any discipline and which can potentially be transferred to a range of contexts, in higher education or the workplace. However, there several problems associated with notions of graduate attributes including questions of definition and the possibility of transferability. All these questions raise doubts as to what the term attribute refers, and how much commonality there is amongst the various stakeholders in their understanding of the term.

There are three broad approaches to helping learners develop the variety of explicit skills typified by the term Graduate Attribute: *embedded*, which involves the skills being developed within the curriculum; *stand-alone* in which the skills are developed in free standing modules rather than integrated into the curriculum; and *work placements*, which are aimed at developing learners' work related skills (Drummond et al. 1998). The embedded approach to teaching academic skills, (with

the associated problem of some educators *not* embedding them), is probably the one most frequently used in higher education. Proponents of stand-alone teaching of skills argue that there are clearly identifiable features of many graduate attributes such as critical thinking, team work, communication skills that make it possible to practice them in a concentrated and focused manner, which can then be utilised across a range of disciplinary areas. There is an influential and long running debate in the literature on critical thinking regarding its generalisability (Davies, 2006; Ennis, 1992; McPeck, 1981; Norris, 1992). Ennis and Norris, for example, are proponents of the view that critical thinking is a skill and can be taught independently of content². Further, many academic staff will argue that large classes, content heavy courses and limited contact time mean that teaching staff do not have the time or experience needed to teach skills and in many cases do not consider it to be part of their role (Jones, 2009) and hence that many academic skills should be taught separately from content.

However there are a number of powerful arguments for the embedded teaching of skills. The first is the limited transferability of such skills. The idea of transfer is taken to mean that skills learned in one context can be used in another context (Misko, 1995). There is evidence to suggest that transferability of academic skills is limited (Barnett, 1994; Lilly, 1995; Lohrey, 1995; Marginson, 1994; Misko, 1995; Perkins & Salomon, 1994) and Misko (1995) clearly points to the failures of transfer of skills from education to the workplace. What is apparent is that if transfer is to take place, the skills of transfer must be explicitly taught (Misko, 1995; Perkins & Salomon, 1994).

The second factor is that many learners are assessment-driven (Biggs, 1999) and so unless skills are taught in a way that is central to the curriculum and valued through assessment practices, they will not be taken seriously by learners and given marginal status. Thus in many existing curricula the graduate attribute *is* discipline mastery; such as a deep understanding of Tort Law, rather than the tools used in its acquisition and use, such as Para-legal skills, critical thinking, problem solving etc. in the case of professional Law degrees.

The third factor is that graduate attributes often appear to exist in relation to content knowledge. Regarding critical thinking for example, McPeck (1990) argues that disciplinary knowledge already contains the essence of critical thinking. Further, Smith (1992) points out that that one of the key elements of critical thinking is knowledge and that it is not possible to think critically unless one has knowledge of the topic. In other words, critical thinking and problem solving are carried out using a particular body of knowledge and all the conventions accompanying it. There is a considerable body of evidence both empirical and theoretical to suggest that graduate attributes are part of disciplinary knowledge rather than isolated from it (Alexander & Judy, 1988; Baron & Sternberg, 1987; Nickerson, Perkins, & Smith, 1985).

But the debate should not necessarily be characterised by its extremes. Davies (2006) has shown how critical thinking, to continue the example, is at least in part a general skill that can be taught independently of the discourse of the disciplines. Davies (2006) argues that the split between generalists (associated with the teaching of stand-alone skills) and specificists (who would have skills taught specifically within their discipline) is unhelpful and proposes instead an integrated approach that

² An example of material designed to teach critical thinking external to disciplinary content is the 'Rationale' program (see Austhink <http://www.austhink.com/rationale/>).

combines the two. This has strong face-validity as educators from both traditions agree that what is of prime importance is that the objectives in teaching such skills are made clear to learners, but that they will only be understood if applied in relevant contexts.

Method

Following the approach espoused by Davies (2006) 'Southwest University' began to organise graduate attributes in the Business and Management program in a way that was both explicit but also embedded. The first attempt to codify this experience began in 2008 with a research question: *How does the use of an 'embedded skills' or a 'skills taught separately' approach support the learning objectives of an undergraduate Business and Management program?* Earlier work into Graduate attributes has suggested that some of the barriers to the teaching of attributes include their often tacit nature, their separation from disciplinary understandings and a lack of understanding about the nature of these attributes (Jones, 2009). The findings of that study (MacVaugh and Jones, 2009) addressed these problems through the suggestion that an 'Integrated' approach; i.e. one that integrates the explicit teaching espoused by the stand-alone method and the close association with disciplinary knowledge championed in the embedded approach, better supported Business and Management learners.

From 2006-2010, Southwest University Business and Management learners were increasingly taught academic skills in an overt and transparent way that arose out of and was integrated with disciplinary knowledge. The module and group of associated activities came to be named 'Management Development' in 2009. At Southwest learners benefited from the opportunity to first *understand* academic skills and then *enact* them in real and meaningful tasks, specifically coursework assigned in other modules. In parallel, other learners in the business school (such as those from Accounting, Joint or Combined studies) did not take the integrated module, but rather may or may not have participated in a traditional, university wide (stand-alone) skills module known as 'Study Skills'.

While collecting data about the business and management learners' experiences we also noted ancillary data that suggested learners on other programs found coursework on common modules in the faculty more challenging. In fact, towards the end of the study many personal tutors were suggesting that some learners elect to 'audit' (take without credit awarded) the Integrated module to improve their academic skills. The department of Marketing was a notable exception in that in 2009 they began their own integrative skills program. Synthesising the findings from the initial study and the literature (above) leads us to propose:

P1: Learners who participated in 'Integrated' skills modules will achieve better marks on assignments in other modules at level one (whose form or practice had been discussed in the Integrated skills module) than those who had not.

P2: Learners who participated in 'Integrated' skills module will achieve better marks on assignments at levels two (where these assignments mirror the skills whose form or practice had been discussed in the Integrated skills module) than those who had not.

This can be summarised in our major research question (MRQ):

MRQ: To what extent has the introduction of an Integrated approach to the teaching of Academic Skills changed the performance outcomes of learners on the Business and Management program?

To that end the method applied is a mix of both the original qualitative data and a recent quantitative analysis. It follows the pattern: identify the key changes to the business faculty's curriculum that can be obtained from the original case study data; make comparisons of course results at level 1; make comparisons of course results at level 2, and highlight other significant outcomes not suggested in the original case.

Findings

Southwest case study review:

A review of the academic skills course materials from 2005 provided the starting point for research at Southwest University. The materials describe a 12-week 'Study Skills' module, originally designed centrally by the university in 2001, which includes taught sessions and practical seminars. The content was tied to a well known study skills text, and covers a broad range of student activity including: report and essay writing, research and library work, time keeping, examination preparation, Harvard style referencing, and note taking. The Business and Management demarcated version of the module was, itself, not a compulsory element of the degree program, but was only substitutable for another similar module from within the university scheme. The 2009 study (MacVaugh and Jones) categorises this module as 'stand alone.' Thus in 2006 the only academic skills education offered to learners in the business faculty was 'Study Skills' or in a few instances, none at all.

Although the next stage in the research was a planned review of the 2006/2007 module results, a follow up interview with several level-one tutors was scheduled in 2007 following information that the current module leader was giving up the role (MacVaugh and Jones, 2009). At the meeting of module tutors the formal module review agenda was abandoned in favour of a discussion of the future of 'skills' given two significant problems: 'lack of application' of the skills learned by learners at levels two and three, and 'poor attendance' at the skills sessions during the last four weeks of the semester. The memo written after this meeting concludes that a 'stand alone' module tends not to deliver academic skills that can be applied across different modules and was considered 'less valuable' to learners than working toward content module assessments. For the 2007/2008 run, the newly appointed study skills module leader changed the method of delivery to an approach linked to the course assessment for HT101 (Organisational Behaviour), a core requirement for all learners in the faculty. Thus in 2007-2008 there were three academic skills routes offered to learners in the business faculty 'Study skills,' 'Business and Management Study Skills' or in a few instances where learners joined the faculty at level two or three, none at all. In 2008/9 the study skills program integrated not only HT101 assessment preparation, but also the academic skills implicit in other modules, such as BM101 (The Management Environment).

In the final phase there was a further interview with level-one tutors (MacVaugh and Jones, 2009). They revealed that during 2008/2009 a new Business and Management degree program had been developed that in 2009/2010 would replace the existing program. This has important implications for year one as the University had decided to move from a ten 'short' modules in a split year system to either eight short modules or four 'year long' ones. In many faculties and courses this led to the dropping of 'Study Skills' from degree programs, the 'including' of such skills within

other first year modules, or the development of discipline related skills modules. The Business and Management program chose instead to extend their skills program, to include the current 'integrated' skills content, work placement preparation, and to act in conjunction with academic tutoring to provide weekly support in small groups. In terms of the old scheme this a 20% increase in learner contact time applied to the development of Graduate Attributes. The new program (named Management Development) further integrated with the curriculum by supporting both the updated Business and Management modules and a new, year long, integrated project which allows learners to demonstrate ability in the Graduate attributes that were an explicit part of the curriculum. Table 1. (Below) provides a timeline of the integration of Business and Management curriculum aims with the historic Study Skills program:

Program/Academic Year	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010
Business and Management (Also incorporating the International Business and Human Resource specialisms)	BM160, a version of the university wide XX160 'Study Skills' module	BM160, a version of the university wide XX160 'Study Skills' module	BM160, stand alone but revised to support HT101, a core module in the business school	BM160, stand alone but revised to support several common modules in the business school	BMN101, an integrated year long program that supports assessment and personal development across most elements of the curriculum
Joint honours within Faculty (Media, Tourism, Leisure, Hospitality, Business Information Technology)	BM or XX160 'Study Skills' module	BM or XX160 'Study Skills' module	XX160 'Study Skills' module. (New BM160 not available)	XX160 'Study Skills' module (New BM160 not available)	Must take skills module if offered in joint program (BMN101 not available)
Joint honours outside of Faculty (Sports Science, Psychology, Social Sciences, Combined Studies)	BM or XX160 'Study Skills' module	BM or XX160 'Study Skills' module	XX160 'Study Skills' module (New BM160 not available)	XX160 'Study Skills' module (New BM160 not available)	Must take skills module if offered in joint program (BMN101 not available)
Accounting and Financial Management programs	BM160, a version of the university wide XX160 'Study Skills' module	BM160, a version of the university wide XX160 'Study Skills' module	FM160, a version of the university wide XX160 'Study Skills' module	FM190, a stand alone year long program that supports personal development	FM190, a stand alone year long program that supports personal development
Marketing and related programs	BM160, a version of the university wide XX160 'Study Skills' module	BM160, a version of the university wide XX160 'Study Skills' module	MM160, a version of the university wide XX160 'Study Skills' module	MM160, a version of the university wide XX160 'Study Skills' module	MM190, field specific but integrated with faculty curriculum
Business and Management level 2/3 entry	Should have credit for an 'equivalent' module	Should have credit for an 'equivalent' module	Should have credit for an 'equivalent' module	Should have credit for an 'equivalent' module	Should have credit for an 'equivalent' module

Table 1. A summary of academic skills provision by degree cohort: Darker shading indicates increasing integration of skills with core of the Business School's curriculum

Statistical data analysis:

The qualitative analyses present two possible paths for exploring the effect of changing from a stand-alone approach to an integrated one. The first is to treat each module taught in each year as an independent event. The second is to aggregate the modules taught as stand alone in one category and those taught as integrated in another. In the first instance the data were processed as a set of independent events. This showed differences between learners studying different degrees, but many pair wise comparisons made interpretations difficult, and gave more detail than is necessary to answer the research question.

The qualitative data points to the use of the second approach, combining modules into 'integrated' and 'not integrated' categories gives results that are easier to interpret.

Integrated: BM160 from 2007/2008, BMN101, MM190

Not Integrated: BM160 until 2006/2007, MM160, other XX160 modules from across the business school

Where data was not available for which study skills module a learner had taken it was assumed that they had taken a non-integrated equivalent module. This was the case for learners taking their first year modules before 2005/2006, learners transferring to 'Southwest University' in their second year from abroad, and learners who took other study skills modules from across the university. Marks are recorded as a percentage score where 40% is a pass and 70% is the level needed for a first. 95% significance tests are used in all cases.

P1: Learners who participated in 'Integrated' skills modules will achieve better marks on assignments in other modules at level one (whose form or practice had been discussed in the Integrated skills module) than those who had not.

When performing t-tests with independent samples, the first step is to use Levene's test for equality of variances to determine whether the two groups can be assumed to have equal variances or not. Where this test shows a significant difference in the variances of the two groups, equal variances cannot be assumed in the t-test. In this case, equal variances could not be assumed for MM101 and BMN104. Following this, t-tests showed a significant difference for HT101 with a significance level of 0.002. The differences for MM101 and BM101 were positive but not significant (0.107 and 0.576 respectively). BMN modules were only available in 2009/2010 and so very few learners took these modules and not BMN101 (the integrated study skills module), meaning that these results were not significant (BMN102: 21; BMN103: 21; BMN104: 3; BMN105: 0). Table 2 (below) highlights the average marks achieved on these common modules from the Business School by learners categorised by their participation in an Integrated or Not Integrated skills module:

		ht101_mark	mm101_mark	bm101_mark
Not Integrated	Mean	43.9	50.4	43.8
	N	454	113	436
	Std. Deviation	17.14	18.31	19.69
Integrated	Mean	48.3	53.6	44.7
	N	200	142	186
	Std. Deviation	15.68	12.23	17.92
Total	Mean	45.2	52.2	44.0
	N	654	255	622
	Std. Deviation	16.82	15.28	19.17

Table 2: Marks achieved in core modules at level one by two cohorts, those participating in Integrated or Not Integrated skills modules.

BM101 does not show a significant difference between learners taking Integrated and Not Integrated study skills modules but, as discussed, the study skills module was not specifically integrated with this module until 2008/2009. Splitting the study skills modules further by which modules they were integrated with gives the following results. An ANOVA test was used as there are more than two groups for comparison. This was significant at 0.042, with the highest learning outcome from learners who took BM160 in 2008/2009. The difference between those taking BM160 in 2007/2008 and Not Integrated modules was not significant. Table 3 (below) indicates that learners who took the study skills module now integrated with BM101 gained significantly higher marks than those who did not.

		bm101_mark
Not Integrated	Mean	43.8
	N	436
	Std. Deviation	19.69
BM160 0708	Mean	41.2
	N	91
	Std. Deviation	18.99
BM160 0809	Mean	48.1
	N	95
	Std. Deviation	16.22
Total	Mean	44.0
	N	622
	Std. Deviation	19.17

Table 3: Performance of student on BM101 indicating an increase in mean scores for student taking the 0809 version of BM160

Further, BMN102 was designed to replace and build upon the content of BM101 and BMN103 that of HT101. Combining marks from these modules means that BMN102 and BMN103 can have a larger control group for comparison. Repeating the previous procedure, Levene's test for equality of variances showed that equal variances could be assumed for HT101/BMN103 but not for BM101/BMN102. Table 4 (below) shows the result of t-tests indicating that learners taking an integrated module perform better than those taking a Not Integrated one (both at 0.001 significance level).

		ht101_bmn103_mark	bm101_bmn102_mark
Not integrated	Mean	44.1	44.4
	N	475	457
	Std. Deviation	16.91	19.49
Integrated	Mean	48.0	48.8
	N	312	298
	Std. Deviation	15.72	17.41
Total	Mean	45.7	46.1
	N	787	755
	Std. Deviation	16.55	18.81

Table 4: Learner performance on comparative core modules at level one from 2006-2010, indicating better performance where learners have taken an Integrated skills module

P2: Learners who participated in 'Integrated' skills module will achieve better marks on assignments at levels two (where these assignments mirror the skills whose form or practice had been discussed in the Integrated skills module) than those who had not.

Since the newer BMN coded (rather than BM) modules have only been running for one academic year, no learners taking these modules have finished any second year modules yet, so the comparison is between those taking the integrated BM160 or MM190 and stand alone study skills modules. Levene's test showed that equal variances could be assumed for BM203, BM206 and MM203, but not for HT201 and FM205. The t-tests were significant for BM206 (0.015) and HT201 (0.006).

		bm203_ mark	bm206 _mark	ht201 _mark	mm203_ mark	fm205_ mark
Not Integrated	Mean	48.4	45.4	49.9	52.9	42.3
	N	432	125	331	314	178
	Std. Deviation	15.47	16.57	18.62	13.85	20.43
Integrated	Mean	49.6	53.2	54.0	54.5	36.2
	N	140	34	149	128	19
	Std. Deviation	14.08	15.35	13.42	12.80	27.91
Total	Mean	48.7	47.1	51.1	53.3	41.7
	N	572	159	480	442	197
	Std. Deviation	15.14	16.58	17.27	13.56	21.25

Table 5: Learner performance in common modules at level two indicating generally higher performance for those who participated in Integrated skills modules at level one.

Table 5 (Above) shows that four out of five second year modules show higher marks from those learners who took an integrated skills module, although the marks for BM203, MM203 and FM205 are not statistically significant.

MRQ: To what extent has the introduction of an Integrated approach to the teaching of academic skills changed the performance outcomes of learners on the Business and Management program?

Our results suggest that the introduction of an integrated approach to the teaching of academic skills has increased the performance outcomes of learners in the Business and Management program in both first year and second year modules. In particular where the Integrated module has specifically taught the skills indicated by the module outline for a content module, the performance of learners has markedly increased. We suggest that superior performance in core modules due to preparations at level one empirically supports the value of teaching integrated yet explicit skills. This modular performance providing a better chance those learners develop broader Graduate attributes resulting from their participation in the program as a whole.

Conclusions

This paper has considered the teaching of academic skills and argues that what is most important is the careful integration of the both the content and the context that informs the curriculum (Jones, 2009). Earlier work into graduate attributes has suggested that some of the barriers to the teaching of skills include their tacit nature, their separation from disciplinary understandings and a lack of understanding about the nature of these attributes. The work done by Southwest University takes an important step towards addressing these questions in a way that fits with the particular conditions of that university. The integration between stand alone and embedded in this case means that learners are taught skills in an overt and transparent way that arises out of and is integrated with disciplinary knowledge. Thus learners are given the opportunity to understand the skills first, and then enact them in real and meaningful tasks.

Beyond that which was exposed in the case study of Southwest University (MacVaugh and Jones, 2009) this paper has provided robust evidence of the correlation between participation in an integrated skills course and success in other modules in a degree program. This is not simply the case in the year of the skills support, but also has a visible effect into year two of the program where no such support is provided. These results can be considered impressive given the large cohort sizes of the program, which usually result in lower course averages; and because the shift has also influenced other departments within the faculty to change their skills programs in a similar manner.

While the findings presented in this paper are encouraging there are, however, some limitations to the study. The approach presented at Southwest is still new and so the findings presented here are tentative. It will be important to measure the performance of learners who participate in the new Management Development program when they attempt core faculty modules at level two. Further we found it difficult to gain a statistically significant analysis of year three modules, as at this level departmental cohorts tend to take specialist modules with small class sizes rather than modules common to the faculty as a whole. Also, while the number of learners in the sample is sound (N value is well over 2000 for core modules), the sample is taken from a single faculty. Hence the findings must be interpreted with some caution. A further limitation of the study is that it does not include the student voice (though this is part of our ongoing work) and hence the judgements about the success or otherwise of the programmes is presented from a program management rather than student perspective.

There are a number of implications that arise from this study. The first is the value of including graduate attributes in the planning process and making the needed skills overt for the learners whenever possible. In the Integrated skills module at Southwest University learners were specifically asked to apply skills to assessments assigned in other modules. This brought the curriculum designed 'behind closed doors' to the forefront of the student's attention. Second is the value of linking the teaching of skills to the common or disciplinary curriculum. With the Southwest case, we have demonstrated a measurable change where departments have reorganised academic skills education to reflect the content seen as core to the entire program. The third implication is the need to consider the barriers to the operationalisation of graduate attributes in each particular context and hence to examine the ways of overcoming these barriers in a creative way. This can take a number of forms and this paper suggests that a move from stand-alone teaching or an 'implicit' approach to an embedded one is a valid option; especially when attempting to overcome student's 'strategic learning' when it tends to favour working towards assessed goals rather than broader scheme aims (Biggs, 1999).

We are aware that similar suggestions exist within the higher education community, but feel they are important to restate here in conjunction with our analysis given that the implementation of such suggestions often face the barrier of "faculty budget" holder(s). At this point the many and well known qualitative arguments; such as engagement and class participation (Gilbert et. al, 2004) for spending money on academic skills fall away as finance advisors demand quantitative evidence of their worth. In the case of Southwest University the personal tutorial team successfully used the data above to support the argument for more contact hours in the Management Development program at a time when other departments were closing their comparable skills courses. We feel that this paper should go some way to providing support for others involved in the graduate attribute debate, and are keen to hear of other examples exploring the use of integrated programs to support attributes development.

In our future research we plan to examine the ripple effects of the move to not only integrated attributes education, but also to a more integrated and active learning-led program as a whole. We are aware of a growing number of business programs in the UK with similar goals (Gosling and Mintzberg, 2006; Parrott, 2009). For our part we are currently in the process of measuring student outcomes in second and third year modules at Southwest University as they become increasingly tied to core faculty themes, rather than specialised depending on the research area of the faculty member teaching the course.

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A Case Study: Four English Professors' perspectives and Pedagogical Practices

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Oral Presentation



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Introduction

In this research I study what professors believe about the role of discussion in learning, why they advocate this approach, and what specific techniques they use to support discussion in their university classrooms.

According to Sharan B. Merriam (1988) "A qualitative case study is an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit." Hence, John W. Creswell (1994) states that "A qualitative study is defined as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting." In addition, Denzin and Lincoln (1994) emphasize that qualitative research involves an interpretive, naturalistic approach to its subject matter.

In this study, I pursue the qualitative case study principle and have placed emphasis on understanding through looking closely at people's words, actions and records. In addition, I examine the patterns of meaning which emerge from the data presented in the participants' own words. My task, as a qualitative researcher, is to find patterns within those words or actions, and to present those patterns for others to consider, while remaining as exact as possible in recording the world of the participants as they experienced it.

I aspire to discover patterns which emerge after close observation, careful documentation, and introspective analysis of the research topic. This study relies much on descriptive case analysis since it examines specific phenomena, within the pedagogy practices of professors at a private prestigious research university in the U.S.A.

Literature Review

The values of classroom discussions for students' learning are plentiful. Kenneth E. Eble writes (1988), "discussion develops the individual skills of formulating and expressing ideas and opinions. Discussion offers the opportunity for widening the student's perception of learning and of ways of learning and for making distinctions in the use of fact, opinion, belief, rumor, proof, value judgments, and the like" (p. 88).

Joyce Gall and Meredith Gall (1990) claim that research has found that the discussion method is effective for five types of students learning outcomes: 1) general subject matter mastery, 2) problem-solving ability, 3) moral development, 4) attitude change and development, and 5) communication skills (p. 25).

Barbara Gross Davis (1993) asserts that "class discussion provides students with opportunities to acquire knowledge and insight through the face-to-face exchange of information, ideas, and opinions. A good give-and-take discussion can produce unmatched learning experiences as students articulate their ideas, respond to their classmates' points, and develop skills in evaluating the evidence for their own and others' positions" (p.63).

Stephen Brookfield and Stephen Preskill (1999) suggest that conversation invites students to practice the dispositions of hospitality, participation, mindfulness, humility, mutuality, deliberation, appreciation, hope, and autonomy. In addition they suggest that classroom discussions help students to: 1) explore a diversity of perspectives; 2) increase students' awareness of and tolerance for ambiguity or complexity; 3) recognize and investigate their assumptions; 4) encourage attentive, respectful listening; 5) increase intellectual agility; 6) learn the processes and habits of democratic discourse; 7) develop the capacity for the clear communication of ideas and meaning; 8) develop skills of synthesis and integration (pp. 22-23).

William Ewens (2003) stresses that "compared with the traditional lecture method, discussions elicit higher levels of reflective thinking and creative problem solving, including synthesis, application, and evaluation. There is also evidence that information learned through active discussion is generally retained better than material learned through lecture" (p. 27).

Joseph Lowman (1995) stresses that:

"A useful classroom discussion, unlike a dormitory bull session, consists of student comments separated by frequent probes and clarifications by the teacher that facilitate involvement and development of thinking by the whole group. Dynamic lecturers captivate a class by the virtuosity of their individual performances. Exemplary discussion leaders accomplish the same end by skillful guidance of the group's collective thinking processes" (p. 159).

McKeachie and Kulik (1975) review research at the university level comparing the efficiency of lecture and discussion in encouraging students' learning and claim that the discussion pedagogy is more helpful than the lecture approach for inspiring students to have a positive view of learning as well as an incentive to learn.

David Bridges (1988) asserts that discussion is concerned with the development of knowledge. He believes that discussion is more serious than conversation in that it requires the participants to be "mutually responsive" to the different views expressed as well as to be disposed to or "affected by opinions one way or another in so far as they merit acceptance or approval" (p. 15). Stephen Brookfield (1991) also notes that "discussion is one of the most effective ways to make students aware of the range of interpretations that are possible in an area of intellectual inquiry" (p. 18). Roland Tharp and Ronald Gallimore (1988) emphasize that as students interact during discussion, they construct an understanding of the topic. Peter Frederick (1994) stresses "the fundamental value of discussions is that through them students develop a sense of ownership and responsibility for their own learning" (p.100).

While discussions can be effective in helping students think critically about what they are learning (Bridges, 1988; Brookfield & Preskill, 1999; Ewens, 2003; Frederick, 1994; Lowman, 1995; Welty, 1989), fostering effective discussions can be challenging (Brinkley, et al., 1999). To have effective discussions, professors must know what goals they wish to reach and plan appropriate strategies to attain those goals (Davis, 1993; Welty, 1989).

Participants

I invited professors of literacy, language or humanities, teaching at a research university in the U.S.A. to participate in this study. Participants of both genders were invited. After sending out eighty recruiting emails and after having talked to more than ten prospective participants face-to-face in their offices, four professors agreed to participate in this study.

Methods of Data Analysis

In order to understand each professor's take on discussion as a method of teaching I asked each: (1) why they advocated this teaching method, (2) what strategies they used, and (3) what they thought they had learned about leading discussions over time.

I used a constant comparative method (Glaser & Strauss, 1967) to analyze each individual case. Each individual case was first treated as a comprehensive case in and of itself. Later I did a cross-case analysis attempting to build a general explanation that fits each of the individual cases, even though cases vary in detail (Yin, 1994, p.112). I specifically looked for why professors said they advocate discussion as a method of teaching; how professors incorporate discussion in their classroom and what strategies they use to do so; how professors form discussion questions; how professors conduct discussion; how professors encourage participation; what, in these professors' minds, make a good discussion leader and a successful discussion; and what environmental factors influence classroom discussions.

Using Interview Data to Understand Individual Participant's Perspectives and Pedagogical Approaches to Classroom Discussion

This study examines each of my 4 participants' perspectives and beliefs about discussion as an approach to university teaching. Data in this study are taken from each participant's interview transcripts, their course syllabi, and their teaching handouts. Data have been organized to focus on my research questions. These categories are: 1) reasons for advocating discussion as a method of teaching, 2) strategies used to incorporate discussion in the classroom; 3) characteristics of a successful discussion leader and of a successful discussion, 4) techniques used to encourage participation, and 5) classroom environmental factors that support discussion. Each individual participant's case has an introductory profile, a general set of reflections on his/her teaching, followed by a discussion of these five categories. In order to protect the anonymity of the participants, all participants are identified by pseudonyms. Exact titles of participants' courses have not been given; instead, a more general description has been provided to preserve participants' anonymity. I have also cited outside sources, where applicable, that support observations and insights that are made.

Discussion and Findings

My analysis of these interviews generated six categories: (1) reasons for using discussion as a major vehicle in teaching, (2) strategies for incorporating discussion into one's teaching, (3) characteristics of a good discussion leader, (4) characteristics of successful discussions, (5) strategies for supporting participation, and (6) important classroom factors.

A Closing Commentary

Faculty research and publishing achievements also have the potential to support or enhance classroom discussions. Most of my participants agreed that a command of one's subject matter is a fundamental to success using a discussion method of teaching. This is supported in the literature as well (see Brinkley, et al., 1999, p. 36; Welty, 1989, p.42). Being well prepared for each class session is just one part what it means to get ready to teach using discussion as the major tool. A good discussion leader must be able to explain difficult topics in down to earth ways complete with examples, details, analogies, and metaphors. They must present facts and

concepts from related fields and be able to present and discuss viewpoints other than their own. Overall, they must keep their focus on the student and value each student's ability to think independently about issues. These conclusions are also supported by past research, particularly as they relate to respecting students as individuals (Barnes, Christensen & Hansen, 1994, p. 27).

Importantly, each of my participants wished that they had had help learning to teach using discussion as the major method of instruction. Each of them talks about how they learned over time and how over time they learned to prepare in important ways. Importantly, participants in this study say they are ready and willing to share their teaching experiences and pedagogical insights.

Participants' Beliefs about Various Classroom Discussion Strategies (Organize by Popularity)

Participants Beliefs	Dr. Malone	Dr. Clark	Dr. Doyle	Dr. Thurtle
Questioning	√ (**strategies mentioned as important)	√ (strategies mentioned as important)	√ (strategies mentioned as important)	√ (strategies mentioned as important)
Lecturing	√ (strategies for incorporating the discussion method)	√ (strategies for incorporating the discussion method)	√ (strategies for incorporating the discussion method)	√ (strategies for incorporating the discussion method)
Faculty development and training	√ (characteristics of a good discussion leader)			
Ample room, space to move around	√ (ideal environment)	√ (ideal environment)	√ (ideal environment)	√ (ideal environment)
Enhance cognitive development and effective learning	√ (reason listed as why use discussion)	√ (reason listed as why use discussion)		√ (reason listed as why use discussion)
Supports an openness to other perspectives		√ (reason given for using discussion)	√ (reason given for using discussion)	√ (reason given for using discussion)
Active engagement	√ (element of successful discussions)	√ (element of successful discussions)	√ (element of successful discussions)	
Questioning (as a form of participation)		√ (strategies which encourage participation)	√ (strategies which encourage participation)	√ (strategies which encourage participation)
Technology support		√ (one aspect of an ideal)	√ (one aspect of an ideal)	√ (one aspect of an ideal)

		environment)	environment)	environment)
Listening and encouraging	√ (characteristics of a good discussion leader)			√ (characteristics of a good discussion leader)
Supportive atmosphere		√ (characteristics of a good discussion leader)	√ (characteristics of a good discussion leader)	
Knowledgeable		√ (characteristics of a good discussion leader)	√ (characteristics of a good discussion leader)	
Shared, authentic purpose	√ (element of successful discussions)			√ (element of successful discussions)
Listen closely; accept all responses	√ (strategies which encourage participation)			√ (strategies which encourage participation)
Ability to sit face to face, see participants eye to eye	√ (ideal environmental aspects for classroom discussion)			√ (ideal environmental aspects for classroom discussion)
Scaffolding			√ (strategies for incorporating the discussion method)	
Tolerate different opinions		√ (characteristics of a good discussion leader)		
Relaxed atmosphere		√ (element of successful discussions)		
Sense of caring and concern		√ (element of successful discussions)		
Common content				√ (element of successful discussions)
Calling on specific students		√ (strategies which encourage participation)		
Raising the level of conversation		√ (strategies which encourage		

by adding new information		participation)		
Engaging in give and take		√ (strategies which encourage participation)		
Business like atmosphere			√ (ideal environmental aspects for classroom discussion)	

**I interviewed professors as to what strategies they used. The information in the parentheses is the category of questions that were asked. In this instance, “What strategies do you use to incorporate the discussion method in your classroom?”

Conclusion

This qualitative case study has attempted to understand how four professors perceive and go about facilitating discussion in their university classrooms. A constant comparative method of data analysis – both within-case and cross-case analysis -- has been used. I have moved back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation. I began with one professor, her interview, the observations and field notes I made, and the teaching materials I collected. I then compared this professor profile against other professors from the same data set. These comparisons lead to categories that were then compared within and across cases. Comparisons were constantly made within and between levels of conceptualization with the result being the model I flesh out here. I see a model as a visual aid or picture which highlights the main ideas in a process or system. The model presented in this chapter includes words and diagrams intended to give an understanding of classroom discussion as a key to effective teaching. I was particularly interested in understanding what beliefs need to be in place as well as to identify what teaching strategies support discussion in the university classroom.

Findings from interview data suggest that there are lots of reasons to advocate for discussion as a major teaching method in college classrooms. Dr. Malone believes that classroom discussion is a way for student to embrace what they have experienced in their reading. Dr. Clark thinks classroom discussion is most effective when conducted as a two-way process. Dr. Clark sees classroom discussion as a provisional act; something someone engages in on the way to reaching a conclusion. And, Dr. Thurtle sees discussion as mirroring learning; showing students how one idea builds upon another.

Beliefs

Below is a listing of the key things professors said they believed about discussion as a teaching method:

- ✓ Active engagement in key to learning (Professors said they took a student’s ability to discuss what was read as evidence of learning);

- ✓ In order for discussion to work as a teaching method, students and instructors must share a common experience (or text), students and instructor need to be interested in pursuing the world of ideas, and students and instructors need to be willing to engage each other;
- ✓ Knowledge is something learners construct rather than something teachers impose;
- ✓ Discussion is seen as the provisional act one engages in on the way to reaching a conclusion;
- ✓ Good discussions encourage in-depth understandings;
- ✓ One should not answer each and every question that a student might have about a topic under discussion;
- ✓ Allowing students to answer some question on their own encourages creativity and critical thinking;
- ✓ The most important characteristic of a good discussion leader is the ability to listen to what other people are saying;
- ✓ Good discussion leaders need to be able to ask challenging questions;
- ✓ Discussion mirrors learning in that students can see how one idea builds upon another.
- ✓ Classroom discussions are most effective when they are conducted as a two-way process;
- ✓ Knowing student names support discussion;
- ✓ A good discussion leader is polite, open-minded, and always ready to support students who have risked sharing their opinions;
- ✓ A good discussion leader should have two characteristics: the ability to be neutral and the ability to listen;
- ✓ A relaxed and friendly atmosphere is important;
- ✓ Grades for classroom participation are not necessary;
- ✓ The classroom environment is important; an ideal environment should be roomy and have a table around which everyone can sit and face each other. If no table is available, a circle allows students to exchange ideas with each other easily;
- ✓ Space is important as sometimes ideas need to be dramatized to be understood;
- ✓ Media (LCD projector, screen, television monitor, playback unit, and computer) is important as it opens up new ways to present materials and it gives students new ways to understand the material being covered;
- ✓ It is important to use one's course syllabus to provide a structure for discussion;
- ✓ Silence, as a strategy, promotes discussion;
- ✓ The use of humor often enlivens a faltering discussion;
- ✓ One way to organize instruction is by listing topics and questions for discussion; This also helps professors and students stay on track;
- ✓ Assigned readings and pop quizzes make students aware that they are responsible for knowing the course material.

Practices

While beliefs are important, classroom observations reveal that practices often trump beliefs. Despite what they said, the following principles seem to guide practice:

- ✓ Keep class size small;
- ✓ Learn student names;
- ✓ Arrange the room to facilitate face-to-face interactions;

- ✓ Use course syllabus to structure the course and delineate responsibility;
- ✓ Give students ownership of the class by allowing them to make some key decisions (Just remember that you have to live with what they decide so don't offer them the opportunity to make decisions you can't live with!);
- ✓ Use the blackboard to create a daily agenda and to make the day's events predictable.
- ✓ Use handouts to structure the class and keep students organized;
- ✓ Help students get organized by walking students through the course schedule and the course requirements;
- ✓ Provide background information as a way of beginning conversations;
- ✓ Use technology to make abstract concepts concrete;
- ✓ Provides demonstrations of how one systematically thinks through problems in the discipline being taught;
- ✓ Provide lots of opportunities for students to apply analysis strategies they have been taught through class demonstrations;
- ✓ Keep lectures short and use them to introduce students to key piece of vocabulary and key ways of thinking through the materials in this discipline;
- ✓ Use questions to raise the level of conversations;
- ✓ Use wait time to allow students to organize their thinking and to respond;
- ✓ Restate questions if students do not seem to understand what are being asked;
- ✓ Support students as they attempt to answer questions raised by others;
- ✓ Scaffold students responses when it is obvious they are having difficulty responding.
- ✓ Use humor, eye contact, and wait time to signal that you are listening;
- ✓ Restate what you have heard;
- ✓ Draw generalizations from specific examples which students can understand;
- ✓ Accept partial and incomplete attempts at answering questions;
- ✓ When things do not go as expected, change directions and consider approaching the topic from a new direction;
- ✓ Use drama to enact difficult pieces of text and to support student understanding;
- ✓ Assume a particular student's question is everyone's question unless it is obvious that that isn't the case;
- ✓ Use graphics to demonstrate how people in this discipline think through problems in a systematic fashion;
- ✓ Assume comprehension until you have reason to assume otherwise;
- ✓ Accept and encourage multiple interpretations;
- ✓ Do not move ahead and leave students who are having difficulty understanding behind.
- ✓ Put off questions which distract;
- ✓ Restate and summarize what students have said so that it is clear to the class;
- ✓ When students generate a new insight (one you hadn't thought of before) give them the praise that is their due;
- ✓ Before moving on to a new topic or closing down a conversation make sure that everyone has understood the major points and are more or less on the same page;
- ✓ In preparation for tomorrow's lesson, overview the new material that students will be encountering;
- ✓ Use evaluation techniques that ask student to synthesize what they have learned and that operate to extend the conversation that has been going on in the class;

- ✓ Use technology (like email and blogging) to extend conversations that have been started in class.

All four participants argue that using a discussion method of teaching enhances students' critical thinking. They also argue that because of this single characteristic, discussion as a teaching method has more merit than other teaching pedagogies. Making discussion central to one's teaching requires advance preparation of one's syllabus, the effective use of questioning strategies, and the ability to scaffold student learning. Further, the physical classroom environment is important. Furniture needs to allow for face-to-face interaction. Class size needs to be kept small. Technology needs to be available to support and extend classroom conversations.

Each of the participants in this study worked to refine their ability to teach via class discussion through self-evaluation of their teaching over an extensive period of time. They all learned to consider students' opinions, needs and interests first when designing their courses. They take students' evaluations of their courses seriously and use students' comments to help them make changes. Respect for students and a desire to help them learn are seen as major goals.

In their interviews, all say that they have faced and have accepted the challenges that come with electing to teach via discussion. One of these challenges is isolation as all say that they have had to develop their classroom techniques alone rather than through discussion or collaboration with colleagues. Drs. Malone and Doyle reported that they developed their discussion pedagogy through replication and modification of the techniques they experienced from the teachers they had themselves in college. Drs. Clark and Thurtle say they learned how to teach using the discussion method through trial and error.

Factors That Affect Classroom Discussion

My research data suggests that there are three key components to a discussion method of teaching: 1) beliefs; 2) practices; and 3) environment. While I summarize all of the beliefs that these professors held above, for the most part a good discussion leader believes that learners want to learn. He or she also believes that talking about an issue leads to a deeper understanding of that issue and in this way teaching and learning is enhanced. Good discussion leaders also have skills. While I have summarized the strategies that these professors used above, what is clear is that they know how to ask important questions and support learning by keeping the conversation going. This is not always easy and their learning is never complete. Environment is a third essential. Class size, space, face-to-face conversations, and having technology handy are key. In addition to these physical elements there are important psychological elements that are needed including the creation and maintenance of a supportive environment conducive to talk.

I believe the materials I have presented here make teaching by discussion less daunting and more rewarding for faculty who choose to utilize the discussion method in their university classrooms. In order to encourage professors to share challenges, reflections, and insights through discussions and to establish better practices, a faculty mentor program has been shown to be enormously important (Savage, Karp & Logue, 2004). Mentor programs, if well developed support new faculty become part of the university community, lessen feeling of isolation, and help the novice teacher masters effective educational practices.

Study Contribution to Theory/or Practice

In the study contribution to theory or practice, I analyzed my participants' perspectives on teaching and my personal observations of my participants' teaching practices. These findings reveal that what my participants said they believed about effective teaching did not always show up in their actual teaching in the classroom. Interestingly, this wasn't always a negative slippage. Each of my participants did some things better in practice than they were able to talk about as a theoretical perspective on effective teaching. The reasonable explanation for these incongruities is that they are natural, and are probably beneficial. The discrepancy between what one believes and what one does allows theory to serve as a self-correcting device. To support this process I would suggest that novice faculty interested in mastering the use of discussion in their classroom: 1) note down what they believe and why they think discussion is important in learning, 2) film their own classroom teaching for a period of time to see if their beliefs match their practice, and 3) if there are discrepancies, seek help from more experienced colleagues. Of course, once through this process is not enough. After completing this cycle, it is important to once again set up another round of research by re-stating what one now believes and examining these new beliefs against one's actual teaching practices.

I see the finding of this study as a resource for enhancing the use of discussion in university classrooms. I see classroom discussion as supporting students' in making connections to what they already know as well as supporting the development of critical thinking. I see understanding how to support discussion in the classroom as a tool for the expansion and redesign of curriculum as well as a way to support creative teaching. This study shows that the infrastructure which supports teaching, like educational technology, can be use to effectively extend the discussions which are started in the classroom, thus allowing professors to continue as well as begin much needed conversations with students.

There are several additional contributions that this study makes:

- (1) this study contributes to theory by suggesting that the closer the believe system, relative to discussion, is to practice, the more likely discussion as a method of teaching will be successfully implemented.
- (2) Along similar lines, this study has identified a range of strategies that professors use to support classroom discussion. Given my careful review of the literature I can assure readers that this study identifies more specific strategies that support discussion than do any of the studies currently reported in the literature. My study has talked specifically about what strategies professors use that support, what techniques they use, and how they organize the classroom.
- (3) A third contribution this study makes is that it shows the short-coming of what universities are currently doing to support conversation as an instructional methodology in university teaching. One common theme across professors was that they had little or no support from the university itself or from colleagues in their departments. Currently, at this institution (and I suspect a good many institutions across the world) there seems to be no vehicle for more experienced faculty who teach using a discussion method to talk with or support younger faculty who are interesting in teaching using discussion as a primary method.
- (4) my study shows that even when professors think they are supporting discussion, there is still a tendency to talk too much. As a group, we professors, need to become much more cognizance of how much we talk and what kind of talk is truly supportive of learning.

Suggestions for Further Research

This research has led to new questions and areas of research: 1) What challenges do new or junior faculty encounter when they attempt to implement discussion in their university teaching? 2) How can experienced faculties best interact with new faculties to develop discussion pedagogy? 3) What curricular engagements might be developed to support new faculty “live,” or experience firsthand, the power of discussion teaching? 4) What teaching support might institutions of higher education provide junior faculty? And which, of all those resources which are now being provided, do young faculty members find truly supportive?

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**Enhancing IT Literacy in an English Medium of
Instruction Liberal Arts College in China**

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Abstract

Education in the People's Republic of China (PRC) has been evolving over the past few decades, and basic courses to improve computer (IT) literacy have been developing, especially over the last decade. As the PRC has become more powerful economically, the English language has also risen in importance. As part of the innovation in PRC education, the United International College (UIC), a new Liberal Arts college in Southern China, was founded in 2005. UIC is one of the first English Medium of Instruction (EMI) colleges in the PRC. All non-Computer Science major students in UIC are required to take an introductory Information Technology (IT) course, as part of UIC's effort to enhance students' IT literacy. This paper describes the situation for students taking this course at UIC, outlining their background and some unique aspects of their college experience. The paper traces the history of IT literacy efforts in the PRC, and specifically in UIC.

This paper identifies some of the special challenges facing the design and delivery of an introductory IT course in the Mainland Chinese context, especially in an English medium of instruction institution.

1 Introduction

This paper describes some of the issues related to the teaching of an introductory Information Technology (IT) course as a required subject to all non-Computer Science major undergraduate students at the United International College (UIC), a new Liberal Arts College in southern China. At UIC, the IT course, like most other courses, is taught through English. The vast majority of students at UIC, however, do not have English as their first language, and UIC is their first experience of learning at an English Medium of Instruction (EMI) institution.

The paper is structured as follows: the remainder of this Introduction section outlines IT literacy (Section 1.1), and the background of aspects of education in the People's Republic of China (PRC) (Sections 1.2.1 to 1.2.3); the United International College (UIC) is introduced in Section 2; and the introductory IT course taught at UIC, IT1010, is explained in Section 3.

1.1 IT Literacy

IT Literacy (also referred to as Computer Literacy) has been defined variously, but can basically be understood as the ability to use computers and (information) technology effectively (Mason & Morrow 2006, Hoffman & Vance 2008, Gupta 2006, Epperson 2010).

This ability may be crucial to students for the success of their academic study, but it is also increasingly seen as essential for job prospects after leaving colleges, and even while at college: a glance through employment offerings invariably includes a reference to “good computer skills.”

At UIC, the curricula are designed to enable graduates to develop certain attributes, referred to as Graduate Attributes (GAs) (HKBU Centre for Holistic Teaching and Learning 2010a). Among the GAs for UIC’s students are Computer Literacy and IT Skills, which are interpreted as not only the skills required to use basic computer applications, but also a confident attitude when faced with IT problems or new, unfamiliar software to be learned (UIC 2010b).

1.2 People’s Republic of China (PRC)

The People’s Republic of China (PRC) was founded in 1949. The PRC began economic reforms in 1979, prior to which time the economy was centrally planned (Morrison 2009). Since that time, the PRC’s real Gross Domestic Product (GDP) has grown at an average annual rate of about 10% (Morrison 2009), and over the past decade or so, the PRC has become a significant global economic power (Rajan 2003). China’s economic growth has improved Chinese living standards, and helped raise hundreds of millions of people out of extreme poverty (Morrison 2009). With the economic growth, and increasing support from the PRC Ministry of Education, the number of PRC students studying abroad also increased dramatically: according to the Ministry, in 2009 about 1.12 million students were studying abroad, about 800,000 of whom at tertiary level (PRC MoE 2010).

1.2.1 Education in the PRC

In the PRC, education is divided into three categories (CERNET China Education and Research Network n.d., Brandenburg & Zhu 2007): basic education, higher education, and adult education. Basic education includes compulsory elementary education and senior secondary education, with an optional pre-school system before elementary school education. Compulsory education starts at the age of seven and lasts for nine years: six years of elementary, and three years of junior secondary education. Senior secondary education usually starts at the age of sixteen and is divided into two types, academic secondary education and vocational secondary education. Junior secondary school graduates wishing to continue their education take a locally administered entrance exam, on the basis of which they can make a choice. In the academic secondary school, students are educated for three years and also prepared for the National College Entrance Examination (NCEE) (Yu & Suen 2005), after which they may be admitted to study at a higher education institution.

Higher education at the undergraduate level includes two-and three-year junior colleges (short-cycle colleges), and four-year colleges and universities. Short-cycle colleges typically award associate degrees, while four-year colleges and universities award bachelor degrees or higher. Master degrees and PhDs are usually offered by universities and research institutions which have been accredited by the State Council.

1.2.2 IT Education in the PRC

Since 1997, when the PRC Ministry of Education issued guidelines on the structuring of IT courses for non-IT major students (PRC MoE 1997), almost all PRC colleges and universities have created such courses. Most of these courses, however, focus on a basic knowledge of computer systems, Windows OS, and basic Office software (Wang & Wen 2004, Zhao & Yang 2009).

As more of the basic materials began to be taught in primary and secondary-level schools, the courses offered at tertiary-level became obsolete. A second set of guidelines was issued by the Ministry, urging an update of these courses (PRC MoE 2006). Accordingly, many universities have adopted the new curriculum and have increasingly included new topics such as multimedia, information security and databases (Gong & Yang 2009).

1.2.3 English in the PRC

With the opening up and internationalization of China, English has received a lot of attention in the PRC. For most school entrance examinations, e.g., NCEE (Yu & Suen 2005), English is a required examination subject. Additionally, many universities require students to pass the College English Test (CET) (Zheng & Cheng 2008) in order to graduate.

Currently, English study in China starts from Grade 3 in elementary school, and continues for more than ten years (PRC MoE 2001b). Although a great deal of time and effort has been invested in improving English proficiency, so far the results have not been as impressive as anticipated. It was reported that reading and grammar were over-emphasized in English classes, with a resulting situation where many students could not speak fluently, or understand what people say, even after more than ten years of study (Lin 2002).

At the turn of the 21st century, in order to meet the economic challenges of globalization and technological advances, the PRC Ministry of Education began to encourage third-level institutions to use English to teach some major courses (PRC MoE 2001a). Currently, many universities in China have adopted this strategy (Wu 2007).

Although not yet very popular in the PRC, from 2004 to 2006, three English Medium of Instruction (EMI) third level institutions were founded.

2 United International College

One third-level EMI institution in the PRC is the United International College (UIC)¹, jointly founded in 2005 by Beijing Normal University and Hong Kong Baptist University. UIC is the first full-scale cooperation in higher education between Mainland China (PRC) and Hong Kong. It is situated in Zhuhai, Guangdong Province, just north of Macau SAR, and west of Hong Kong SAR.

In its first year of operation (2005), UIC received about 300 students. The student intake has now increased to about 1,000 per year, with the current student population around the full capacity of about 4,000.

In addition to the increases in numbers, the typical student enrolling in UIC has also changed: in 2005, most students had a weaker academic background, they spoke Cantonese Chinese as their first language, and they often had difficulties with English proficiency; more recent student cohorts have stronger academic profiles, speak Putonghua (Mandarin Chinese), and have a comparatively high English proficiency.

2.1 UIC's Educational Philosophy

UIC was founded with goal of creating an innovative international education model for China that can contribute to the welfare of the nation and the world (UIC n.d.).

The mission of UIC (UIC n.d.) includes the following

- To integrate creatively and dynamically international and national experiences of education in China.
- To promote Whole Person Education with local and international relevance.
- To promote liberal arts education by tapping into both classical Chinese and Western cultural traditions.
- To develop an innovative Four-Point Education Model that unites the forces of the college, the students, the parents and society for the delivery of our education programs.

2.2 English at UIC

UIC is an English Medium of Instruction (EMI) institution, which means that, with a few exceptions, all courses are delivered in English. Although the English proficiency of newer students is improving, the fact that the majority of students do not have English as their first language, and that UIC is probably their first experience of an EMI institution, mean that many are not immediately equipped for study at UIC.

¹ <http://www.uic.edu.hk>

The English Language Centre (ELC)² at UIC is the unit responsible for all General English language courses, and for the overall provision of English Language services to the university.

To assist students with the transition from secondary schooling to tertiary-level, the ELC runs an English Enhancement Programme before normal classes begin. This programme is explained in Section 2.3.2.

Throughout their entire period of study, students have general English classes, which are delivered in small groups of about 20 students per class. These classes are designed to enhance the general English proficiency of students, and to provide them with the communicative skills relevant to academic, business, and social contexts (ELC 2010b).

The ELC also runs a semester-long course on Academic Reading and Writing (ARW), which all students take in their first year. The course aims at raising students' specific language ability in reading and writing academic texts of their own major disciplines.

A final resource made available to students by the ELC is the Writing Resources Centre (WRC), where students can go to get assistance with their English writing.

2.3 Freshman Experience at UIC

2.3.1 Dormitory Life

At UIC, as with all universities in Mainland China, all students are required to live in college-provided accommodation. This may be the first time for many students living away from their families. Since UIC student accommodation consists of rooms housing 2 or 3 students each, each student must share their room. Because of China's One Child Policy (Fitzpatrick 2009, Fong 2004), this is also often the first time for them to share a room.

2.3.2 English Enhancement Programme

All Year 1 students who come to study at UIC, before the commencement of their normal academic courses, are provided with one to two weeks of an English Enhancement Programme (EEP) run by UIC's English Language Centre (ELC).

During this programme, students are introduced to the English environment of UIC, and assisted in preparing for their normal courses. For the duration of the programme, the students are grouped into teams to attend lectures, tutorials, and workshop-like activities. The programme usually culminates in a performance competition, where each of the teams showcases their achievements.

² <http://www.uic.edu.hk/elc>

2.3.3 Clubs and Workshops

In addition to the clubs and activities run by the students themselves, the ELC also arranges a large number of English-medium clubs. Most of these clubs are open to all students, but Year 1 students must choose at least one, and attend this club every week. The themes of the clubs vary according to the interests of the faculty running the club. In the first semester of the 2010–2011 academic year, there were over twenty clubs offered, covering regular themes such as the drama or debating, and some more unusual ones such as Navajo Culture or Women’s Issues (ELC 2010a). Students usually take part in the club for 1 hour per week. Several academic workshops, targeting English proficiency exams such as IELTS³ or TOEFL⁴, are also run on a weekly basis by the ELC.

2.3.4 Mentor Caring Programme

To help students to integrate more quickly into the UIC college life, and ease their transition to studying in UIC’s EMI environment, a Mentor Caring Programme (MCP) (UIC SAO 2010) was set up. This programme pairs groups of 10–15 students with a faculty member (the mentor) from the students’ study programme. The mentor (frequently a native English speaker) meets with the students throughout their first year, both in a group and individually. As well as being an extra opportunity for the mentees to practice English, this programme allows the mentor to serve as a friend, and help them resolve difficulties associated with college life.

2.3.5 Whole Person Education (WPE)

One of the underlying ideals of UIC’s approach to education is the need to educate the Whole Person (Section 2.1), an undertaking coordinated by the Whole Person Education Office (WPEO).

All UIC students go through WPE courses or training in eight areas: language culture, experiential development, voluntary service, sports and culture, environmental awareness, emotional health, experiential arts, and adversity quotient (WPEO 2010).

The WPE approach has proven both very successful and popular, and has influence the approaches taken to teaching other courses at UIC.

2.3.6 Semester 1 Study Plan

All degree programmes at UIC require four years of study (UIC 2010a). The courses taken over these four years are categorized as:

1. General Education Required courses
2. General Education Elective courses

³ <http://www.ielts.org>

⁴ <http://www.ets.org/toefl>

3. Core/Major Required courses
4. Major Elective courses
5. Whole Person Education modules

Many of the programmes at UIC have identical or very similar courses in the first year. Typically, a Year 1 student's timetable will include a large proportion of General Education Required courses, including Chinese and English. Students also take the introductory IT course (IT1010) in their first semester.

3 IT1010: Information Technology

The IT1010 course is designed to introduce students to the fundamental concepts of Information Technology (IT), and develop students' confidence in using computers and computer applications (Huang & Towey 2010). Another goal of the course is to develop the "problem-solving perspective", one of several skills Computer Science has been argued to be able to offer to a Liberal Arts education (Walker & Kelemen 2010).

In the course, students are introduced to the background of Computer Science, and the modern IT sector. Some of the major IT organizations are introduced, and current IT issues and questions are discussed. The basic architecture and design of a computer is explained. Software applications useful for students of all majors are introduced and, where possible, more than one alternative is presented: whenever possible, free alternatives to common proprietary software are also presented. Students are also introduced to strategies for purchasing and maintaining computer systems.

The course is compulsory for all non-Computer Science major students, and is taken in their first semester at UIC. Typically, about 1,000 students take IT1010. The students are grouped into about 10 large sections, each with an individual instructor and Teaching Assistant (TA). All students follow the same syllabus, with the same course materials and final exam.

3.1 IT1010 History

Since the course was first introduced in 2005, it has been restructured according to the principles of Outcomes-based Teaching and Learning (OBTL) (HKBU Centre for Holistic Teaching and Learning 2010b).

The original aims and content have also been modified to move away from proprietary software and basic operational skills, to more theoretical issues, alternative software, and attitudinal objectives (UIC 2010b).

Because the English proficiency of many of the newly arrived students was not always very high, the delivery of the course required some special steps, including provision of translations, Chinese-speaking Teaching Assistants (TAs), and additional consultation times with Chinese-speaking staff

Linked to the ideals of Whole Person Education (Section 2.3.5), teams and teamwork were adopted as the main structures for teaching and assignments of IT1010.

As the course content evolved to include new technologies, the course delivery also changed. When first taught, the delivery was based on the traditional lecture/lecture notes model, where each instructor prepared their own slides and notes, and distributed them to their students. Later, instead of each of the instructors essentially delivering a separate IT course, all instructors began to use the same materials (slides, handouts, etc.). The course then evolved to using a single main website and single electronic Bulletin Board System (BBS) for all students in the course. In the third year of the course, Content Management Systems (CMS) were included in the content, and a CMS (Joomla (Joomla n.d.)) was used to manage the course website. The IT1010 Content Management System Joomla was later replaced by a Course Management System (MOODLE (Moodle n.d.)), which also became the main teaching support system used by UIC.

A detailed discussion of the IT1010 content is provided in Huang & Towey(2010).

3.2 IT1010 Course Delivery

IT1010 is delivered over the course of a single semester, usually 14 or 15 teaching weeks, with three lecture hours, one computer lab contact hour, and several consultation hours each week.

Because UIC is an EMI, the IT1010 course is delivered through English. As explained in Section 1.2.3 though, many students, especially in the early years of UIC, had a lower English proficiency. To help these students, one measure taken was to have a multi-lingual teaching team, especially for the support team of teaching assistants (TAs).

The large number of students (about 1,000), compared with teachers (5 to 10 instructors, and about 5 TAs) has also been a constraint. With these ratios, small class sizes are not feasible.

To further assist students, videos have been produced showing IT1010 staff illustrating how to use some of the IT applications in the course. These mini-videos are made available for the students to access whenever they choose.

Because of the size of the classes, getting immediate, direct feedback on teaching is impossible. However, UIC places a great deal of emphasis on the quality assurance of teaching. IT1010 conducts online feedback exercises every 4 weeks of semester, and holds staff meetings immediately afterwards to address any issues that appear in the student comments. Students are also encouraged to approach both instructors and TAs with any questions or complaints. The MCP mechanism (Section 2.3.4) also provides students with an alternative avenue to raise problems, and in the past many mentors have been able to convey the worries or frustrations of students to the IT1010 staff.

A very successful strategy developed by another unit at UIC, the Teaching English as a Second Language Degree programme (TESL)⁵, is the student Teaching Assistant (sTA) initiative (Towey 2010). Similar to this, the IT1010 will attempt to recruit more

⁵ <http://www.uic.edu.hk/~tesl>

senior students to act as sTAs to the new students, and provide an additional bridge between the instructors and the staff.

4 Summary

This paper has outlined some of the issues surrounding the of teaching an introductory-level Information Technology (IT) course to non-Computer Science students, through English, in the United International College (UIC), a new Liberal Arts college in the People's Republic of China (PRC).

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**An Investigation of the Use of Language Learning Strategies at
Four Senior High Schools in Taiwan**

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An Investigation of the Use of Language Learning Strategies at Four Senior High Schools in Taiwan

Background

In the last two decades, there have been numerous studies concerning learning strategies used by language learners. These studies have been conducted mainly to find out what strategies learners use, as well as what factors affect these choices. Although there have been many reports on findings of learner strategy use among ESL/EFL learners, the light shed on high school learners is limited.

In order to help high school teachers facilitate their students' English learning, the major aim of this study is to identify learning behavior and tendencies that are representative of high school students in Taiwan. The most important feature of Taiwanese high schools is that sophomore students need to choose a study track (Natural Science or Social Science) relating to their major in university. Consequently, current study is aimed to investigate the correlation of language learning strategies with learners' study track.

Research on Language Learning Strategies

In the 1970s, language learning strategies (LLS) are defined as device and methods for acquiring knowledge about languages and using information to improve competence in L2. For example, in Rubin's (1975) study, LLS were defined as a kind of techniques or devices which help learners to acquire knowledge while learning language. In another study, Bialystok (1981) added that LLS were methods and conscious enterprises to take advantage of accessible information to improve second language learning.

Later, in 1980s, some researchers defined LLS as mental operations, concerning a set of operations and actions which help learners to accomplish learning tasks and regulate L2 learning. To give an example, Weinstein and Mayer (1986) defined LLS were behaviors or actions which were specific and the learner used the processes to facilitate acquisition of information. Based on Rubin's definition of LLS, learning strategy was a set of operations, steps, plans and routines for learners to regulate learning (Rubin, 1987). According to Chamot (1987), LLS were defined as techniques, approaches or deliberate actions that are to facilitate the learning and recollect the information of both linguistic and content area. In the beginning of study, the researcher regarded LLS as actions to aid the acquisition, storage and retrieval of information. Later, Oxford (1990) claimed that "language learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable,

more self-directed, more effective, and more transferable to new situations.”

Subsequently, LLS are recommended as a special thought or behaviors taken by learners in order to comprehend new information and make learning easier, faster and more effective. For instance, Oxford (1993) and Mohamed Amin Embi (1996) both regarded LLS as actions to improve students’ skills and process of second language learning. They have proved that successful language learners make use of a wide range of learning strategies; in other words, less successful learners might benefit from knowing how to use language learning strategies effectively.

A number of research studies have utilized a questionnaire developed by Oxford (1990), the *Strategy Inventory for Language Learning (SILL)* to collect data on foreign language learners (e.g. Cohen, Weaver & Li, 1998; Nyikos & Oxford, 1993; Olivares-Cuhat, 2002; Oxford, 1990; 1996; Oxford & Burry-Stock, 1995; Wharton, 2000). The *SILL* is a standardized measure with versions for students of a variety of languages, and has also been used in studies that correlate strategy use with variables such as attitudes, motivation level, learning styles, gender, proficiency level, culture, and language teaching methods (Bedell & Oxford, 1996; Bruen, 2001; Green & Oxford, 1995; Nyikos & Oxford, 1993; Oxford & Burry-Stock, 1995; Wharton, 2000).

Oxford’s Classification of Language Learning Strategies

In the 1990s, Oxford (1990) developed a new system of language learning strategies after she evaluated and analyzed others’ classification of language learning strategies. Oxford divided language learning strategies into two major categories: direct strategies and indirect strategies. All direct strategies depend on learners’ mental processing, and learners are assumed to be able to learn directly through those strategies by themselves. Three subcategories- memory, cognitive and compensation strategies are involved in direct strategies.

Memory strategies are the methods to help learners store and acquire new information (Oxford, 1990). For instance, learners use the rhyme to memorize the similar words, such as “parrot” likes eating “carrot”. Cognitive strategies involve direct analyzing, summarizing or note-taking of the target language (Oxford, 1990). People usually jot down the notes when they are listening to the speech. Usually, learners relate new information to existing information, then to form and revise internal mental models. Compensation strategies are the skills that let learners to make up for their lack of knowledge in the process of compensating the target language (Oxford, 1990). For

example, learners guess wisely and logically according to the context in listening and reading tests.

On the other hand, indirect strategies are practical to solve the problems in four language skills: listening, reading, speaking and writing (Oxford, 1990). Three subcategories of indirect strategies are introduced: metacognitive, affective, and social strategies.

Metacognitive strategies make learners manage, conduct or organize their learning (Oxford, 1990). For example, learners arrange learning plans and set future goals by themselves. Meanwhile, they find out the mistakes of learning, and figure out the ways to improve. Affective strategies help learners to manage their emotions, attitudes, and motivations of language learning (Oxford, 1990). If learners achieved the goal which was set before, they would reward themselves such as encouraging through buying something or doing something they enjoy.

Social strategies are moves that having interactions with other people, just like cooperating and discussing with others (Oxford, 1990). When learners face some problems of learning, they seek for solutions by asking friends or instructors for assistances. Furthermore, empathizing with others, like becoming aware of others' thoughts and feelings when learners are in teamwork is also a kind of social strategy.

Factors Influencing Language Learning Strategies Use

Language learning strategies use were influenced by several factors, and in some previous studies, researchers have indicated that learning attitude, beliefs (Oxford, 1990), gender, motivation (Kaylani, 1996), learning style and year of study (Nyiko & Oxford, 1993) might relate to the use of learning strategies.

Many studies had discussed the relationship between gender and language learning strategies use. For example, Green and Oxford (1995) found the female learners used language learning strategies more frequently than the male learners, especially in the social and affective strategies. Similarly, the researcher in Taiwan investigated 977 Taiwanese senior high school students about their learning style and the use of language learning strategies; the result showed that gender had an influence on language learning strategies' choice (Yang, 1993). Yang found that the female learners used more compensation, metacognitive, affective and social strategies than the male learners.

Later, Green and Oxford (1995) used the SILL (Strategy Inventory for Language Learning) to analyze the use of the language learning strategies of 374 students at the University of Puerto Rico, and the study showed that those students who used language learning strategies more frequently tend to be more successful in academics. Park (1997) used SILL to investigate the relationship between language learning strategies and second language proficiency of 332 Korean university students. Park found that participants' English level was positively correlated with the use of language learning strategies.

In conclusion, according to the review of related studies on EFL learning strategies, it is learned that make use of various learning strategies would benefit the process of English learning. Studies have supported that high-achieving students used learning strategies more frequently than low-achieving students. It is also found that female learners used more various learning strategies than male learners. However, due to the particular learning environment in Taiwanese high schools, limited studies have been conducted to explore the relationship between the use of English learning strategies and students' study track. To fill the gap of research literature, participant's study track became one of the significant variables in this present study

Methods

This study was an attempt to investigate the learning strategies of EFL students at four senior high schools in Taiwan. More specifically, it is hoped to answer two questions:

1. What kind of English learning strategies do high school students report themselves as using?
2. Do study track and gender influence the use of these strategies?

Participants

There were 657 senior high school students participating in this study (male=361; female=296). They came from two public schools and two private schools. The four schools are average schools, neither particularly strong nor weak. Participants were second year and third year students, and their study tracks are either Social Science or Natural Science respectively. Students must choose a study track when they are sophomore at a senior high school in Taiwan. The study track determines the major of the student in university. Students in the track of Social Science tend to major in humanity related subjects (e.g. Business, Languages, Politics, Law...etc.) when they enter the university. On the contrary, students in the track of Natural Science will major in science related subjects (e.g. Engineering, Mathematics, Medicine...etc).

Therefore, there are more male students in the track of natural science, and vice versa.

Instrument

The major instrument employed in this study was a questionnaire based on Strategy Inventory for Language Learning (SILL) version 7.0 (Oxford, 1990). SILL comprises six categories of 50 items of self-report questionnaire for non-English speakers learning English as a second or foreign language. The translated version in Chinese by Yang (1992) was adopted in this study. The reason to use Chinese version is due to high school students' limited English ability which may result in misunderstandings.

Results and Discussion

The Use of Language learning strategies (LLS) by the Participants

The major purpose of this study was aimed to investigate the strategies used by the senior high school participants in this study to learn English. The result shows that the compensation strategies were used most frequently among the six kinds of strategies (see Table 1). It indicates that Taiwanese high school students prefer to guess when encountering unfamiliar vocabulary or information. Metacognitive strategies followed by compensation strategies were ranked the second. Social and cognitive strategies were ranked in the middle-frequency use range. Participants ranked memory strategies the fifth. Affective strategies are the least used learning strategies.

Table 1

Descriptive Statistics of the Use of Language Learning Strategies

Category	N	Mean	SD	Rank
Compensation	657	3.14	.60	1
Metacognitive	657	3.08	.78	2
Social	657	3.06	.78	3
Cognitive	657	2.92	.62	4
Memory	657	2.78	.62	5
Affective	657	2.63	.68	6
Total	657	2.93	.68	

The Use of LLS by Male and Female Participants

Compensation strategies were adopted most frequently by the 361 male students; while metcognitive strategies were ranked the highest by the 296 female students (see Table 2). On the other hand, male students rated metacognitive strategies top second and social strategies the third. However, female students ranked social strategies the

second and the compensation strategies the third. Interestingly, the ranks of the last three categories of LLS are the same among both female and male students. In terms of the frequency of use, female students used language learning strategies significantly more often than male students.

Table 2

The Use of Language Learning Strategies among Male and Female Participants

Category	Male (N=361)			Female (N=296)			<i>p</i> -value
	Rank	Mean	SD	Rank	Mean	SD	
Memory	5	2.60	.59	5	3.01	.58	.000
Cognitive	4	2.74	.57	4	3.14	.60	.000
Compensation	1	3.05	.56	3	3.25	.65	.039
Metacognitive	2	2.86	.76	1	3.32	.73	.000
Affective	6	2.54	.69	6	2.75	.64	.057
Social	3	2.82	.76	2	3.30	.73	.000
Total		2.77	.65		3.13	.65	.000

The Use of LLS by Grade 11 and Grade 12 Participants

There is no distinctive difference in the use of LLS among 11th graders and 12th graders (see Table 3). The rankings of the six types of LLS were identical. Compensation strategies were ranked the most frequently used learning strategies by both groups. Second top strategies were the metacognitive strategies, followed by social, cognitive, memory, and affective strategies.

Table 3

Use of LLS by Grade 11 and Grade 12 Participants

Category	Grade 11 (N=315)			Grade 12 (N=342)			<i>Sig.</i>
	Rank	Mean	SD	Rank	Mean	SD	
Memory	5	2.68	.57	5	2.85	.65	0.079
Cognitive	4	2.86	.60	4	2.97	.62	0.247
Compensation	1	3.14	.66	1	3.15	.55	0.985
Metacognitive	2	3.05	.76	2	3.10	.79	0.657
Affective	6	2.57	.65	6	2.69	.69	0.241
Social	3	3.03	.76	3	3.08	.79	0.657
Total		2.88	.67		2.97	.68	0.212

The Use of LLS by Participants of Social Science and Natural Science Track

The use of LLS by the students of different learning track was also investigated.

Compensation strategies were ranked the most frequently used language learning strategies by the participants of the track of Natural Science (see Table 4). Metacognitive and social strategies were listed the second. Students of this track ranked affective strategies the least used LLS among the six kinds of learning strategies. On the other hand, participants of the track of social science used metacognitive and social strategies more often than other strategies. In addition, compensation strategies were ranked the third by this group of students. Similar to the previous rankings, cognitive, memory, and affective strategies were less used by the participants of the track of social science. In conclusion, students of the track of social science used every kind of language learning strategies more frequently than the students of the track of natural science.

Table 4

T-test Analysis of the Use of LLS by Participants of Different Study Tracks

Category	Social Science (N=283)			Natural Science (N=374)			Sig.
	Rank	Mean	SD	Rank	Mean	SD	
Memory	5	2.97	.54	5	2.62	.63	0.000
Cognitive	4	3.08	.57	4	2.79	.63	0.003
Compensation	3	3.21	.62	1	3.09	.59	0.205
Metacognitive	1	3.23	.73	2	2.93	.79	0.013
Affective	6	2.73	.63	6	2.56	.70	0.122
Social	1	3.23	.73	2	2.93	.79	0.013
Total		3.07	.63		2.82	.69	0.015

The Most Frequently Used Learning Strategies by Participants

According to the results shown in Table 5, the learning strategy "To understand unfamiliar English words, I make guesses" was used most frequently (M=3.88) by male participants. Moreover, three of the compensation strategies were listed among the top five learning strategies by male learners. Two of the cognitive strategies were used frequently, too. On the other hand, female learners liked to use the learning strategy "If I can't think of an English word, I use a word or phrase that means the same thing" (M= 4.07) more often than other strategies (see Table 6). In addition, it was found that female learners tend to use metacognitive strategies to learn English more frequently than male learners.

Table 5

Five Learning Strategies Used Most Frequently by Male Participants

<u>Learning Strategies</u>	<u>Category</u>	<u>Rank</u>	<u>Mean</u>	<u>SD</u>
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To understand unfamiliar English words, I make guesses.	Compensation	1	3.88	.99
If I can't think of an English word, I use a word or phrase that means the same thing.	Compensation	2	3.52	1.07
I practice the sounds of English.	Cognitive	3	3.44	.99
I read English without looking up every new word.	Compensation	4	3.33	1.00
I find the meaning of an English word by dividing it into parts that I understand.	Cognitive	5	3.29	1.55

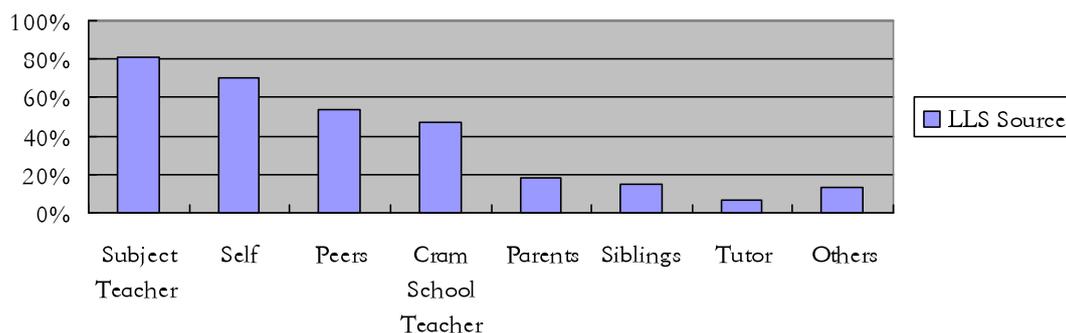
Table 6

Five Learning Strategies Used Most Frequently by Female Participants

<u>Learning Strategies</u>	<u>Category</u>	<u>Rank</u>	<u>Mean</u>	<u>SD</u>
If I can't think of an English word, I use a word or phrase that means the same thing.	Compensation	1	4.07	.82
To understand unfamiliar English words, I make guesses.	Compensation	2	3.90	.92
I say or write new English words several times.	Cognitive	3	3.74	1.09
I have clear goals for improving my English skills.	Metacognitive	4	3.71	.97
I pay attention when someone is speaking English.	Metacognitive	5	3.69	1.07

The Sources Where Students Learned the Learning Strategies

Many of the students (81%) reported that their English teachers at school were the major source where they learned the learning strategies (see Figure 1). However, participants themselves (71%) were identified the second important source; then was the peers (54%). Followed by the peers are the teachers at cram schools to teach the students learning strategies (47%). The last three sources were parents (18%), siblings (15%), and tutor (13%).



Discussion

The major goal of this study was to investigate the current status of the use of LLS by senior high school students in Taiwan. According to the results shown in last section, compensation strategies were used most frequently by 657 participants. Affective strategies were ranked the least-use LLS. The results indicate that most Taiwanese high school students often guess the meaning of unknown words/phrases when they listen or read English passages. Nevertheless, they seldom relax when they feel challenged for using English, and they seldom offer themselves a reward when do well.

Moreover, female students and male students had different preferences for language learning strategies (see Figure 1.). Female students preferred metacognitive strategies to compensation strategies and reported using metacognitive strategies most frequently. It shows that female students are more willing to learn from making mistakes and like to schedule their study plan. Meanwhile, the results reveals that females students tend to use LLS more frequently than male students in every strategy group. It also echoes the findings of some research studies (e.g. Green & Oxford, 1995; Bremner, 1999). In addition, female students like to learn English through interacting with others; male students showed less interest in interaction.

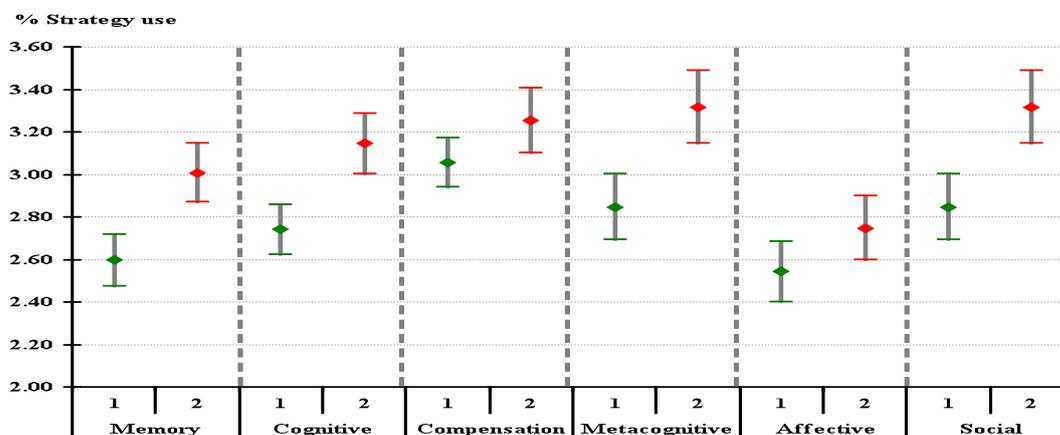


Figure 1. Difference between gender and the use of language learning strategies (1=male students; 2=female students)

Another important finding of the current study is the investigation of the use of LLS between two different learning tracks of students (Social Science vs. Natural Science). It was found that the students at the track of Social Science tend to use metacognitive strategies and social strategies more frequently than other learning strategies. On the contrast, students at the track of Natural Science use compensation strategies most frequently (see Figure 2). The results parallel the relationship between gender and the use of LLS. It is because that more male students were at the track of Natural Science (male 68%; female 32%), and more female students were at the track of Social Science (male 33%; female 67%) in this study. In fact, the gender ratio in the current study is consistent with the demographic data of the test takers of the Joint College Entrance Examination (Han, Wang, & Chen, 2010).

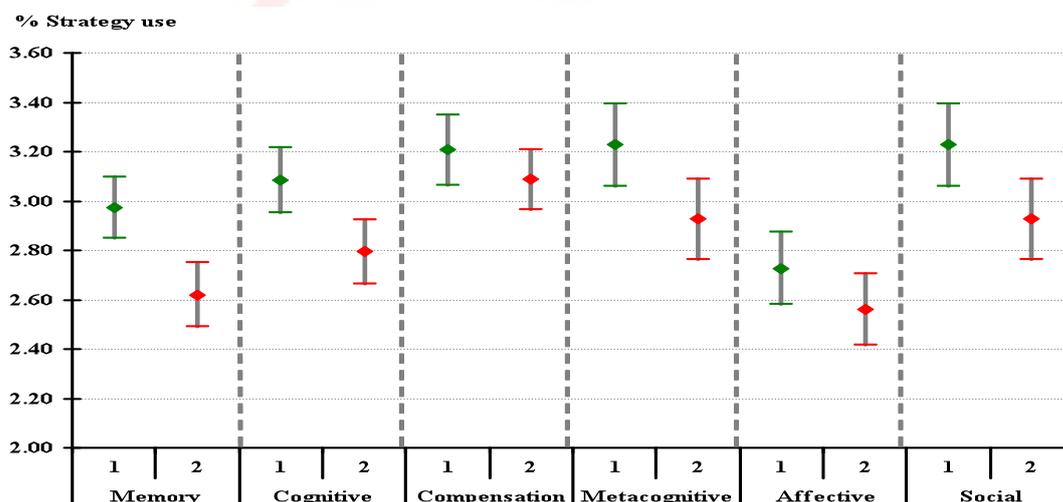


Figure 2. Differences between students' study tracks and the use of LLS (1=Social Science; 2=Natural Science)

Conclusion

In this study, some general findings concerning Taiwanese high school students' English learning strategies were presented. It was found that compensation strategies were used more frequently than other learning strategies. Affective strategies were reported to be the least frequently used. We also found that there was a significant difference between genders in the use of all six groups of learning strategies. Female students reported using these strategies significantly more frequently. There were also significant differences in the use of LLS by students at the track of Natural Science and Social Science. Students at the track of Social Science used learning strategies more frequently.

One important implication of this study relates to the infrequent use of affective strategies and memory strategies. Teachers at high school could provide more specific trainings in affective skills and memory skills. It was also noted that male students did not use learning strategies as frequently as female students. Therefore, teachers need to offer more guidance for male students to experience these strategies and know the types of strategies that suit them. Future research studies are encouraged to investigate whether the different frequencies in the use of language learning strategies by students of different study track are related to students' English proficiency. It is hoped that with more endeavors to study language learning situations among high school students, we thus know the effective way to help them enhance English competencies.



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Title: How are cultural influences reflected in perceptions of Vietnamese students studying at Australian universities?

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How are cultural influences reflected in perceptions of Vietnamese students studying at Australian universities?

Introduction

Going overseas for study is becoming a prevalent tendency in many Asian countries. Students coming from Asian nations not only have to handle different teaching and learning styles but also face a different culture. Some studies have investigated the influences of the various cultures which international students encounter during studying in western environments (Kato, 2001; Pho, 1999; Ha, 2001; Le, 1992; Phuong, 2001; Ballard & Clanchy, 1991; Ellis, 1995; and Biggs, 1996). These studies identify the understandings of international students in general and Vietnamese students in particular regarding the cultural influences to which they are usually exposed to western universities including Australia.

Asian students usually bring their own cultural traditions with them when they study overseas. Ballard & Clanchy (1997) question “Why should the cultural and social backgrounds of international students make such a difference to the ways they study when they enter Western universities?” (p10). Consistent with Ballard & Clanchy, Te (2000) gives typical evidence of the experience of Vietnamese students to demonstrate the incompatible cultures:

A Vietnamese student who sits quietly and listens attentively to the teacher wants to express respect to his teacher. This behavior has often been misinterpreted by the American teacher as passivity and non-responsiveness. It is also out of respect that the Vietnamese student avoids eye contact with the teacher when speaking or being spoken to. By American standards, a person acting in this way would appear suspicious, unreliable, or mischievous. In Vietnamese culture, however, looking into somebody's eyes, especially when this person is of a higher status (in age or in social or family hierarchy) or of a different gender, usually means a challenge or an expression of deep passion. The proper respectful behavior is to avoid eye contact in talking who is not an equal or the same sex. (p1)

The above examples would be convincing evidence to indicate the cultural influences towards Vietnamese students who are studying in Australia.

In an article titled “ Exploring ‘Cultures of Learning’: a case of Japanese and Australian classrooms” in *Journal of Intercultural Studies*, Vol. 22, No. 1, 2001, Kato discussed the influences of different cultures in learning. In this study, Kato argued and described the differences in the perceptions of local students and international students arising from different cultures. The author mentioned “culture” in educational contexts; “Cultures of Learning” in a cross-cultural context; the differences in the ‘culture of learning’; differences in teaching approaches; and teacher-student relationship.

This paper will elaborate on some relevant points from Kato's argument which would fit the Vietnamese context. The focus of this article is to examine and describe the cultural influences which are reflected in perceptions of some Vietnamese students studying in an Australian tertiary institution. First, the literature review of Vietnamese and Australian contexts will be drawn. Second, the perceptions of Vietnamese students will be highlighted with regard to cultural influences. Finally, there will have some discussions of the implications for Vietnamese students and Vietnamese education, and also the directions for further research.

What is going on: A review of the literature

Vietnamese context.

In the past, Vietnam was dominated by China for thousands of years, and parallel with the influences in culture, language or political, education is still impacted by Confucianism. Confucianism is a progressive ideology which heightens the values of morals, humanity and tolerance among humans. Furthermore, Confucian ideology praises peace and condemns inhuman wars. These ideas are valuable and true in any circumstances and in any society. The Confucian influence in education has been quite apparent until now. However, in the educational field, some ideas of Confucianism are not suitable and outdated in current societies, especially in Vietnam – one of the countries which are on the way to integrate with the world.

Importantly, Phuoc (1975 cited in Ellis, 1995) indicated that “the Confucian model is teacher-centered, closed, suspicious of creativity, and predicated on an unquestioning obedience from the students” (42). Generally, traditions may contain elements to hinder progress and create inappropriate attitudes towards improvement (Tong 2000, cited in An, 2001). One aspect of Vietnamese tradition is reflected in the hierarchy of both the society and education systems (An, 2001). This hierarchy makes the traditional Vietnamese teaching-learning style a teacher-centered one-way form of communication. In recent years, these traditional styles are changing towards student-centered approaches. However, the changes are not yet very effective, as embedded thoughts of Vietnamese generations towards the traditional education remain very strong.

In the classroom, students are only allowed to speak or ask the questions with the permission from their teacher. Otherwise, questioning the teacher is considered to be rude and unacceptable. The students' responsibilities are to obey teachers and show good behavior towards their teachers. They are trained to be thankful to the teachers. Hoang Tuy (2000:54) said that owing to the hierarchical system and the notion that “the teachers know the best”, the teaching becomes dictatorial and the learning becomes forced and passive. Consequently, this is the reason why the Vietnamese student “finds it easy to imitate, but difficult to do creative works” (Nguyen, 1998. p20).

Regarding the teacher-student relationship, it can be said that teacher-student relationship in one of the most important factors contributing to the success of educational outcome. Nguyen (2000: 68) states that “the relationship between teachers and students in the most important to the classroom environment” (21). However, the connection between teacher and student in Vietnam has tended to be ignored. As mentioned above, this flaw comes from Confucian ideology which teaches the young generations to always keep harmony

with their elders and teachers. According to Irwin (1996), in Vietnam, the hierarchical structure of society according to Confucian ideology was emphasized in three main relationships: king/subject, teacher/pupil and father/children. In this model, the role of women is apparently ignored and neglected.

Australian context

In Anglo-Australian higher education there is a notion that tertiary education emphasizes the potential for extending the students' knowledge base, and for the creation of "new" knowledge. This notion is rooted in the relationship between teaching and learning strategy, and the relationship of cultural attitudes to knowledge which inform them. Ballard & Clanchy (1997) believe that higher education in Australia is based on an extending attitude to knowledge; therefore, the teaching strategy directs the students to independent and critical thinking, the development of a capacity for abstraction, and the expansion of knowledge.

Western education in general and Australian education in particular often requires from the teacher a combination of "the theoretical, the personal and the political" (White, 2006). Moreover, White indicates that, teachers not only equip themselves but also know what should be required from students. For example, teachers would "require students to focus on their own educational experiences and identity, and demands the articulation and documentation of beliefs, values and philosophy" (16). White (2006) establishes five key elements of learning:

- Creativity derived from risk-taking and daring.
- Support and encouragement for students, especially when working in unfamiliar ways.
- Collaboration and collegiality in dealing with challenges, negotiating and solving problems.
- Encouragement and inclusion of innovative thinking and ideas (including the personal and the political).
- Exploration of ideas and learning through the creation of performance rather than learning about ideas through discussion and reading only.

Hofstede (1986) reveals that, in Australia, along with most other Western societies, education is designated as having small power-distance relationships. Hofstede indicated that the power-distance flexibility impacts the nature of the teacher-student relationship (see Table 1)

TABLE 1

Differences in Teacher/Student and Student/Student Interaction Related to the Power Distance Dimension

SMALL POWER DISTANCE SOCIETIES	LARGE POWER DISTANCE SOCIETIES

<ul style="list-style-type: none"> • stress on impersonal “truth” which can in principle be obtained from any competent person 	<ul style="list-style-type: none"> • stress on personal “wisdom” which is transferred in the relationship with a particular teacher (guru)
<ul style="list-style-type: none"> • a teacher should respect the independence of his/her students 	<ul style="list-style-type: none"> • a teacher merits the respect of his/her students
<ul style="list-style-type: none"> • student-centred education (premium on initiative) 	<ul style="list-style-type: none"> • teacher-centred education (premium on older)
<ul style="list-style-type: none"> • teacher expects students to initiate communication 	<ul style="list-style-type: none"> • students expect teacher to initiate communication
<ul style="list-style-type: none"> • teacher expects students to find their own paths 	<ul style="list-style-type: none"> • students expect teacher to outline paths to follow
<ul style="list-style-type: none"> • students may speak up spontaneously in class 	<ul style="list-style-type: none"> • students speak up in class only when invited by the teacher
<ul style="list-style-type: none"> • student allowed to contradict or criticise teacher 	<ul style="list-style-type: none"> • teacher is never contradicted nor publicly criticised
<ul style="list-style-type: none"> • effectiveness of learning related to amount of two-way communication in class 	<ul style="list-style-type: none"> • effectiveness of learning related to excellence of the teacher
<ul style="list-style-type: none"> • outside class, teachers are treated as equals 	<ul style="list-style-type: none"> • respect for teachers is also shown outside class
<ul style="list-style-type: none"> • in teacher/student conflicts, parents are expected to side with the student 	<ul style="list-style-type: none"> • in teacher/student conflicts, parents are expected to side with the teacher
<ul style="list-style-type: none"> • younger teachers are more liked than older teachers 	<ul style="list-style-type: none"> • older teachers are more respected than younger teachers

Re-printed from:

Hofstede, G. (1986). Cultural Differences in Teaching and Learning. *International Journal of Intercultural Relations*, Vol. 10, pp. 301-320.

It is quite apparent to see the the nature of teacher/student interaction in western education which includes Australia. This is exhibited as “small power distance societies” with the characteristics such as “student-centred education”, in which teachers expect students to find their own paths”, “students may speak up spontaneously in class”, and “student allowed to contradict or criticize teacher”.

The reflections of cultural influences on the perceptions of Vietnamese students

Ballard & Clanchy (1997) showed in their study of *Teaching International Students* that “All our students enter university with expectations, knowledge and behaviors which have been shaped not merely by their individual personalities but, more fundamentally, by their previous educational experiences and their own cultural experiences” (p9).

In order to establish whether the above idea is true or not, it will be discussed as follows. I will use as evidence my personal experiences in Vietnam as well as in Australia. Moreover, some further evidence will involve informal discussions with Vietnamese students, who are studying

master of coursework in different faculties at La Trobe University, Victoria, Australia. Beside, these ideas will be consolidated by a variety of the relevant resources.

Regarding learning styles

Hong, Huong and Cuong all said that they are puzzled in approaching the independent learning styles. They revealed that, in Vietnam they were trained to be obey teachers, and the outcomes of their work mostly depended on the instructions from teachers. An (2002) made a comment that, because of the effect of the Confucian ideology, Vietnamese learners are usually dependent and passive. Complementing this point, Lee (2001) said that “based on Confucian values, students usually follow their teachers’ instructions without any criticism” (p6). These ideas reflect exactly the learning styles of many Vietnamese students. According to Hofstede (1986) in western classrooms “teacher expect students to initiate communication”. This point is quite compatible with our own experiences during studying at La Trobe University. In the first semester, some other Vietnamese students and I enrolled the unit Intercultural and Communication in Education. During the lecture, teacher often divided class into different groups which were mixed with local students. In the group discussions, the Vietnamese students – myself included – did not feel confident in expressing our own opinions, and we usually followed opinions from the local and other international students. We recognized that, local students were very self-reliant in their study, and they paid more attention in their own ideas rather than meeting the expected answers for their teachers.

Vu reported that, in class activities such as group discussions or group presentations, Vietnamese students usually eluded being presenters. I also realized that Vietnamese students seem to avoid arguing and debating with others about conflicting ideas. If they think differently from other students, especially with teachers, they often do not write or say their own thinking, and they seemed to be expected to do what the majority think and value. Engholm (1991, cited in Irwin, 1996) comments the influences of traditional culture on behavior of each other of Vietnamese people that (Confucianism) “...is a practical code of conduct to follow in everyday life, a manual for managing human relationships harmoniously”(p7). I suppose that the above characteristics not only occur on Vietnamese students but also on international students, especially Asian students. These are quite unlike with the “small power distance societies” described by Hofstede “students allowed to contradict or criticize teachers”. Bigg (2003) founded that “Many university teachers report difficulties in teaching international students” (p121). These teachers complain about international students that:

- ‘They rote learn and lack critical thinking skills’
- ‘They are passive; they won’t talk in class’
- ‘Progressive western teaching methods won’t work with Asian’
- ‘They appear to focus excessively on the method of assessment’
- ‘They don’t understand what plagiarism means’
- ‘They stick together... won’t mix with locals’
- ‘They do not easily adjust to local conditions’
- ‘They tend to look on lecturers as close to gods’

Bigg did not agree to the above points. He asserted that “teach better, and you’ll address the problems presented by international students” (p139) In my opinions, I also do not

totally agree with some above points. Typically, Asian students in general and Vietnamese students in particular almost recognized that western teaching styles are progressive and better than educational framework in their host nations. Furthermore, Asian students are still getting used to this process. It is easy to understand that Asian students are often immersed in the culture of their own countries, so they usually find it difficult to adapt immediately with teaching styles in western environment.

Regarding the commenting on student's learning outcomes, Vu, Hung and Thanh all reported that, during the course, Vietnamese students frequently took great pride in the teacher's rare compliments. These are implied as an affirmation of their genuine success in studies. Due to the influence of Vietnamese culture, like many other international Vietnamese students, Vu revealed that "I am occasionally suspicious of the sincerity of complimentary comments that Australian teachers usually employ in class and wonder whether their praise is a bit hackneyed and whether my work is actually excellent or not so as to further endeavor in the future". This is actually different from our culture, in Vietnamese culture, the teacher appears to give compliments only to students who richly deserve to be justifiably praised.

The following comparative information of Mezger (1992) would give a conclusion of learning style in term of different cultures.

Table 4 Cultural Shift Required in LEARNING STYLES

OTHER CULTURE	WESTERN CULTURE
Reproductive rote learning is dominant.	▶ Analytical and sometimes speculative learning is expected.
Passive reception of information is expected.	▶ Critical reception of information is expected in reading, writing and verbal interactions.
Memorisation and imitation is expected.	▶ Analytical and critical thinking and sometimes speculating and hypothesing.
Learning all information given.	▶ Selective learning of keys concepts and details.
Activities of summarising, identifying, describing and applying formulas and information.	▶ Activities of questions, judging, recombining ideas and information into an argument. Sometimes research activities.
Characteristic question is What?	▶ Characteristic questions are Why? How? How valid? How important and sometimes What if?
Aim of learning is 'correctness'	▶ Aim is 'simple' originality and reshaping material into a different pattern. Sometimes 'creative' originality.
Reading source usually limited to one	▶ Reading widely is expected.

text and teacher notes.	
Reading the text at great depth in great detail.	▶ Skim and selective reading of many texts, articles and reports.
There may be limited resources available for student use in some countries eg. libraries.	▶ Extensive use of library and other resources (eg. media, experts, colleagues) is expected.
Circular patterns of thinking and reasoning.	▶ Logical linear patterns of thinking and development of logical arguments and opinions is expected.
The written word is seen as the truth and the goal of learning.	▶ The written word is seen as a tool for learning.
Learning and studying in one's own language.	▶ Learning and studying in a second language.

(p157)

These are the comments made by a Vietnamese postgraduate student in the USA. They are not necessarily Mezger's interpretations – she cautions the reader against believing too much in these generalizations. These are very broad generalizations that do not necessarily apply to all international students in general and Vietnamese students in particular or to all Western students in Universities

There are several Vietnamese sayings which imply the sacrosanct role of the teacher such as:

Khong thay do may lam nen

You would do nothing without a teacher

Or

Nhat tu vi su, ban tu vi su

Whoever teaches me a letter, he should be my teacher

Or

Cha me sinh con, thay cho cuoc song

My parents give me birth, but my teacher made a man of me

These above sayings mostly draw the teacher-student communication regarding cultural influence in Vietnam.

With respect to teacher-student relationship

Hung, Thanh and Huong revealed that the teacher-student relationship in Australian class is equal, opened and approachable. Hung said that, in his first few classes, he did not dare to make eye contact with the teacher as he thought it was rude. Complementing these thoughts, Ballard & Clanchy (1997) judge that:

Many international students feel shocked and embarrassed at the disrespectful behaviour of Australian students in the presence of their teachers. They also feel awkward with the informality displayed – calling a lecturer by his or her first name, remaining seated when the professor enters the room, walking through a door ahead of a tutor. (p18)

Actually, I realize that almost all Vietnamese students felt shock when they saw the behavior and communication between local students and teachers. As mentioned above, the teachers in Vietnam are always seen as being superior. Thus, when talking or addressing the teacher, Vietnamese learners always say “thua thay”, “thua co” to show their great respect. “Thua” is a very polite form which is used before a personal pronoun to talk to someone superior. Like other Vietnamese students, I felt reluctant to call teachers by their first name which I only used to call my friends in Vietnam. Moreover, the form of address between the teacher and Australian students gave me the impression that they seemed not to show reverence to the teacher.

Another thing I have discovered is that Australian teachers often treat students like their friends rather than their students. Dr. Peta, a lecturer at La Trobe University stated that ““We are not teachers – we are facilitators of learning developing lifelong learners”. Vu and Huong said that in their class, teachers usually encouraged them to express their own thinking and personal experiences no matter wrong or right. After that, teachers often made a comment or suggestion about the mentioned issues. The most important thing I have realized is that teachers always respect our personal ideas and experiences. This is worth noting that teachers said they are interested in our own experiences. Bigg (2003) shows that some characteristics of international students, especially students come from Confucian heritage societies make teaching them easier rather than difficult. To be influenced by host culture, we are often not confident to express our own ideas to teachers as we are afraid being wrong. Wei (1977) said that Vietnamese students usually avoid showing problems to outsiders because that is a revelation of their weakness. We concern more about *losing face or saving face*.

In addition, rest of the Vietnamese students – myself include - usually thought that in class the more we keep quiet the more we showed respect toward our teachers. The lecturers realized that, and they tried to change our approach in various ways, such as: encouraging us to discuss and sharing opinions; seating us with local students; asking us to engage in group discussions. Moreover, teachers required students in general and Vietnamese students in particular to say “My understanding is ...” or “in my personal experience, I think/suppose that ...”, instead of saying “I do not know” or “I have no idea”. To sum up, the usefulness I have learnt from teacher-student relationship in Australia are:

- A close distance between teachers and students
- The empathy and encouragement from teachers towards students
- The casual and informal environment in class
- Respect of teacher toward our own experience
- No avoidance in term of exposing the weaknesses in front of teachers

However, it is worth noting that, all of the teachers are different. Some are more strict and more formal, some not so. Some focus on content, some on relationships, some on learning facts, some on learning general principles, some on solving problems, some on theoretical frameworks. Generally, the teachers in Australian universities are easier to communicate than the teachers in Vietnam.

What are implications for Vietnamese students who are going back Vietnam after studying in Australia?

It can be asserted that, almost all Vietnamese students, who are studying in Australia, could understand and appreciate the positiveness of the new teaching and learning approaches in term of holistic education. However, this does not mean that holistic education could apply immediately to Vietnamese situation upon return. There is a meaningful proverb in Vietnamese that “Chuoì dao bang vang khong the lap vao mot luoi dao bang sat” (A golden knife handle cannot fit in a metal knife). In other words, we cannot bring the entire holistic contents in education to Vietnamese education. Furthermore, Vietnamese students, who return to Vietnam, is only a small number, so we should not be able to change the education system in Vietnam overnight as this is impractical and infeasible. We should try our best to incorporate new approaches to teaching and learning in some ways.

One of the most important things which Vietnamese, who will return to Vietnam as teachers will try and implement, is to replace the step by step teacher-centered approach by the student-centered approach learnt in Australia. Teachers should respect the feedbacks from students, and students should be free to express what they understand or what their confusion about the lecture material is. In addition, teachers should not impose and enforce their ideas on students' study. Instead of saying “Do your homework tonight”, we should say “Try and do your homework tonight”. In this way, we might reduce the pressure and enforcement on students, and students themselves would appreciate the encouragements from teachers rather than the orders. However, to successfully apply this way, the consensus of a small number of people is not enough, it really needs cooperation from other teachers, students and parents. Moreover, we should try to organize the class to become a cooperative learning environment. There should be more discussions in classes which now rarely happen in Vietnamese schools. However, the attempts of a few people are not strong enough. It needs a consensus of a whole society especially from the educational administrators of Vietnam.

Conclusion

This paper has taken up some ideas from Kato (2001). It has continued and developed the idea of cultural influences of international students during studying overseas. It includes challenges, hurdles, cultural shock and different teaching and learning approaches. The paper explored the range of feelings of Vietnamese students regarding coping with cultural differences, from puzzled, unconfident, passive, and isolated to be coming confident, active, interested, cooperative, and independent learners.

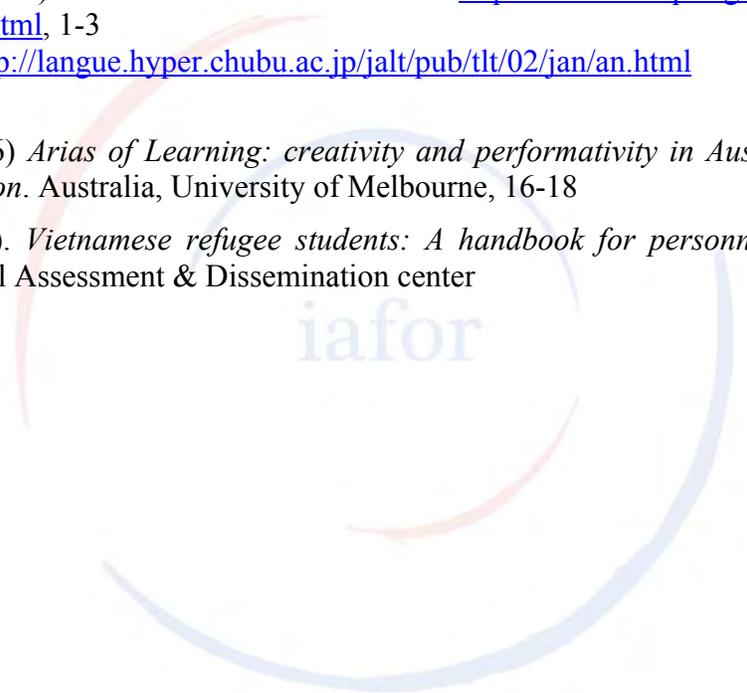
This paper based on reliable direction in the study of Kato in term of intercultural learning. However, the paper used the data from several discussions with a number of Vietnamese students who are studying in Australian universities. Most of the information comes from my personal experiences and other Vietnamese students in both Vietnamese

and Australian contexts, especially at La Trobe University. Moreover, data has also been included from other Vietnamese scholars who have already conducted the studies about the perceptions of Vietnamese students, such as Pho (1999); Phuong (2001); Ha (2001) and Le (1992) Thus, the drawn information would be not highly representative for all Vietnamese students who are studying in western countries in general and in Australia in particular.. In the next studies, I will attempt to give a more comprehensive and adequate analysis to consolidate the idea of cultural influences of international students during in studying overseas.

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The logo for the International Association for Foreign Language Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs in shades of blue and red, creating a stylized circular frame.

Mentoring Young Japanese TESOL Researchers

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Topic Strand: Professional Concerns, Training and Development

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iafor

Mentoring Young Japanese TESOL Researchers

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1. Introduction

English is increasingly deemed important in Japanese society, but Japanese graduate students need more than language proficiency to perform worldwide. That is, there are certain “conventions” and strategies that need to be acquired to join and thrive successfully in the world of academe. Yet, compared to that in the US that provides effective training for novice academics, currently there is no consistent system in Japan (Kira & Kitano, 2008, p. 29). This paper provides a descriptive account of what one university implemented to foster Japanese graduate students’ professional development.

In order to provide adequate training needed for young Japanese scholars to perform competitively, a mentoring program was devised. Mentoring has been used extensively in certain areas including business and medicine to promote individual’s career success, but has only recently been adopted in graduate education for individual’s academic development (Wright-Harp & Cole, 2008, p. 4).

Our research questions are as follows:

- i) Does mentorship provide effective and adequate training needed for graduate students to perform competitively (e.g., attending conferences, publishing in journals, etc.) in academic forum?
- ii) What kinds of benefits are gained by the mentees?
- iii) What factors are conducive to the benefits accrued by the mentees?
- iv) What are the obstacles in providing effective mentorship program?

In order to facilitate our investigation, qualitative data were collected from 15 graduate students, mostly from master’s level, in the course of three years, between fall 2007 to fall 2010. Two doctoral students’ accounts of sponsored conference attendance are also included.

Japan currently lags far behind other developed countries in terms of hosting students from overseas (MEXT, 2010a). Without an influx of students from overseas, Japan will

not be able to perform competitively in the international academic arena. Internationalization of Japanese institutions is therefore in dire need, which implies the need to elevate the quality of Japanese education. To begin with, research on the experiences of graduate students', particularly those at master's level should be explored (See Johnson et al., 2007, p. 64). In particular, research on the mentorship of Japanese students in the area of applied linguistics is missing in academic dialogues. For these reasons, this study sheds important light on the area of professional development on the part of young Japanese applied linguists.

2. Theoretical Framework

The theoretical underpinning for the mentorship emerged from the notion of sociocultural theory (Vygotsky, 1981). In the following, sociocultural orientation is explained, followed by a definition of mentoring.

2.1 Sociocultural Theory

Our theoretical perspective draws on sociocultural theory (Vygotsky, 1981). Sociocultural theory describes the genesis of knowledge to stem from social interaction that first appears on an intermental plane, which then is transformed and internalized on an intramental plane. Thus, according to Vygotsky (1981), *all* learning is not direct but rather mediated. Furthermore, sociocultural theory acknowledges the expansion of competence on the part of the learner with the help of an adult or a more capable peer. This expansion of competence, or in sociocultural term the *zone of proximal development* (ZPD), reflects not the current, already attained ability but the future ability of the learner which could only be manifested through collaboration (Lantolf & Thorne, 2006, p. 20). By reflecting these notions of interaction and ZPD, we have come to visualize mentorship as inherently connected to the expansion of the learner's cognitive development.

2.2 Mentoring

Now, the notion of "mentoring" needs clarification. Wright-Harp and Cole (2008) define it as:

a process whereby one guides, leads, supports, teaches, and challenges

other individuals to facilitate their personal, educational, and professional growth and development through mutual respect and trust.
(p. 8)

Wright-Harp and Cole (2008) distinguish mentoring from advising, as mentoring comprises more all-encompassing features where more commitment on the part of the mentor is expected. More precisely, academic mentoring includes at least three elements: (a) emotional and psychological support, (b) role modeling and (c) career guidance (Ku et al., 2008, p. 366).

Johnson (2007) claims that mentees can accrue eight types of benefits from participating in mentorship. They are: (a) scholarly productivity, (b) professional skill development, (c) networking, (d) initial employment, (e) professional confidence and identity development, (f) career eminence, (g) satisfaction with program and institution, and (h) psychological health benefits. In this paper, to evaluate the positive effects of the mentorship program, we refer to the first three of the eight categories (i.e., scholarly productivity, professional skill development, networking). This is because the students are still enrolled in the master's program and the effects the mentorship have on the students after they leave the program is beyond the scope of this paper.

3. Methodology

The majority of the data comprise the self-study (Loughran et al., 2004) and narrative inquiry (Connelly & Clandinin, 1990) where the participants reflected on their involvement in the mentorship. Self-study evolves from the notion of reflective practice (Schön, 1984) in which one's own experiences are used as knowledge source for practice. In this sense, it is a self-regulated and intuitive process. In narrative inquiry (Connelly & Clandinin, 1990), the participant shares his/her narrative with the researcher. In essence, this too is a reflective practice. This told narrative is an intellectual rendition of actual experiences. It is a personal meaning-making process, an idiosyncratic interpretation of the past, hence it might not be a true rendition of what had *actually* happened but yet is a guiding force of the tellers' action and the source of their philosophical orientation.

3.1 Participants

This study involves 12 mentees, or protégés, who have been selected between 2007 and 2010 to participate in the mentorship offered at an urban private university in Tokyo. They are all graduate students majoring in TESOL (Teaching of English to Speakers of Other Languages) or applied linguistics. There are four mentors in total, to each one mentee is assigned. The profiles of the mentors are given in Table 3-1, and those of the mentees are given in Table 3-2. All names of the mentees are pseudonyms, except for Lumi who is one of the writers of the present paper.

Table 3-1 Participants: Mentors

No.	Name	Gender	Age	Title	Area of Expertise
1	Ken	M	60s	Professor	Psycholinguistics
2	Josh	M	50s	Professor	Language Testing
3	Sean	M	40s	Assoc. Prof.	EFL Teaching
4	Mitzi	F	40s	Assoc. Prof.	Sociolinguistics

Table 3-2 Participants: Mentees

No.	Name	Gender	Status	Year	Mentor
1	Saori	F	D	2007(F); 2008(S)(F)	Ken
2	Mark	M	M	2007(F)	Josh
3	Kohei	M	M	2007(F); 2008(S)(F)	Mitzi
4	Shiho	F	M	2007(F); 2008(S)(F)	Mitzi; Sean
5	Kosuke	M	M	2008(S)	Josh
6	Takumi	M	M	2008(F)	Josh
7	Masayuki	M	M	2009(S)(F)	Ken
8	Naoto	M	M	2009(S)(F)	Josh
9	Tomoko	F	M	2009(S)(F)	Sean
10	Lumi	F	M	2009(S)(F); 2010(S)(F)	Mitzi
11	Shu	M	D	AILA 2008	-
12	Yuki	F	D	AILA 2008	-

D=Doctorate; M=Master's

S=Spring (1st) semester; F=Fall (2nd) semester

In early spring, the advertisements for the following academic year's mentorship positions are announced, and graduate students are invited to make their application. While the program is primarily for the TESOL master's students, graduate students in the applied linguistics strand in master's and doctorate programs are also permitted to apply. The priority for the TESOL students was instigated due to an external government research funding provided specifically for the TESOL program.

3.2 Data Source and Analysis

The data collected include retrospective surveys and reflective essays on having been involved as a mentee. First, the surveys were completed anonymously as to gather honest reactions to the mentorship program. Responses were used to identify common key themes among the mentees. Then, more detailed anecdotal accounts in the form of reflective essays were collected. The mentees were advised that these essays would *not* be anonymous, and will serve as feedback for the mentors. The survey data together with the three of the eight benefits identified by Johnson (2007) (i.e., scholarly production, networking, professional skills development) served as the thematic nodes for qualitative analysis.

4. Findings & Analysis: Participants' Voices

Findings and analysis of the participants' reflection essays are presented in this section. The themes are categorized into subsections that were derived from Johnson (2007) and themes that emerged from the surveys.

4.1 Scholarly Productivity

The mentorship program of the current study aims at providing effective and adequate training needed for graduate students to perform competitively in academic forum. In this respect, scholarly productivity receives high attention in evaluating the program's success. In the following section, accounts on scholarly productivity are presented, especially focusing on publishing, and presenting at conferences.

4.1.1 Publishing

Writing up an academic paper was mentioned as a valuable experience by all mentees. Those who wrote papers for abstracts and presentations for conference meetings expressed the writing process to be beneficial for both skills development as well as deepening their expert knowledge on their research field. Masayuki and his mentor Ken worked on the analysis of public opinions about the new English study guideline. Masayuki asserted that the research results were of great interest to him, and after writing a paper for an educational corporation, he stated:

Since it was the first time for me to write such an official report, I could learn how the professional research institution conducts the research and how the professional study report should be. (Masayuki, Fall 2009)

Overall, Masayuki expressed conducting research and writing a report was a valuable experience for his future research and career.

Takumi also mentioned that the research process provided him with experience that leads to his future research career. He was involved in proofreading a draft for a book on language testing. Takumi mentioned how he used various skills, including using statistical analysis software, and searching for and reading related articles so as to write a research paper. He described the process as advantageous:

...reflecting my experiences as a research assistant, what I have achieved was valuable especially to my future research for MA thesis. Basically by working closely to the professor, I learned many things that I did not learn by attending classes. (Takumi, Fall 2008)

Although the previous participants focused only on the bright side of the process of publishing, Kohei, who presented at two conferences and wrote two papers along with his mentor, expressed stress in writing a paper. Nonetheless the overall impression is positive, since he shows his eagerness in applying what he learned in the research process:

To be honest, the process of writing the paper and doing the analysis were very tough. However, after successfully finishing presentation, I was filled with a sense of achievement...Based on the experience, I

would like to apply for the presentation if there is a next chance. (Kohei, Spring 2008)

On the other hand, one of the participants (i.e., Saori) wrote papers not for a particular aim but to keep track of her research and submit them to her mentor (i.e., Ken) on what she was researching. She reflects on the process as follows:

...having given the chance to privately write reports for the sake of Ken's research was meaningful and was strong motivational factor throughout the process. It required a wide range of knowledge, interest, and patience to overcome this task; hence the fact that I was assisting Ken's research was an important aspect to carry out the study in this broad field. (Saori, 2007)

Although not directly taking part in publishing, having being involved in conducting research, some of the participants mentioned their development of new perspectives in terms of teaching and research. Mark mentioned in his essay:

...the program has exposed me to detailed insight into the workings of research and university life at the professional level...these projects helped me to develop those skills essential to being a teacher who not only teaches but one who also does research. (Mark, 2007)

Lumi similarly stated:

Having participated in the assistantship, I have learned that research is not a granted special privilege of the researchers done by "outsiders", but an on-going professional development for teachers. Being a research assistant meant, for me, the break with traditional approach to language learning and teaching. (Lumi, Fall 2009)

The participants' comments reflect their awareness of being (becoming) a teacher and researcher, which means the mentorship program offered the participants experience to develop not only as a researcher but also as professional teachers. From the accounts, it can be inferred that publishing allowed the participants to develop their professional skills that shape their future career.

In addition, participants who attended international conferences such as Shu, Yuki,

Shiho, Kohei and Lumi, expressed their professional development as well as heightening of their self-esteem and confidence.

4.1.2 PRESENTING

Those who presented or participated in international and/or domestic conferences mentioned their rewarding experience, gaining access to deeper knowledge of the field as well as sharing the research findings with other scholars who contribute to the same field of academic interest.

Saori, after presenting at a local workshop with Ken, reflected on her rigorous research as well as on the final presentation as a very fruitful experience. Hearing other speakers present was beneficial for her:

I reflected on my own presentation during other people's lectures, and began to recognize things I was not aware of at the time of my presentation. (Saori, Fall 2008)

Presenting in front of an audience gave the participants the opportunity to reflect upon their own presentation skills. Presenting did not serve as a mere end itself for many participants, but also as a means to share and receive feedback from the audience.

Masayuki also presented with Ken at the same venue a year after. He expressed his sense of fulfillment after conducting research and presenting along with Ken:

...the lack of prior comprehensive studies on this issue also made this research meaningful not only for me but also for the people involved in English education in Japan. Actually, many people seemed interested in our study, and I received many positive feedback comments from the audience after the presentation. For these reasons, the research and the presentation that I conducted with Ken were great experiences for me. (Masayuki, Fall 2009)

The reciprocal effect of the presentation fosters self-esteem of the participants, resulting in the rise of interest as well as confidence in their presence in the academic field. Shiho, who presented at an international conference, describes her similar sense of satisfaction

in having presented and shared ideas and issues at the conference:

Although we had only four audiences, I enjoyed giving a presentation in front of them. I enjoyed sharing our findings with researchers from another country (i.e., Indonesia) and answering their questions. They were eager to listen to our presentation and gave us interesting comments. This experience made me want to go to more international conferences and share my ideas with more researchers from many more countries. (Shiho, Spring 2008)

Making presentations was not always easy, as Shiho states, but the sense of accomplishment outweighs the hardship. Shiho states:

Although it had not at all been easy to complete this project and I often had to sacrifice my own research for the thesis...my experience of giving a presentation at an international conference taught me the enjoyment of sharing ideas with other researchers and helped me build self-confidence in working as a researcher. (Shiho, Spring 2008)

The account reveals the program being challenging but at the same time productive to equip the participants with the skills as well as confidence to enter the professional world of research.

Kohei, who attended another conference in Nagoya, reflected that he was able to make a link between the graduate course's content and actual research cases. Since the research was strongly connected to what he had learned in the course, this led him to become more interested in sociocultural theory and the related topics. Having presented at two conferences and served as a Teaching Assistant (henceforth TA), Kohei makes his final reflections as follows:

Without this assistantship, I might have had limited perspectives in academic area. This assistantship surely gave me wonderful opportunities to broaden my academic interest, to build my confidence in many aspects, to cultivate teaching skills, to foster linguistic skills in academics and to develop the quality as a researcher. (Kohei, Fall 2008)

Two doctoral students who attended AILA, Shu and Yuki, mentioned that

conference presentation has highly benefited their future research career. Shu stated, “the AILA conference provided me with a great opportunity to grow as a researcher” (Shu, 2008). Yuki offers a more concrete vision as to developing as a researcher:

I am enthusiastic to find out the extensive empirical research and projects that has been done by academics around the world. This will help me build strengths of both as a novice researcher as well as a teacher...I am looking forward to having discussion with researchers and teachers from different countries regarding improvements to teaching and programs for the betterment of learners. (Yuki, 2008)

Besides the participants who actually presented at conferences, those who only attended as audience also commented that they benefited in various ways. Naoto and Lumi stated that they gained how to make presentations effectively, as well as developing their interest in the field. Naoto states:

The conference had a section on language testing with some of the presentations related to my M.A. research. Each presentation of the section was very interesting to me and they taught me how to make presentation effectively in the limited time. After the all presentations finished, I became confident that I will be able to organize presentation as great as they did. (Naoto, Spring 2009)

Lumi, after attending an international conference along with Mitzi, reflects:

The presentation skills of the scholars served as a useful reference for the future, and I learned that researchers must have the skill to convey their theory not only via written but through oral means as well. (Lumi, Spring 2009).

Conference presentation is a major factor in developing the participants' self-esteem as a researcher and holds a great motivational effect on pursuing their future academic career. Some of the accounts revealed that the participation in conference itself has served constructively in terms of getting to know the conventions in the professional world.

4.2 NETWORKING

Developing professional networking is also one of the benefits mentioned that can be

attained through the mentorship program. Although not directly related to conference settings, Mark, for example, stated the importance of networking in relation to a project he was involved in:

Through this project I was able to meet people I ordinarily would not have been able to meet. Hopefully I was able to establish professional friendships that will last a life-time. In this way the GTR position helped me to network quite extensively, which was also one of my reasons for joining a graduate program in the first place. (Mark, 2007)

Yuki explicitly states the benefit of having the opportunity to socialize and to get to know prominent researchers from around the world:

...I was able to exchange ideas related with my field of studies and was able to look into my research from a different angle. (Yuki, 2008)

Shu, who also presented along with Yuki, similarly stated getting response from other researchers was beneficial:

The AILA symposium gave me a precious opportunity to report on my study in front of researchers from various countries in the world and to get feedback from them. (Shu, 2008)

In order to develop academically, socializing and exchanging opinions at an international level is essential. Some of the participants who have attended international conferences were able to appreciate the networks that are established among the researchers from all over the world.

4.3 Professional Skill Development

Among the various experiences and benefits that appear in the participants' reflection essays, two major professional skills are focused on in this section: Teaching skills that are obtained by serving as a teaching assistant, and research skills attained through conducting research.

4.3.1 Teaching Assistant

Some of the participants were involved in teaching in university settings, thus serving as TAs. The three participants, Shiho, Kohei and Kosuke, were given opportunities by

their mentors to take charge of a certain period of time in class and teach. All three participants expressed the teaching difficulties at first, but they came to know how to take the students through the class. Shiho reflected on her teaching as follows:

When I first stood up in front of the class and took students through reading an article, I got very nervous, and to be quite honest, there were a few times when I felt reluctant to go to class. Because it was only due to my lack of experiences standing up in front of people and giving lectures, however, I gradually became used to being “teacher” and started to enjoy taking them through articles. Many students commented on this course...when I read their comments, I was very moved and, at the same time, motivated to become a teacher myself. (Shiho, 2007)

As can be inferred from Shiho’s statement, getting used to teaching requires time and practice. Kohei went through a similar process in developing his confidence in teaching:

I had felt a pressure in front of the classes and almost always encountered difficulties in teaching the content matter as well as managing classroom atmosphere. I think I was not confident in my management skill as a teacher as well as language skills to teach content matter. (Kohei, Fall 2008)

Kohei pointed out that the continuous commitment in teaching has enabled him to enhance his quality as a teacher.

Kosuke served as a TA as well, but his duties were more inclined to helping out the professor’s (i.e., mentor’s) class rather than teaching and doing class management himself. Nevertheless, his presence in the university-level class gave him the opportunity to experience and gain classroom-related knowledge. He mentioned:

...it was very fun and informative for me to join students’ discussion, because they have a lot of experiences and opinions in studying and teaching language...I always brought these meaningful discussions to Josh after each class... I could see the class from both teacher’s and student’s point of view and found there were many cues and techniques to manage a class in English. (Kosuke, Spring 2008)

The participants’ TA experiences have led them to gain confidence as teachers and to

develop their skills as teaching professionals. This is an important effect of the program, especially because the program is being offered to the TESOL majors. In addition to the teaching skills, participants repeatedly mentioned the attainments of research skills as well.

4.3.2 Conducting Research

As may be inferred from the previous sections, all of the participants mentioned their sense of their own development as a researcher. Those who were involved in conference presentations described their development through actually preparing for and participating in the conference. Similarly, those who did not actually present but experienced some work on research process also noted their progress.

The general consensus was that the program offered them the opportunity to gain deeper understanding of the research field as well as knowledge in academic research methods, attaining academic research skills such as analyzing and writing papers. Tomoko expressed how she was able to gain deeper knowledge of qualitative research, which she found new and interesting. She stated:

By using qualitative research methods, there are data that can not be obtained through numbers and statistics, which is very appealing to me. I would like to refer to this experience when I design my own MA thesis research. (Tomoko, Spring 2009)

Similar to Tomoko's account on coming to know a new research method, other participants also expressed their joy in these encounters and showed eagerness to apply them to their own research. As a whole, the program can be evaluated as successful in enhancing the participants' professional knowledge and skills, as well as their self-esteem as researchers and teachers.

6. Discussion

Given the overall positive accounts for the mentorship program, it could be said that the program was successful. The numerous benefits the mentees claimed to have accrued would help their future academic and professional performances. Yet such program does have limitations. First, mentorship calls for time, effort and funding. Coordinating

a successful program involves seeking, maintaining and nurturing assistantship provided by mentees. This cannot be done without care on the part of the mentor (Ku et al., 2008, p. 373; p. 375). This time-consuming effort should be rewarded by making it a part of tenure and promotion process (Wright-Harp & Cole, 2008, p. 9). By doing so, this can propose a win-win situation for both the mentor and the mentee. In contrast, if no such provisions are made, less faculty members would volunteer to be a mentor, thus less number of students being mentored. This would be an unfortunate outcome, as Johnson (2007) reports how “the vast majority of those not mentored report regret at being unable to find a willing mentor” (p. 204).

Second, we have discovered that not all mentoring experiences are uniformly relevant. That is, the students’ level of satisfaction and sense of achievement reflected the productivity of the mentee. Such productivity cannot be accrued by the mentee alone. The work done collaboratively between the mentor and the mentee determines the quality of the mentorship to a large extent (Johnson, 2007, p. 196).

The mentor could enhance mentee’s professional confidence and identity by providing a forum where mentorship could lead to productive graduate and post-graduate activities. Johnson (2007) refers to this chain reaction as “social heredity” (p. 197) where the quality of mentorship provided by a mentor could have far-reaching consequences on the mentee, largely contributing to the successes (or failures) of the protégé. Specifically, “protégés are more likely to adopt the professional demeanor of the mentor and sharpen many of the profession-specific skills crucial to eventual success” (Johnson, 2007, p. 195). This social heredity, or the passing of qualities from a senior to a junior scholar, could result not only benefits for the novice scholar, but for the senior scholars as well (Johnson, 2007, p. 198).

In sum, the mentor could accrue the following benefits by providing successful mentorship:

- a) personal satisfaction from witnessing growth and development in protégés;
- b) personal fulfillment and meaning;
- c) creative synergy and professional rejuvenation;

- d) networking;
 - e) motivation to remain current;
 - f) friendship and support;
 - g) reputation for talent development.
- (Johnson, 2007, p. 1999)

6.1 Limitations

While the analysis illuminates positive effects of mentorship in the field of applied linguistics, this study suffers from two shortcomings: the small sample size, and the public nature of the essays. To begin with, the experiences of the mentees are context-specific, largely shaped by the nature of the task and the relationship they had with their mentors. This does not allow for any generalizations.

Second, the mentees knew that the reflective essays would be read by their mentors. Hence it may have deterred them to give honest opinions, hence documenting only the positive dimensions of the mentorship program. However, the survey allowed for some anonymity, thus inviting any negative feedback, if any.

7. Conclusion

The results show how successful mentorship could lead to research productivity including reviewed journal publications, book chapters, and conference proceedings while the mentee is still a graduate student. This in turn enhances the probability of post-doctoral performance eventually leading to a successful and productive faculty membership (Wright-Harp & Cole, 2008, p. 14). Given the positive impact it has on the graduate students, it leads us to conclude that there is a pressing need to create more mentoring programs at all levels and on a national basis (Wright-Harp & Cole, 2008, p. 14). Mentorship could provide a pathway for the needed positive transformation of the academy, in order to provide sound, effective academic training (Herman & Mandell, 2004, p. 206). However, positive and successful mentorship program requires numerous elements for its success. For example, an ideal mentor should be committed to mentoring, be accessible, be open-minded, be supportive, be sensitive and considerate, be respectful, trusting,

understanding and empathetic (National Academy of Sciences, National Academy of Engineering Institute of Medicine, 1997, in Wright-Harp & Cole, 2008, p. 9; See also Zelditch, 1990, p.1). In sum, the ideal mentor should possess excellent motivational skills and be committed to nurturing students, believing that mentoring is satisfying and rewarding (Wright-Harp & Cole, 2008).

Given the commitment on the part of Japanese Ministry of Education, Culture, Sports, Science and Technology in providing competitive and sound post-secondary education, a project known as Global 30 was launched in 2009 (MEXT, 2010b). This project addresses the need for the Japanese institutions to provide attractive, competitive education for Japanese and international students in Japan. By emphasizing globalization, Japan hopes to contribute significantly internationally. A successful and effective mentorship needs to be maintained and monitored to assure the nurturing of novice scholars who can participate in global arena. In order to do this, institutional commitment is indispensable.

The study on mentorship relationship is still at its infancy, especially in the field of applied linguistics and it is hoped that exploratory qualitative research would provide ways for theory building (Johnson et al., 2007, p. 65). It is hoped that this paper contributes to such endeavor.

(4844 words)

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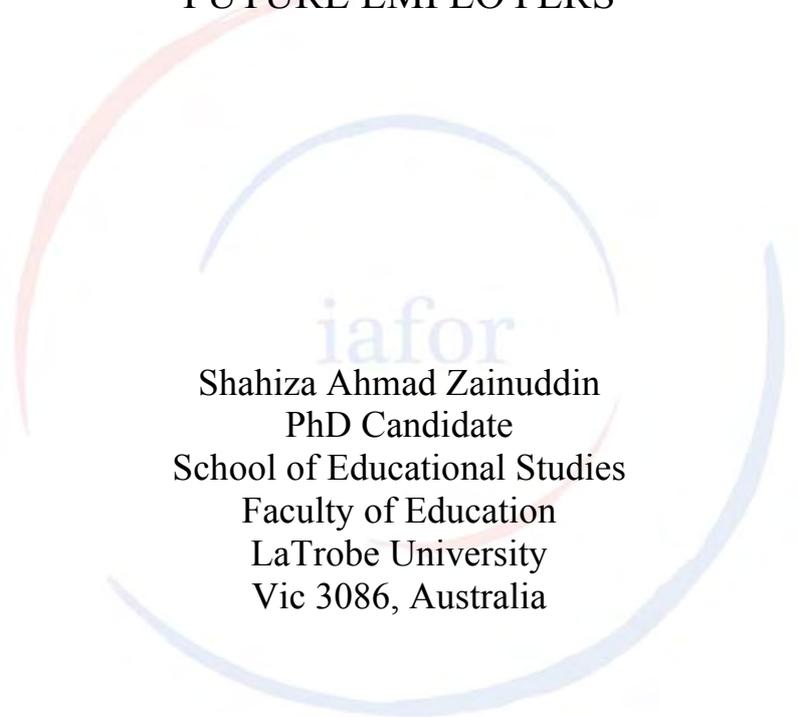
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ENGAGING THE LANGUAGE NEEDS OF ICT STUDENTS AND FUTURE EMPLOYERS

The logo for the International Association for Frontiers of Research (iafor) is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The upper arc is a light red color, and the lower arc is a light blue color, matching the text. The arcs are positioned such that they appear to frame the text from behind.

iafor

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1.0 Introduction

Languages in Malaysia are accepted not only as a mean of communication but they are seen as means to ensure the country's development. The status of the Malay Language or Bahasa Malaysia (BM) as the national language needs to be uphold, having English Language as the second language and on top of that, without neglecting the importance of other languages.

After the independence in 1957, education in Malaysia has gone through many dramatic changes and one of them was to upgrade the standard of the Bahasa Malaysia as the national language. The national language is used as a mean to unite all the races in Malaysia. Language shift in Malaysia has been an ongoing concern for many years. Language is seen to motivate unity among the many races and as a mean to develop the country.

Even though BM is widely used as a language for all formal correspondence in Malaysia, it lacks of terminology for science and technology. In the new world of globalisation and modernisation, Malaysian government cannot avoid from taking drastic actions which may be seen as retreating to the past. Language is again seen as a factor that influences a success of a nation. English has become the second most important language (Asmah, 1992) even though it is the only non-native language taught in all schools. In the mid-1990s, the government urged the tertiary institutions to use English in teaching technical courses and at the same time, senior government ministers including the ex-prime minister, Tun Dr Mahathir Mohamed have become convinced that the standard of English Language in Malaysia has deteriorated and may jeopardize the nation.

Despite the dissatisfaction voiced out by many, in 2003, the government had introduced the teaching of Science and Mathematics in junior primary and secondary classes via English medium (Ridge, 2004). It was convinced that by integrating the language and content would increase the students' content and language competency. The future generation of Malaysia will be able to accept challenges of globalisation and Information and Communication Technology. However, after six years experimenting using English to teach Mathematics and Science in schools, Malaysian educational authorities have accepted the view that these subjects are better taught in a language best understood by students, which is BM in national schools, Mandarin in Chinese and Tamil in Tamil schools (Lotbiniere, 2009). The, English-medium education policy, introduced in 2003, will be phased out, from 2012, in junior and secondary schools .

Higher education institutions, including polytechnics and community colleges, will need to adapt to these changes in the language policy. Future students will face greater challenges. They will need to improve their English and be competent enough to study at polytechnic which will maintain the usage of English in their teaching and learning. Polytechnics will need to take initiatives to improve their students' knowledge of content in English, and upgrade the bilingual competencies among lecturers. If these challenges can be overcome polytechnics could produce future graduates who are good academically and can demonstrate language competencies which are acceptable to employers.

2.0 Overview of Language and Employability

For these past years, there have been concerns that the higher institutions do not produce graduates who meet the needs and expectations of employers. The issue of not having Malaysians who are proficient in English language is widely discussed in industry and education. Realizing this, the Malaysian government has taken serious measurements to overcome this problem. One of the steps is to enhance the importance of English. English is the language of science and technology, therefore, Mathematics and Science subjects are best taught in that language (New Sunday Times, 21 December 2008). Higher institutions such as polytechnics, accept the importance of English as the language used in teaching technical subjects. Despite the dominance

of English in teaching ICT, the relationship between teaching ICT and English continues to stimulate discussions, because of the tension between the current English proficiency levels of students and their teachers, and the demands of employers for communicative competence in English in the workplace.

2.1 Language and employability

Employers have frequently voiced their disappointment at the quality of graduates who do not meet the job market requirements (Industry Dialogue, 2008). It is mentioned that graduates lack hands-on knowledge and relevant skills and the industries were not keen to take on the task of training new employees. Students are expected to graduate with employability skills also known as job readiness skills. One of the employability skills is communication skills (Latisha & Surina, 2010). The graduates' poor communication skills in English and their inability to articulate a line of thought in either English or BM are among the employers' complaints (Industry Dialogue, 2008). A lot of research documents claims that, graduates' lack of competency and poor communication skills affect their ability to secure jobs (Lee, 2004; Nurahimah, 2002). According to Tan (1999) based on a needs analysis 60 percent of students in Malaysian Polytechnics had low proficiency in English, not enough for career advancement. It was reported that only 600 from the total of 13000 graduates who registered with Human Resource Ministry for jobs in service and marketing sectors in the first 10 months of the year 2002 were employed, while the rest were rejected due to their poor command of English and lack of communication skills (Fairuz, 2003). The decline in the standard of English is not only felt in the academic circle but also in diplomatic services (Asmah, 1992). In another survey conducted by Nurahimah and Rosmawati (2002), discovered that employers perceived the graduates were not prepared with written and oral communication skills in English.

This causes difficulties for the graduates to find a job after they have completed their studies. It becomes a nation worry when the mission to produce human capital which is IT literate, independent, highly motivated and competitive (Education Ministry, 2000) seems not been accomplished when the ex-Human Resource Minister, Datuk Dr. Fong Chan Onn revealed the feedback from employers that a number of unemployed graduates lack of communication skills, unable to use computers and lack of team spirit (Cruetz, 2003). Due to these, Malaysia has set up RM70million fund to retrain unemployed graduates and teach them skills such as communication, English Language and creative thinking (News Straits Times, 8 March 2009).

I believe the ministry has been accommodating and sensitive towards employers' needs and prepare programmes which involved collaboration and cooperation between industries and the ministry. In addition to this, several actions have been taken in order to increase to proficiency level in order to meet the minimum required standard claimed by future employers; among them are conducting dialogues with industries and setting up graduates' development programmes which involve participation from industries. It is hoped this initiative will help the unemployed graduates to be able to fully adapt their generic skills thus creating wider opportunities to secure jobs.

2.2 ICT in Malaysia

Information Communication Technology is seen as the field where English is used as medium of instruction and the graduates of polytechnics should prepare themselves to be semi-professional group who might need English for their career advancement. ICT in Malaysia has been identified as one of the factors that contribute in achieving the mission proposed in Malaysia Education Development 2001-2010. ICT development is seen as the important driver for positioning Malaysia as competitive knowledge based economy, global ICT and multimedia hub (MOSTI 2007). One of the challenges for the nation is to develop an economy system which is based on

knowledge or K-economy. K-workers or knowledged workers are the people who create information and knowledge and integrate it into business (Turban et.al, 2001).

Therefore, graduates who are proficient in English which is the language used in the ICT era have the advantage to utilise their generic skills. They will be able to learn on their own and explore the world of IT and become future workforce who is K-worker, IT literate, independent, with high motivation and competitive in line with the mission proposed by the Higher Education Ministry. Hamidah (2001) discovered a significant relationship between English language proficiency and Information Technology (IT) literacy. IT literacy is affected by the level of proficiency in English, the language of technology. Garcia-Vazquez, E., Vazquez, L. A., Lopez, I. C., & Ward, W. (1997) found out that there is a significant connection found between proficiency in English and standardized achievement scores.

It is a concern for the nation that Malaysia has a sufficient supply of graduates with technical skills which includes ICT but the demand for graduates is low despite the economic growth in the country (Singh & Singh, 2008). It has being said that graduates with employability skills attract future employers. If one of the employability skills is ability to communicate in English (Latisha & Surina, 2010), then a low level of English competence will have a negative impact on employability.

In this paper I examine in detail what are the components of competency in English that employers are seeking. If we can specify in sufficient detail the perceived needs of employers and compare them with the perceptions of students and their teachers, we might have a better basis for identifying appropriate structures and strategies for the content and pedagogy of integrating English language with the teaching of ICT in Malaysian polytechnics.

2.4 English Language Programme in Malaysian Polytechnics

The tertiary institutions including polytechnics have taken the next step and starting 2009, English is used as a medium of instruction in teaching technical subjects. The Department of Polytechnic and Community College Education (DPCC), Ministry of Higher Education, Malaysia is aware of the needs to improve the ongoing language programmes and supports progressing in polytechnics and community colleges. Among the support programmes was to prepare the subject lecturers with English courses before implementing the language shift. The three-phase language programmes enhanced the skills and abilities of the lecturers in using English in class. English lecturers were trained and they became the facilitators in this programme. In addition to that, DPCC gives opportunities for the industries to contribute by organizing industry dialogues, annually since 2006. The main objectives of these dialogues are to foster closer ties with the industry and to have first-hand feedback on current trends pertaining to the human capital needs of the industry and nation. DPCC is aware the importance of engaging the needs of the industries and how the polytechnics and community colleges can fulfil those needs for the national as well as the international market.

The general aims of English syllabus are to develop students' confidence and fluency in English and to enable them to function effectively at the workplace. Besides that, the graduates should be able to practise independent learning and self-monitoring as well as to develop appropriate study skills. The objectives mentioned in the syllabus include the graduates being able to communicate effectively with Malaysians and non-Malaysians (English Syllabus, 2002). Industrial visits and gradual exposure to ESP brought awareness amongst the English lecturers of the needs to have an English language programme tailored to the needs of the students and at the same time, sensitive towards the expectations of the students' prospective employers.

3.0 Methodology

This paper explores the language skills needed at the workplace and future expectations for graduates in IT. In order to find the language needs, both quantitative and qualitative data are used. A mixed method research is opted for this study. This study was conducted in a few phases and it involved two groups of respondents: students and trainers.

3.1 Sampling

For this study, I have employed purposive sampling which involved ICT students of polytechnics and industrial trainers. In purposive sampling, the researcher identifies the characteristics of the population of interest and locates individual with those characteristics (Johnson & Christensen, 2008).

3.1.1 ICT Students

The sample was chosen based on two criteria: experience in learning English in polytechnic and had undergone industrial training. The respondents should have undergone English for Technical Purposes when they were in semester 1, 2 and 3. The researcher was interested to investigate the perceived needs of the ICT students who have taken English courses in polytechnic. Their experience in learning English in polytechnic and during their industrial training helped the researcher to get a description what their language needs for academic and occupational purposes.

3.1.2 Industrial trainers

The other group of respondents was the industrial trainers. The researcher was interested to find out the needs and expectations of the trainers. Their needs and expectations of the use of English in the workplace are important in this study. A semi-structured interview with was conducted.

4.0 Methods of Data Collection

4.1 Questionnaire

The questionnaire was developed based on a study on language and ICT literacy skills by Hamidah (2001) and Juriah et.al (1997), English and ICT syllabus used in polytechnics and Information Technology Checklist questions from CAUDIT (The Council of Australian University Directors of Information Technology) IT Literacy Policy. Questionnaire is a self-report data-collection instrument and researchers use them to obtain information about the thoughts and perceptions of research participants (Johnson & Christensen, 2008).

The findings of the questionnaire were used to find out respondents' perceptions on the language needs and perceived level of IT literacy. The students were asked to evaluate their own proficiency level and mark the language needs at their training places. Responses were gathered from participants who learn English in polytechnic and have undergone their 6 months Industrial Training Programmes. They were asked to express their language needs pertaining to learning IT and training place.

4.2 Interview

For this study, I have conducted two types of interviews; retrospective and semi-structured. Interviewing is an important way for a researcher to check the accuracy of-to verify or refute- the impressions he or she has gained through observation (Fraenkel & Wallen, 2000). Interviews allow opportunity for researcher to prompt or probe the participants when necessary (Johnson & Christensen 2008).

Retrospective interviews can be structured, semi-structured, or informal (Fraenkel & Wallen, 2000). The aim was to find out further clarification and explanation on the language needs of the ICT students. This type of interview was conducted in a group of five students. These students have participated in the earlier stage of the data collection; which was the questionnaire administration.

Semi-structured interviews were conducted with industrial trainers. The data gathered from the interviews was pertinent to give rich data of the needs of trainers. This method of data collection will help the researcher to allow participants provide historical information on their fields (Creswell, 2009). Concerning this, researcher conducted face-to-face interviews with eight industrial trainers. Their responses on the language needs of the ICT students for training place were important to discover the expectations and demands of future employers and ICT students.

5.0 Findings and Discussion

The findings are categorized into two sections: students' perceptions, and discussion of the four sub skills of reading, listening and speaking and writing.

5.1 Students' perception

Results from the questionnaire distributed, described the ICT students' perception on their language proficiency. Students were most proficient in Bahasa Malaysia (BM) which is the national language in Malaysia. English as the second language were graded as little. Since English is not one of the requirement subjects to study at polytechnics, it is expected that most students is with average or low level of proficiency. Table 1 below describes the perceptions of students regarding their language competency.

Table 1

Languages	Expert		Average		Little		None		Total
	F	%	F	%	F	%	F	%	
Malay	55	80.9	9	13.2	4	5.9	-	-	100%
English	-	-	19	27.9	45	66.2	4	5.9	100%
Others	4	5.9	3	4.4	2	2.9	59	86.8	100%

F : Frequency; % : Percentage

Based on the students' perceptions on their language proficiency, it reflects students are most confident in Malay and none perceived themselves as experts in English. The students were asked to indicate their proficiency in English skills and the highest mean score was reading (3.83) then followed by listening (3.26), writing (2.58) and the lowest mean was speaking (2.75). A six-point rating scale was used to get the students' perception on their skills in English. Students of polytechnics perceived themselves as either with average or little competency in English. Their evaluation on their own competency of using the language showed there was a tension between the level of English proficiency and level of expectation among trainers. The trainers expected students of polytechnics to be of average competency level. However, during the interviews, the trainers accepted students, regardless their low English competency level but kept on stressing on the needs for them to improve their English.

The students claimed they needed English especially when it involved IT. They accepted that most terminologies and content were in English, therefore they need this language for better

understanding. The students used English to do their own research and to gain better understanding of ICT subjects. Besides that, they made friends with people from other countries and exchanged views and opinion to improve their knowledge. They needed to do their own reading in order to master the IT. Even their lecturers encouraged them to learn more on their own. They know English is the language of IT and to master IT they need the language.

5.2 *Students' perceptions of needed competencies*

The students were asked to answer some questions to describe their industrial training placement. All polytechnic students are required to join companies related to their field and get some real work experience. Students were either assigned to companies in order to get places to be trained. Unfortunately, it is getting harder even to secure a place to get training due to many reasons and one of them is the economic condition. Most of the students decided to do their industrial training recommended by lecturers or seniors. Table 2 is the description of places where the IT students went for their Industrial Training.

Table 2

Background of Industries	Frequency	Percentage
Industrial Sector		
<i>Private</i>	46	67.6
<i>Government</i>	22	32.4
		100%
Industrial Placement		
<i>Services</i>	25	36.8
<i>Management</i>	20	29.4
<i>Engineering</i>	13	19.1
<i>Others</i>	7	10.3
<i>Non Response</i>	3	4.4
		100%

From the responses given, many students did their training at private companies more than government. English as a second language is widely used in private companies especially when they deal with international businesses.

The students were given the opportunity to choose the companies in which they preferred to undertake their training. Most of them chose companies based on the location, recommendations from friends or suggestions from lecturers. The economy situation can be one of the factors for the students not to be too selective in choosing a place to be trained. Even though, English is the second language used in Malaysia, it is widely used in private companies. It may vary in ways and intentions but I could say that it has its own place. The role of English may not be the same but both students and trainers accepted that English has its own purpose and use even in government sectors and fully-owned Bumiputera companies. Respondents claimed during their training, English was used sometimes both formal and informal interactions. They needed to be able to use English to fit both situations.

The role of English at the training places is highly influenced by the nature of the companies and most of the time is based on the work or projects they are involved in. Usually, companies which deal with government projects may use BM and English is used in multinational companies. Based on the students' responses, they claimed English was used during formal and informal interaction. Formal interaction scored the mean of 3.88 and informal interaction with the mean of 3.55. They responded based on six-point scale and 6 as being very important. I could say this

shows regardless either it is a government or private company, English is still used at the workplaces. The students ranked the most important English skills at the workplace and claimed listening skills, with the mean of 3.88 as the most important. Reading with the mean of 3.86, speaking with 3.63 and finally, writing with 3.48. Writing skills was seen to be the least important skills required during their training.

For this study, majority of the students did their six-months training at private companies and 32.4% underwent their training at government companies. These private companies include private local and private international. Government linked companies may involve some deals with private international companies. Overall, background of the companies and duties assigned to these students contributed to the language needs and expectation at the training places.

Formal interactions involved attending formal meetings and briefing from supervisors. Receptive skills such as listening and reading were placed in a higher rank as English skills used at the students' training places. The students felt they needed reading skills for reading materials to improve their knowledge and IT skills and when they applied for jobs. Even though, writing was seen as the least important skills at their training place, the students believed they needed these skills when they wanted to apply for jobs. They needed writing skills to prepare curriculum vitae and cover letter. They may not require to prepare reports in English during their training sessions but they needed this skill in order to apply for a training place. Their duties as trainees for six months may confine them to certain responsibilities and expectations. Companies were given full autonomy to set their own module in training these students. There were companies who prefer to encourage the students to venture into other skills such as marketing or conducting IT classes for many reasons. They prefer to expose students to skills that are not taught at polytechnics.

5.3 *Competencies in the four sub skills.*

5.3.1 *Reading*

Respondents perceived reading as a highly needed skill during their training and this was agreed by the trainers. They perceived reading as highest proficient skills in English and may reflect their confidence level in using reading skill in their everyday lives. As for the IT students of polytechnic, they claimed they needed reading skills to improve their knowledge and skills in IT and especially when they were looking for jobs. Respondents perceived reading materials to improve knowledge and skills with the highest mean of 4.21. Reading materials did not only include academic materials but non-academic too such as newspaper and magazines. Students stated they needed reading when they went through job advertisements in order to apply for jobs that matched to their qualifications. As mentioned by Ting (2002), even though reading and writing were not needed in a predominantly Malay-speaking work environment, support staff did read not work-related material such as magazines and newspaper.

Trainers who were interviewed claimed students needed reading to get more information especially on IT. They agreed English is the language used in science and technology and in order to get the recent information, the students were encouraged to learn on their own through internet and books. Occasionally, the trainers gave links of related websites and students needed to search on their own. Even after the students have graduated and started working, they have to keep on learning and get in touch with new development of IT. In addition to that, reading was needed when it came to receiving written instruction or memo from superior staff.

5.3.2 *Listening and Speaking*

Listening skills is the most important skills during their training with the mean of 3.88. As for speaking, the students marked it with the mean of 3.86. Based on the responses, the students needed listening for instructions and during briefing. They perceived to require English during communication with employers and clients. Communication with colleagues was with lower means. During the group interviews, students agreed that they needed English when they dealt with international companies or BM. In some occasion, even 100% Malays companies conducted their meetings in English. The students mentioned English was widely used as a mean of communication even though it was a 100% Chinese owned company and among the colleagues, they preferred to communicate in English rather in mandarin or the other Chinese dialects. The students did mention, the language chosen for the company depends on their customers. Therefore, most international companies opt for English when dealing with businesses.

Trainers noticed the students' communication ability was average and the students complained of not being able to use English, competently. One of the trainers who handled dealings with telecommunication companies claimed English is used most of the time with their clients and the students needed to be competent in the language. The trainers agreed they used BM whenever they dealt with government since BM is the national language. Realizing that the students needed assistance to improve their English, the trainers prepared programmes for language enhancement, such as teaching IT or practise writing reports in English. Unfortunately, only the big companies practise this programme.

5.3.3 *Writing*

Writing was perceived as the lowest skills required at the workplace with the mean of 3.48. Students used English when they wanted to apply for jobs. They wrote letters and resume in English. Even though, it was not requested by companies, they claimed to have better chances in getting a place when they wrote in English. In addition to that, their lecturers at polytechnic encouraged them to write letters and resume in English.

During industrial training, the students were not expected to write reports for the company but they were encouraged to write their daily notes in English. Each student was expected to write notes of their activities during the six-month period. However, since the students were given choices either to use BM or English, majority preferred to use BM. Nowadays, communication involves more than listening and speaking. Communication has taken a step further when it involves communication via email. Instructions and tasks were given to subordinates through email. It may involve short notes and memo but the students need to know the language to understand the information.

5.4 *Future expectations for graduates in IT*

Based on the interviews, trainers had voiced out their opinions on their expectations and needs of graduates in IT. It is known that ICT evolves rapidly and being in this field, the students need to be progressive and responsible in making sure that they are equipped with recent knowledge. In order to do this, they need to work independently in finding solutions and new advancement in ICT. It is accepted that English is the language of ICT and to upgrade the knowledge, the students need the language to seek the knowledge in this field. Furthermore, English is important for career advancement. They added without the language, they may have difficulties to reach the standard set by the companies.

Trainers also felt collaboration between industries and polytechnics may help in finding ways to produce future graduates who are fit to the needs of industries. The industries encouraged

lecturers to be involved in the actual work experience. By having this experience, it may help the lecturers in their teaching and making the syllabus more parallel to the current situation.

Trainers admitted they were satisfied with the students from polytechnics and this was shown by the number of students accepted to do their practical at the companies in each semester. However, there are always rooms for improvement. There are trainers who prefer to expose the students to new things regarding to ICT and challenge them to venture into new field. In order to be more adventurous, the students need to have the right attitude and desire. They need to be motivated, independent and know how to apply the knowledge. Having the competency in English, helps them to become better ICT personnel. One of the trainers did mention ICT skills can be learnt at work but communication skills is only taught when the students are still in schools. Throughout time, duties and expectations of ICT personnel have shifted. They are no longer seen only dealing with technical aspects but nowadays, they need to be more mobile. They are expected to handle clients, closing deals and attend tender briefing. With this, polytechnics need to produce graduates who are knowledgeable and equipped with other skills too.

6.0 Conclusion

The findings of this study engage the needs of ICT students and future employers. Acknowledging the role of English in their field and having the competency in the language will help the future graduates. Since Malaysia cannot avoid competing with other nations in today's globalization era, Malaysians need to be knowledgeable and skilful in the field of science and technology.

It is a fact that tertiary education will remain dependent on English and students who are not proficient in the language will feel deprived of not being able to use of reading materials in English (Abdullah 2005). Students and trainers accepted the oral communication skills of listening and speaking as skills that will help them to succeed in ICT work places. Graduates with good communication skills may attract future employers who nowadays seem to have lifted their expectations to employing graduates with academic knowledge and fit with generic skills. Reading English materials in ICT was perceived as the second most needed skill even though the graduates work in 100% Bumiputera companies which use BM. Students were encouraged to learn on their own by surfing the net to seek for latest information. Trainers admitted they needed to read on their own in order to upgrade their knowledge as ICT evolves rapidly. Communication evolves from merely listening and speaking, people communicate via internet, through email and chatrooms.

In conclusion, in today's world, it is not adequate to only have good grades without mastering the generic skills especially communication skills. By being sensitive to the needs of the students, the lecturers and future employers, it is hoped that the polytechnics can assist future graduates to be employable in order to achieve the target situation.



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Interactive Whiteboard and Pedagogy

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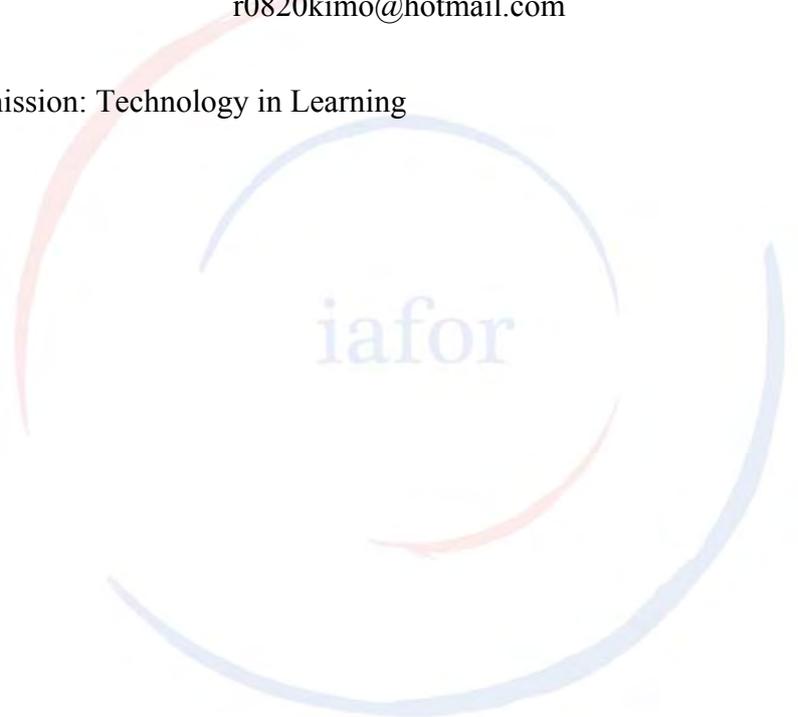
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Topic of the submission: Technology in Learning

The logo for the International Association for Frontiers in Education Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, swirling effect.

Interactive Whiteboard and Pedagogy

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Abstract

Interactive whiteboard (Interactive Whiteboard, IWB) laden with noticeable interactive features into the teaching field, changing the way of teach-and-learn between teachers and students. Interactive whiteboard can make a wide range of presentation materials, manage the teaching tool. It is better for a teacher to organize and arrange the teaching materials before the class, that will improve the teaching fluency, make teaching more efficient. Therefore, the functionality and features of interactive whiteboard provide teachers a way of easy and convenient to teach, to create or to manage teaching materials; the interactivity of interactive whiteboard and multimedia materials presentation have an impact on students learning motivation and effectiveness. This study will first analyze and compare the E classroom trend between the European countries (including the Republic of Macedonia, Spain, Portugal and the United Kingdom) and Taiwan; Next focus on the definition and teaching assistance of the interactive whiteboard, and discuss the British teaching experiment, hoping to give a brief introduction of this high-tech and mysterious field of interactive whiteboard.

1. Current Status of the Development of E-classroom in European Countries

(1) Republic of Macedonia

In order to promote information education, in Republic of Macedonia, every student is provided with a notebook computer. They initiated the construction of information infrastructure in 2007, installed desktop computers in classrooms in 2008, and started to purchase the computers made in Taiwan in 2009. The government aimed to provide computers to all 310,000 students in Grade 1 to Grade 12 in Macedonia. To achieve this goal, the government of Macedonia adopted the strategy of “subsidization and encouragement”. In order to encourage students to purchase computers, the government provides subsidies and the expense will be shared by parents and the government. For students from low income family, the government will provide them with computers for free.

(2) Spain

The information infrastructures in Spain have been well constructed. Their specific method to

promote information education is to implement demonstration project of information-integrated education in specific areas, where the teachers are all equipped with notebook computer.

(3) Portugal

The Portuguese government encourages students to purchase computers through subsidization, and provides those from low income family with computers for free. The development of information technology in Portugal has been in the lead among the European Union members because the government had perceived that information literacy is symbolic to the overall national strength. All children in Portugal bring their own mini-notebook computers to schools. Moreover, the schools in Portugal establish resource classes for learning-disabled students whose academic performance is poorer to receive remedial instruction. There are many useful devices in resource classes to help learning-disadvantaged students to receive the best instruction.

(4) United Kingdom

The development of information technology in the UK has been in the lead among European Union members as well. Their method to promote information education is to use interactive e-whiteboard. More than 80% of the classrooms are equipped with interactive e-whiteboard. In other words, UK promotes e-schools. The school principals can understand how interactive e-whiteboards are used by teachers in class and e-schoolbags are used by students simply by clicking. Schools are equipped with e-instruction platforms and there are many teaching materials available for teachers to download. Therefore, the UK not only promotes e-classrooms, but also e-schools, which include various platforms to assist teachers in using interactive e-whiteboards to teach students, and provide students with an environment where they can use e-schoolbags. Not only are classrooms in the UK all equipped with interactive e-whiteboards, there are platforms to manage them behind, such as teaching materials management and classroom management programs. In terms of classroom layout in the UK, computers are installed around the classroom and an empty area is left in the center. An interactive e-whiteboard is installed in front of the classroom, and sometimes there is an additional whiteboard or blackboard in a classroom as a teaching aid. However, an interactive e-whiteboard is mainly used in class, whereas a whiteboard or blackboard is only a teaching aid.

Therefore, in terms of the status of promotion of e-classrooms in EU countries, their objective is to make all students have their own notebooks. However, the provision of sufficient devices is simply a small start. Their ultimate objective is to construct the overall e-environment, such as constructing many platforms to assist students in learning. One elementary school in Portugal is equipped with various testing systems, which allows students to take online tests. All students can see their test performance, as well as that of others. Such competitive and cooperative learning system is much like the sequenced answer system which was popular in Taiwan many years ago. However, Portuguese schools have established an environment where students can really take online tests and Q&A; namely, all students have notebook computers to take online

tests. However, this is not the end of the project, but the beginning instead. After students have had their own notebooks, schools have to consider how to make the overall school environment conform to such teaching facilities to teach students. The provision of interactive e-whiteboards in school environment is definitely not the end, but the beginning. The next important and critical issue is that how teachers can use interactive e-whiteboards to give more effective teaching and develop more innovative teaching model.

2. What is an interactive e-whiteboard?

As mentioned above, e-whiteboards are the focus in the promotion of e-classrooms in the UK. At present, the definitions of interactive whiteboard still vary. Some schools purchase “handwriting boards” to control computers. Is such combination a kind of e-whiteboards? According to the definition provided by the most credible organization for interactive e-whiteboards in the Europe, British Educational Communications and Technology Agency (BECTA), an interactive e-whiteboard refers to an area where computer screen is displayed by a projector. An interactive e-whiteboard is controlled by a touch panel where a pen (or a finger) can be used as a mouse to control computer from the e-whiteboard. The amendment made to the information projected on the e-whiteboard can also be transmitted to computer and re-presented in class after it is saved (BECTA, 2004). Therefore, an interactive e-whiteboard has to be projected to an area where users can control a computer. Based on such definition, some handwriting boards may not meet the criteria because users cannot project the computer screen onto the small area of handwriting board. The strongest advantage of an interactive e-whiteboard is that teachers can observe the condition of every student during computer operation, which is the same as they give teaching by using blackboards ordinarily. Therefore, the use of an interactive e-whiteboard is meaningful because if it only involves teachers’ computer operation of a tablet PC or a handwriting board without students’ attention to it, the teaching effectiveness is questionable and teachers fail to maximize the advantage. An interactive e-whiteboard is characterized by highly interactive nature. Therefore, as early as in 1997, the UK has promoted the use of a large number of interactive e-whiteboards. To encourage schools to use interactive e-whiteboards, Department for Education & Skills, UK, has appropriated 2.5 pounds (about \$1.425 billion NTD) in 2003-04 financial year and 2004-05 financial year, respectively, with a total budget of 50 million pounds (about \$2.85 billion NTD), to support the purchase of interactive e-whiteboards in elementary schools and junior high schools (Clarke, 2004). In addition, the national interactive e-whiteboard network was established in 2004, which is provided for the use of all local educational institutions and enables them to participate in and promote the use of interactive e-whiteboards. As of 2006, as much as 97% of classrooms in junior high schools have been equipped with interactive e-whiteboards. After UK took the lead to promote the use of interactive e-whiteboards, other countries, such as EU countries, the US, Canada, and Australia have also followed this trend.

3. Functions of Interactive E-whiteboards and Teaching

The implementation of interactive e-whiteboard-based teaching usually needs to follow some principles, which will assist teachers in “teaching” and students in “learning.” The principles are as follows (BECTA, 2004):

- (1) Preparation of activities
- (2) To outline the aims and objectives through introduction
- (3) To introduce new learning contents or learning tasks. In general, it is the major work during the implementation of whole class teaching and can be repeated in class for several times.
- (4) Development of students’ learning
- (5) To conduct class discussion before the end of a class or during a class to enable students to have an opportunity to review the contents they have learnt and recall the learning process.
- (6) The course structure should remain the same whether interactive e-whiteboard is used or not.
- (7) Teachers can improve certain aspects of courses by using an interactive e-whiteboard.
- (8) Students can temporarily depart from an interactive e-whiteboard and be classified into groups to conduct group work.

An interactive e-whiteboard is installed with software developed and designed by various companies, which also provide great assistance in teachers’ teaching. The analysis is as follows (BECTA, 2004).

Whiteboard function	Contribution to teaching and learning
Color	The range of colors available on an interactive whiteboard allows teachers to use color to indicate important areas for focus, to link similar ideas or to differentiate between ideas, or to demonstrate a process using color. Examples of this might be a chloroplast map in geography or a diagram of the digestive system in biology.
Annotations on the screen	These are useful for modeling thinking and for adding information, questions and ideas to text, diagrams or pictures on screen. Annotations can be saved, referred to again or printed off for pupils to use.
Inclusion of sound and video clips	This can significantly enhance learning in a lesson. The technology also allows screens from video clips to be captured and displayed as still images for discussion and annotation.
Drag and drop	This helps pupils to group concepts, identify advantages and disadvantages, identify similarities and differences, and label maps, pictures, diagrams, equipment for an experiment and much more.

Highlighting specific elements of the whiteboard display	Text, diagrams and pictures can be highlighted on the whiteboard, allowing teachers and pupils to focus on particular aspects of the display. It is often possible to cover part of the display and reveal it only when needed. This can be helpful when pupils are being expected to focus on just a part of a text or a picture. Some interactive whiteboard software includes shapes that can also be used to help pupils focus on a particular area. Sometimes, there is a spotlight facility which teachers and pupils can use to select and focus on a particular aspect of the lesson.
Cut and paste	Sections can be cut and erased on screen, copied and pasted, undone and redone. These features help give pupils the confidence to take risks, as they know they can always go back or make changes.
Flip chart pages	These pages can be turned backwards and forwards, allowing teachers to go over particular aspects of a lesson or to recap areas that some or all of the pupils may not have understood. Pages can be viewed in any order and images and text can be dragged from one page to another. It may also be possible to make a link between pages, so that a teacher can move between a general statement and a more detailed analysis.
Split screen	Teachers can split the screen and display two different sets of things at once. This can be useful when exploring what happens if particular changes are made.
Rotate objects	This allows objects to be moved so that pupils can see symmetry, rotation and reflection.
Linking a digital microscope to the screen	This can provide a greatly enhanced experience when it comes to examining and discussing microscopic images.

In fact, teachers are not unfamiliar with the use of interactive e-whiteboard-based teaching because the principle of successful teaching applies to any innovative teaching device or tool. Any successful teaching requires delicate designs, a good structure, and a clear learning objective and learning outcome, and can be divided into different teaching stages. A good teaching structure can assist students in understanding course content and associate it with the knowledge they have obtained.

In Taiwan, Taiwan e-learning and Digital Archives Program Quality Certification Center's research project (Project No. 99-2631-S-008-002) started to draw up regulations on the hardware and teaching material software of e-whiteboard in 2009. The regulations were established based

on the draft proposed by the E-whiteboard Regulation Formulation Working Team after careful planning. In addition, domestic e-whiteboard-related experts, scholars, and e-whiteboard manufacturers were invited to participate in the discussion, and Delphi method was used to collect various opinions. Then, a public hearing was held and the experts from various fields were invited to participate in the discussion to amend and draw up the regulations. The dimensions of the regulations of hardware include:

(1) Hardware specifications: the specifications of e-whiteboard hardware for review are set up by manufacturers. Relevant regulations on the size of e-whiteboard, operative and interactive response of display area, power and safety should be drawn up under the premise that users can operate e-whiteboards conveniently and safely.

(2) Training and services: manufacturers should provide supporting measures, such as complete educational training of software operation, advisory service, bug report, software upgrades, etc.

(3) Software features: manufacturers should provide random software with features such as convenience in interface operation, writing, note adding, saving and recording, as well as supporting application feature and software environment which facilitate the use and application of users.

(4) Creativity requirement: manufacturers should exhibit creativity in the aspects of hardware specification, training and services, software feature and creativity requirement to increase the hardware performance and teaching effectiveness.

Dimensions of regulations on teaching material software are as follows:

(1) Content of teaching materials: content of teaching materials is the most important insight of e-whiteboard. Content of teaching materials should provide accurate information and should be properly organized and clearly presented to enable instructors to achieve the expected teaching objectives. Content of teaching materials include all types of teaching materials (including figures, descriptions, videos, animations, etc.). The learning content of teaching materials refers to the content to be learnt by learners provided in teaching materials.

(2) Operation and teacher's manual: relevant operating mechanism and the feature of resource pool management should be provided in teaching materials to enable instructors to implement teaching activities and provide them with clear suggestions on teaching usage.

(3) Teaching design: the teaching design of teaching materials should be consistent, and teaching materials should provide instructors with distinct teaching objectives, clearly present teaching insights, properly use teaching strategies to increase learning motivation, increase learning comprehension, provide good interaction between teaching and learning, and appropriately feedback.

(4) Teaching media: effective application of teaching media, artistic and appropriate interface design, teaching media design and production, etc. can increase learner's learning comprehension.

(5) After-sale services: manufacturers should instantaneously provide services such as complete and detailed advisory service of software operation bug report, and software upgrades.

(6) Creativity requirement: creativity should be exhibited in the aspects of content of teaching materials, operation and instruction, teaching design, teaching media, after-sale services and creativity requirement to increase teaching effectiveness.

4. Advantages of Interactive E-whiteboard in Teaching

BECTA (2004) indicated in relevant studies that, interactive e-whiteboards can effectively increase students' learning motivations, and the reasons are as follows:

(1) Interactive e-whiteboard's capacity for information presentation: teachers can closely integrate web pages and videos during teaching.

(2) Highly interactive nature: students can enjoy the highly interactive nature of whiteboards and arbitrarily manipulate texts and images.

(3) Presentation and discussion of students' works: interactive e-whiteboards enable teachers to focus on students' works and run a class normally and enhance students' self-esteem.

Students indicate that, the use of interactive e-whiteboard in class makes them feel it is more exciting and interesting, and faster to complete a class (Levy, 2002). Because an interactive e-whiteboard is a colorful and embodied learning tool, teachers can highlight relevant learning focuses by using a stylus to present relevant information with different colors or images in class to attract students' attention. In addition, the use of a large number of visualized images can meet students' need and increase their learning motivation when operating learning materials in interactive e-whiteboard (Beeland, 2002; Glover & Miller, 2001; Kennewell, 2001).

BECTA (2003) suggested that interactive e-whiteboards provide more opportunities of interaction and discussion. Levy (2002) also indicated that, owing to the wide screen, instantaneous interaction, and feedback effect of interactive e-whiteboards, during teaching process, teachers can encourage students to offer their opinions or exhibit visualized and conceptualized image teaching materials to reveal answers, which attracts students' attention and increase their participation and further increases the interaction between teachers and students. The studies conducted by Glover & Miller (2001), and Walker (2003) pointed out that, when group members use interactive e-whiteboards to share their opinions and interact with others, students are more concentrated to listen to them because the use the interactive e-whiteboard can clearly present the outcome of discussion and students can easily find out mistakes, propose them, and correct them. Therefore, as opposed to the use of traditional computer projector screen teaching device, the use of interactive e-whiteboard can more effectively increase the interaction between teachers and students, as well as that among students.

5. Use of Interactive E-whiteboard to Perform Analyses on Teaching Examples

A long-term investigation research commissioned by BECTA in 2007 indicated that, the use of

interactive e-whiteboard has a positive influence on general elementary school students' learning effectiveness of mathematics, science, and language, especially for male students whose academic performance are poorer, and their learning progress writing even is increased by 2.5 months. As for mathematics, female students' learning progress in mathematics is increased by 2.5 months, while that of male students is increased by 5 months. This long-term study also evaluates teachers' use of interactive e-whiteboard. In general, teachers reflect that the use of interactive e-whiteboard has a positive influence on pre-class preparation and the learning assessment and learning achievement of students. Making the best use of interactive e-whiteboard functions enables teachers to change their teaching model and to apply new information technology to teaching activities. The data of BECTA (2007) indicated that, in the UK, 98% of junior high schools and 100% of elementary schools have established interactive e-whiteboards. It can be inferred from the data that, the teaching effectiveness of use of interactive e-whiteboard has won the positive recognition of academic organizations in the UK.

Department for Children, Schools and Families (DfES) in the UK executed "Primary Schools Whiteboard Expansion project (PSWE)" and provide 21 relevant local organizations with sufficient financial support in 2003 and 2004 to assist them in purchasing interactive e-whiteboards for the use of elementary schools. The study team led by Prof. Bridget Somekh at Manchester Metropolitan University performed the follow-up research assessment on this project and the important findings are summarized as follows:

This assessment was performed from September 2004 to December 2006 and covered a large number of quantitative and qualitative data collection and analyses, including the investigation on teachers, schools and relevant local organizations visited, records of teachers' use of interactive e-whiteboard, etc. The research results were obtained based on the analysis of two sufficient data.

(1) Key Stage 2: the study was conducted on 20 relevant local organizations and a total of 97 elementary schools, 172 classes, and 4116 students.

(2) Key Stage 1: the study was conducted on 20 relevant local organizations and a total of 96 elementary schools, 160 classes, and 3156 students.

The research results showed that, the long-term use of interactive e-whiteboard-based teaching can significantly increase students' learning effectiveness of mathematics, natural science, English, writing, etc. The use of interactive e-whiteboard teaching model in class in the UK is very common. The data of BECTA indicated that, as of 2007, 98% of junior high schools and 100% of elementary school have been equipped with interactive e-whiteboard and almost all the junior high schools and elementary schools have at least had one interactive e-whiteboard. Some research reports also pointed out that, teachers using interactive e-whiteboard suggest that interactive e-whiteboard has a positive influence on both students' performance assessment and learning effectiveness and it is beneficial to teaching. For example, it meets teachers' need for diversified teaching, increase students' attention and positive learning attitude, and increases teachers' teaching efficiency, which proves that interactive e-whiteboard plays an important role

in teaching (BECTA, 2007).

6. Conclusions

During the implementation of interactive whiteboard-based teaching, teachers have to remind themselves all the time that the main function and advantage of interactive e-whiteboard are “highly interactive nature,” “feedback effect,” and multimedia. If these functions can be fully used, the objectives of successful “teaching” of teachers and “learning” of students can be easily achieved. In regard to the development scheme, the preliminary objective is to enable students to have their own notebooks and to equip every classroom with an interactive e-whiteboard. The advanced objective is to provide schools with various platforms to be able to support interactive e-whiteboard and w-schoolbag and to provide overall services. Once these information infrastructures are constructed, the most important issue is to use innovative teaching strategies to interact with e-environment.

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Research on Basic Nursing Technology in Teaching Strategies

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Research on nursing technology in teaching strategies

Abstract

The study was an action research on change in teaching strategies of a basic nursing technique teaching course. The researcher designed teaching content with cooperative learning beforehand. Through interviews with students, student reports on what had been learned; team or individual tests and observations made from teachers patrols, teaching strategies were continuously amended in the process. The results showed, in applying planned cooperative learning to change the teaching method from traditional lecturing to diverse teaching, other than improving interaction between teachers and students, students' learning satisfaction with the basic nursing technique course was strengthened, and it also had partial effect on performance of basic nursing technique learning.

Key words: basic nursing technique, cooperative learning, action research

Introduction

Nursing education should be centered on “students” to assist students in developing sufficient professional knowledge and techniques so they can face diverse and complicated medical environment. Therefore, nursing education has been continuously improved. Complete nursing education innovation should not only achieve innovation of a course design in a top-down manner, but nursing teachers should reflect on their teaching. Creating a learning method centered on students is a very important topic. The paper carefully and thoroughly studies the needs and learning problems of students from the interaction of teaching and learning, reflecting on and judging the action process of teaching and learning, to continue to change teaching strategies.

Background

Nursing education is a social activity more complicated than other professions. It is very difficult to control factors influencing teaching results and it must be practical. When trying to resolve practical issues, practitioners should not refer to action researches on common senses, applied science and practice directly (Pan 2007). Action research is also a research on social context. The purpose is not on construction of a theory but increase in quality and quantities of teaching actions. Many applied action research on improvement of courses at present, including learning contexts of senior high school chemistry courses to understand learning willingness of students (Yang & Duan 1998), application on improving accounting education (Paisey & J. Paisey 2005). Researches were also available on assessing teaching demands for individual teachers with action research to assist professional development of teachers and

researcher (Huang & Tsai 2006). Action research method was regarded as one of strategies to enhance nursing profession, and it was progressively applied to nursing research field in Taiwan (Yang et al 2001). Hence, action research did not place publications and writing up of research reports as primary purpose. It emphasized on how to innovate teaching contexts and enhance teaching effectiveness. It could be said that purpose of action research was to resolve teaching problems encountered by scholars at present.

Action research had been also applied to other fields, such as surgical nursing instructing process in surgery (Rosalyn J. 2001). In addition, the action research method was applied to learn the difference in service provided to students between various university libraries (Markless & Streatfield 2006). Researchers also recorded improving process of senior workers using aids based on action research (Hilsen & Ennals 2005). By action research, people's thoughts and perspectives for future could be seen through in many aspects (List 2006). Hence, action research methods had been generally applied in social sciences, education and health related fields (Birkett 1995).

In nursing education innovation process in Taiwan, development and growth nursing teachers was an important subject to be treated seriously and nursing teachers should play a role of guidance and facilitator (Zhong & Xu 2007). Also, nursing teachers should be course designers, users and improvers, and should cooperate with other related teachers to conduct research on nursing courses, substantiating course innovation (Jian et al 2006). Further, they should take centering on “students” as a teaching ideal and a key direction of nursing education innovation (Jian & Huang 2006). Hence, during the nursing teaching process, best

timing for nursing teachers to make teaching reflection was the health check task during the teaching process.

In course planning of Nursing Department in our school, “Basic Nursing Techniques” is the compulsory core course. Researchers had been observed how students practiced in class several times from the class since the first week. After later interviews with students, it was found that students did not understand where to start the technique practice. Students all appeared expectant but nervous at the first time in contact with professional nursing technique course. From teacher-student interaction and responses of students, it was seen that students could not understand the content taught and demonstrated by the teacher. For example, students reflected, “See more of our practice on techniques. It would make tests to be more fulfilling,” “Hope to use hospital beds or be divided into smaller groups during class so as to see more clear, and so that we are more bold to ask if questions raised and the teacher can find our problems more easily,” “Fear to go to Technique class. I am afraid if I would do something wrong or getting a terrible result from a test.” The researchers started to think what role a teacher should play in this course to assist student in study. Hence, the researchers started immediately on planning on new group teaching. The paper was the record of the whole teaching history. From the change of teaching history, what was hoped to understand included:

1. When applying cooperative learning to basic nursing techniques course, situations of teaching strategy change made by researchers.
2. When applying cooperative learning to basic nursing techniques course, understand

conditions of student learning satisfaction.

3、Understand impacts of applying cooperative learning to basic nursing techniques course to student learning performance.

4、Understand impacts of applying cooperative learning to basic nursing techniques course to teacher-student interaction.

Methodology

1. Research Design

The teaching design in this study was to nurture cooperative spirits of students to work with other member in a medical team together to take good care of a patient. Hence, there were 2 reasons for the study to adopt Student Teams-achievement divisions in cooperative learning. Firstly, team cooperative learning enabled team members to generate positive interdependent relationships, as well as enhanced face-to-face interaction and interpersonal relationship behaviors of team members and enhanced the work performance of the whole team (Lin 2006 ; Gau 2004). The other reason was that basic nursing technique was a fundamental ability necessary for a person carrying out nursing profession. The content of techniques was rich and diverse. For students as first timers to touch nursing techniques, students could discuss and observe from each other by team cooperative learning to enable students to dive into the learning context quickly.

2. Study Subject

Subjects studied in this study were second grade nursing students in a technology university, totaling 49 people. After subject studied entered the second grade, the “basic

nursing techniques” course was the first nursing technique course students studied. The course was held twice a week, two hours per class, and the classes were arranged at different days in a week.

3. Study Steps

Study steps of the study were divided into 3 stages, before class, during class and after class and described separately as following:

(1) Before Class

1. Integration of Nursing Technique Operation Steps:

The researcher was the main teacher offering lectures for the course and 2 teaching assistants assisted instructions. Thus, before class, 3 teachers discussed the course content and specified that lecture scope before mid-term exam should have 4 units and 4 techniques in total: Beds with patients, perineum wash, bathing on bed and sterilizing. All teachers did operation observation and discussion for the 4 techniques and established the “Technique operation Checklist” in order to obtain consistency from operation steps and procedure of nursing techniques.

2. Team members (2-4人)

Divide the class into groups of 2- 4 people in a routine distribution. There were 17 teams in total. The return instruction was done for the first 6 teams on techniques by the researcher while that was done for the 7-17 teams by the two teaching assistants.

(2) During Class

1. Group Teaching

Two hours of group studying for the whole class was adopted. The researcher lectured and demonstrated in accordance with specified content. The course content included technique operation and cautious items.

2. Team Return Demonstration

After the lecture, teams of all students were led by three teachers for practice separately in 3 technique classrooms. Teaching materials were the agreed specified content, but teaching methods or means of leading practice were decided by each teacher. The researcher was responsible for the experimental group, the first to sixth team, and systematically planned the content of each technique return demonstration. The researcher patrolled to instruct the experimental group, including demonstrating again on techniques, team evaluation, individual evaluation, interviews, after class reports on what was learned and innovating thoughts on technique operation.

3. Team Assessment

Six experimental teams were instructed by the researcher. One representative was selected for each experimental team during each practice period and assessed by the researcher according to the Technique operation Checklist to represent the grade of a team.

4. Individual Technique Assessment

The researcher also sampled students for individual operation assessment separately. The performance would be the grade of individuals.

5. Nursing Technique Operation Step Discussion

Discuss with the other 2 teaching assistants about questions regarding to the Technique

operation Checklist or innovative methods and applicability. If it was applicable, the Technique operation Checklist was amended.

(3) After Course

1. Individual Interview

The researcher patrolled among experimental teams during the practice period and spoke with each student individually. Before mid-term exam, each student was interviewed no less than (including) 2 times.

2. Reports on What Have Been Learned

Before the mid-term exam, each student in both experimental teams and control teams wrote down separately class report on what they had learned during the eight weeks anonymously.

3. Individual Technique Evaluation

In the mid-term exam, other teachers in the course joined in to assess student study performance according to the “Technique operation Checklist.”

4. Learning Satisfaction

After finishing the technique exam, each student in both experimental teams and control teams was asked to fill out the school's learning satisfaction questionnaires anonymously.

4. Data Collection and Analysis

Because of adopting action research method, the study continually collected and analyzed data to correct teaching methods. Data collection came from interviews with students in 8 weeks, reports of each student on what was learned, mid-term technique exam results and

learning satisfaction questionnaires. For learning satisfaction questionnaires, the school's learning satisfaction questionnaires was adopted and filled out anonymously. The statistics software SPSS 12.0 was used for statistic analysis.

Research Results

1. Change in Teaching Activities

Since the third week, the researcher turned the original tradition group practice into diverse group practice, including teaching activities of re-demonstrated once after group practice, patrolling among teams for instructing on practice, innovation discussion on the topic of each week and technique tests. Time allocation ratio and item difference before and after teaching activities change were as figure 1 and figure 2.

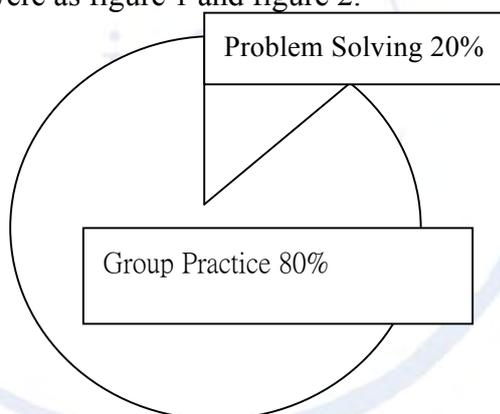


figure 1 : Time allocation ratio and teaching activity item before teaching activities change

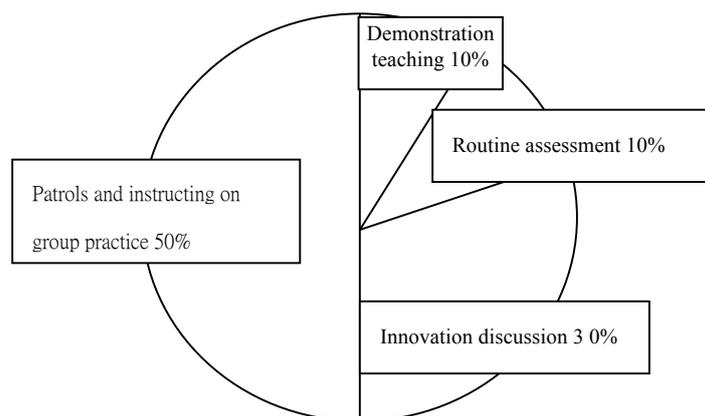


figure 2 : Time allocation ratio and teaching activity item after teaching activities change

After teaching activities were changed, experimental teams made apparently different responses and discussed with each other actively. From learning reports and interviews, responses from experimental teams included *“The teacher allowed us to think how to solve the difficulties, e.g., how to clip scissors well. It was fun and solved technical problems.”* *“The teacher would help us all the time to see if we had done it right!”* etc.

2. Technique Learning Performance

After 8 weeks of the technique course and group practice, planned systematic cooperative learning was adopted by experiment teams and traditional group practice was adopted by control teams. At the 9th week, a randomized teacher-student one-on-one technique exam was held. Test results of the 3 groups showed that the average score of the experimental group was 81.5, and average scores of the control group were 80.2 and 83.2 separately (Table 1). This indicated that a teaching method adopting cooperative learning would partially affect learning performance on nursing techniques.

Table 1**Technique Assessment Results of the Experimental Group and Control Group**

Experimental Group		Control Group		Control Group	
No.	Scores	No.	Scores	No.	Scores
1	87	18	92	36	83
2	78	19	86	37	85
3	83	20	87	38	60
4	85	21	49	39	90
5	95	22	71	40	92
6	68	23	63	41	91
7	65	24	61	42	76
8	80	25	80	43	80
9	96	26	80	44	96
10	75	27	85	45	79
11	82	28	92	46	88
12	78	29	73.3	47	89
13	64	30	96	48	68
14	94	31	89	49	96
15	80	33	89	50	76
16	86	34	80	Average	83.2
17	90	35	90		
Average	81.5	Average	80.2		

Other than assessment results of the technique exam, it was also found from the interviews with student and learning reports that students in the experimental group were better experienced and confident in the technique learning process. For example, *“There is a difference if you practiced more. Teachers will find it out during tests.”* *“I feel that simulation practice and on-job practice are quite different. In a word, more practice should be done.”* *“I can practice on my own, too. In a word, I am confident that I can handle my mid-term and it should be ok.”* etc.

3. Learning Satisfaction

Averages of three groups on each issue in one-way ANOVA of independent samples in the study were listed as Table 2. Students in 3 groups of different teaching instructions differed in extents of agreement regarding to *“sufficiently prepare lecture content.”* *“hard teaching with enthusiasm.”* *“happy to help students learning.”* *“assess student performance fairly and reasonabl.”* *“resolve difficulties in learning.”* *“know well the key of teaching material.”* *“teach according to the progress.”* *“elaborate teaching with examples.”* *“help students to establish integrative concept of the subject.”* *“facilitate students’ learning interests.”* *“often swap classes or be absent, do not attend class according to the schedule.”* *“adjust teaching methods according to student response.”* The extend to which students agreed on *“sufficiently prepare lecture conten.”* *“know well the key of teaching materi.”* and *“adjust teaching methods according to student responses”* were indeed different due to different teaching instruction. In the ex post facto comparison of HSD test, it was found that, the first group had a significantly higher average of extents to agree positively then the third

group did, which showed that students received the researcher's instruction better agree on *"sufficiently prepare lecture content."* *"know well the key of teaching material."* and *"adjust teaching methods according to student responses."* while the first and second group had a higher average than the third group for *"hard teaching with enthusiasm."* *"happy to help students learning."* *"assess student performance fairly and reasonably."* *"resolve difficulties in learning."* *"teach according to the progress."* *"elaborate teaching with examples."* *"help students to establish integrative concept of the subject."* and *"facilitate students' learning interests."* As for *"often swap classes or be absent, do not attend class according to the schedule."* the third group had a higher average than the first, meaning the teaching assistant of the third group might have a slacker teaching attitude than the researcher.

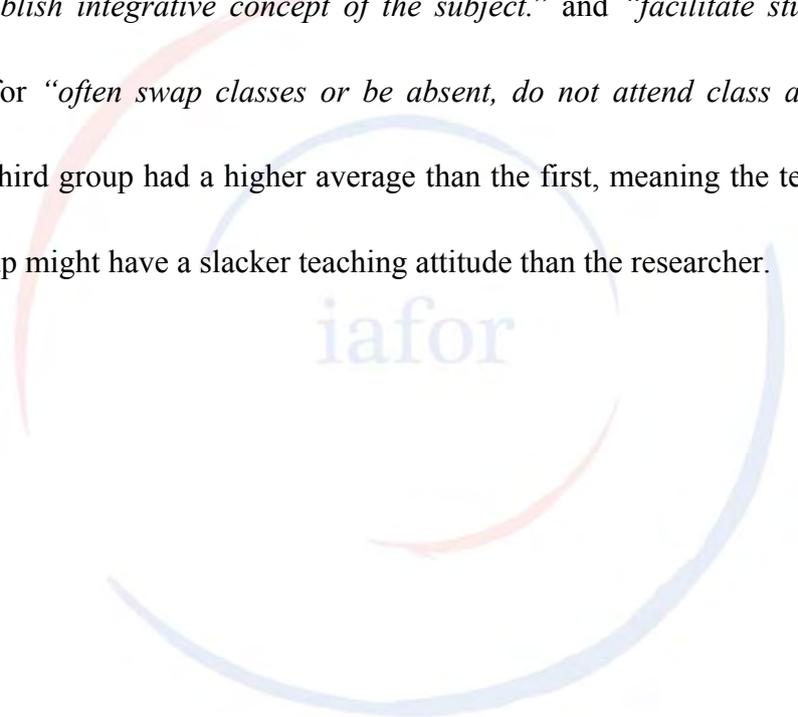
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Table 2**Learning Satisfaction Results**

Consent Issue	Group	Average	Standard Deviation	F Value	Significance	ex post facto comparison
sufficiently prepare lecture content	1	4.69	.60	4.147	.022	1>3
	2	4.47	.51			
	3	4.07	.70			
hard teaching with enthusiasm	1	4.71	.47	12.678	.000	1>3 2>3
	2	4.71	.59			
	3	3.67	.90			
Attend the class on time, making effort not to swap classes and absent	1	4.71	.47	2.028	.143	
	2	4.88	.33			
	3	4.53	.64			
happy to help students learning	1	4.76	.44	12.440	.000	1>3 2>3
	2	4.65	.61			
	3	3.53	1.13			
assess student performance fairly and reasonably	1	4.76	.44	6.312	.004	1>3 2>3
	2	4.56	.81			
	3	3.87	.92			
resolve difficulties in learning	1	4.82	.39	8.038	.001	1>3 2>3
	2	4.59	.71			
	3	3.87	.92			
know well the key of teaching material	1	4.71	.47	4.666	.014	1>3
	2	4.41	.62			
	3	4.00	.85			
teach according to the progress	1	4.71	.47	3.963	.026	1>3 2>3
	2	4.71	.47			
	3	4.20	.77			
elaborate teaching with examples	1	4.71	.47	7.243	.002	1>3

	2	4.65	.49			2>3
	3	3.93	.88			
help students to establish integrative concept of the subject	1	4.71	.47	8.539	.001	1>3
	2	4.65	.61			2>3
	3	3.71	1.07			
facilitate students' learning interests	1	4.53	.72	7.905	.001	1>3
	2	4.53	.80			2>3
	3	3.47	1.06			
Promote students to think	1	4.63	.72	2.951	.062	
	2	4.35	.61			
	3	3.93	1.03			
often swap classes or be absent, do not attend class according to the schedule	1	1.06	.24	4.478	.017	3>1
	2	1.12	.33			
	3	1.67	1.05			
Guide students to participate in discussion and practice	1	4.18	1.13	2.898	.065	
	2	4.56	.63			
	3	3.73	1.03			
adjust teaching methods according to student responses	1	4.41	.62	3.727	.032	1>3
	2	4.29	.85			
	3	3.67	.98			
I feel satisfied in my performance in this course	1	3.59	.94	.195	.824	
	2	3.65	1.06			
	3	3.80	.94			
After studying this course, I gained	1	4.44	.073	.200	.820	
	2	4.44	1.03			
	3	4.27	.80			
How many hours per week I put into studying for this course after class	1	2.96	1.66	2.323	.113	
	2	1.69	1.55			
	3	1.92	1.44			

*p<.05

Besides, other main descriptions related to learning satisfaction of the students in the experimental group included *“It is somewhat fun in Technique class. It’s only that sometimes I felt nervous during tests.” “Technique class is more fun than traditional lecture, just that it’s not fun when having a test.” “During the class, I had lots of fun, superb harvests.” “In Technique class, normal practice is somewhat smooth.” “I felt that I am adapted to the group study quite well.” “I feel happy in class.” “So far so good.” “I believe I am adapted to the way the class was run.”* etc.

4. Teacher-Student Interaction

For teacher-student interactions, interactions between students in the experimental group and the teacher included *“The teacher would give us encouragement and would keep helping us by having a look at us if we had done it right!” “I felt the teacher had a great personality. It’s fun to be taught by her!” “The teacher allowed us to think how to solve the difficulties, e.g., how to clip scissors well. It was fun and solved technical problem.”* etc. Thoughts for interactions between students in the control groups and the teacher included *“It’s a bit serious in class. I don’t dare to speak with the teacher and ask question.” “The teacher seemed very stern, inaffable and very pressing. I felt nervous in class and had difficulties getting along with the teacher.” “Sometime the teacher had a bad mood, which would affect our moods in class, too.” “I hoped that teacher could demonstrate for us again before practice, but be not so fierce with more smiles!” “The teacher would be a bit fierce and made the learning atmosphere a bit intense.” “The teacher seemed a bit irritated.” “If our classmates didn’t answer the question, the teacher would speak in a stern tongue. It’s a bit scary!” “The*

teacher seemed very fierce. Every time when we asked her a question, she would ask back with irritation and we did not know how to answer!" From the above we were able to understand, for teacher-student interactions, students in the control group had more negative thoughts and reports than those in the experimental group did.

Discussion

1. Change from traditional technique practice to diverse cooperative learning was able to facilitate students' interests and learning satisfaction in learning nursing techniques

From interviews, student learning reports and satisfaction questionnaire results, it showed that students often felt not knowing where to start to practice and tired with boredom in group practice of the traditional nursing technique course. However, by means of teaching design change, re-united demonstration, patrols among teams for instruction on practice, innovation discussion on a topic of the week and technique test done by the researcher, it was able to enhance student learning satisfaction as well as enhance learning interests.

2. Affecting from teaching beliefs to teaching activities; turning from a knowledge and technique transmitter to a guidance

During the teaching activities, the researcher placed emphasis on course planning and design teaching activities for teams. According to question and responses from students, teaching methods were immediately corrected to facilitate students' interests and promote their thinking, assisting students to construct cognition and techniques of basic nursing techniques.

3. Change from traditional technique practice to diverse cooperative learning to increase

teacher-student interactions

By planned cooperative learning, opportunities for conversations between students and the teacher were increased and students were happy to get close to the researcher. During the whole learning process, tests regarding course learning were necessary to be offered timely, such as team representative tests, individual tests. The researcher also learned that questions too hard should be avoided and individual learning efficacy of students should be taken into account, too. Furthermore, for tests and innovative performance results, the researcher should offer timely encouragement and praise and conversations between students and the teacher increased without taking a form.

4. Applying cooperative learning, it was able to increase classmates interaction and learning performance

During cooperative learning, most of students could actively involve in group practice techniques. For problems students unable to solve, they would discuss with each other and cooperate with each other to individually propose different views in nursing technique steps and operational items and then find an answer together. This included asking other teams again for their practice or deciding which view was more reasonable. Finally the researcher would be called for discussion together to find a workable answer. This enabled to bring better impressions on what were learned, as well as promoting relationships between classmates.

Conclusion

Nursing teaching was no longer invariant. Teachers should be able to find problems

appeared during the teaching process and conduct research to resolve current problems. The teacher was the researcher. The researcher proposed following conclusions based on the research results:

1. Nursing teachers should be able to timely adjust teaching strategies

When new-coming teachers entered teaching workforce, they often imitated from other teachers' teaching experience. In fact, each course, classes and each student were individuals and should have different teaching activity and context designs. Teachers should timely self-adjusted teaching strategies according to their abilities, class characteristics and teaching context at the time. Although it might not be able to apply to each student, but it should be in a premise of taking care of all student and teachers should choose teaching methods suitable for students as much as they can.

2. Nursing teachers should find problems from students' perspective

From technique demonstration to group practice, nursing teachers should listen to students' voices all the time, timely adjust teaching strategy based on student questions and apply cooperative learning method to further enhance student discussions with each other. Teachers can then better control student learning condition on the go. This also increased classmate interactions, teacher-student interactions, learning satisfaction and learning motives.

3. Nursing teachers should design teaching activities suitable for learning in advance

Nursing technique course is a science course. Each operational process and step had its scientific evident basis and the operational process and steps were often modified based on

many experimental results. Hence, teachers should prepare teaching materials and teaching design before class. Especially in applying cooperative learning in the nursing technique course, teachers should be cautious on training student the cooperative learning technique and on planning and design of teaching activities.

4. Teachers should conduct cooperative learning to reduce teaching burdens

Cooperative teaching can be done between nursing teachers with cooperative learning to divide labors and cooperate, share teaching experience, design teaching activities together and discuss teaching designs, so that everybody's burden can be reduced and students in the same course were able to learn the same teaching purpose and content, as well as possess the same capabilities.

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Designing a Word Recognition Instruction System on Radical Recognition Instruction

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Abstract

Developing Chinese language learning materials in the computer and internet has become the new directions of Chinese language teaching. There is particularly the most development potential in Online Chinese word recognition learning materials. The purpose of this study is to establish the word recognition instruction system on radical recognition instruction, and hope that it is helpful to non-native speakers of Chinese languages learners of Chinese language.

Keywords: radical recognition instruction, Chinese word recognition instruction, word recognition instruction system on radical recognition instruction.

1. Study Background and Purpose

Global Chinese Learning trend keeps heating up. Every country in the world puts Chinese learning on a list as one of foreign language teaching policy. Take America for example, Chinese Advanced Placement Program which under (below) America mainstream educated system has started since the opening semester of season fall in 2006, and held up the first Chinese AP test in May, 2007 [1].

He, Ji-Pong, the director of NTU Chinese Assessment Study Plan, and the dean of Chinese department said, "Face the global Chinese learning heat, high schools in America has started to drive Chinese Advanced Placement Program. The number of learning Chinese in France has increased 20%. And British noble senior high schools also put Chinese on a list of foreign language learning program. In addition, the number of people taking HSK in China has grown up 45%. It has the high possibility to become one of important industries in Taiwan. [2]"

Mr. Liang, Shi-Qiu said, "Be literate before one read," which illustrate that word recognition is an important skill before one start to read. Every article in the book is composed by words, Learning as more words as one could is the only way to read more convenient and fast. The study done by Vellutino, Scanlon and Tanzman [3] also points out word recognition is the core of reading.

The reader encodes form according to the sound when they are reading, even though the Chinese isn't alphabetic system of writing is the same situation. Once learning the sounds connection between structures and grapheme, readers become more and more familiar with decoder. However, in order to become a good decoder, the process of decoding has to become not only quick but also accurate [4]. The ability of recognizing words will the reading ability.

According to the report, a twenty-four years old man, mixed blood in Chinese and American, Ge, Tai-Lai, couldn't say any Chinese. But he used "Chinese root learning theory," learned two thousand and five hundred words within eighty-nine days. He also won Guinness World Records [5]. The "root" what he meant is the

radical that can't be separated anymore. We know that teaching by radicals can reduce the quantity of student's memory.

According to the study background mentioned above, our study will set up "a teaching web side about integrating radicals teaching approach with Chinese word recognition," designing for those beginning learners who are non-Chinese native speakers.

2. Literature Review

The purpose of this study is to establish an instruction website based on radical recognition instruction. Therefore, literature review for this study discuss from some topics such as Chinese word recognition instruction, radical recognition instruction, a word recognition instruction website, and so on.

2.1 Chinese Word Recognition Instruction

The teaching strategies are composed by Teaching Approaches and Delivery Systems. Each class involves teaching strategies; the purpose of this research used Chinese word recognition as class materials. Therefore, we need to analyze every Chinese teaching strategy before instructional designs. Following we compare different Chinese word recognition instructions.

2.1.1 General Word Recognition Instruction (Chinese Characters in groups teaching)

According to National Institute of Translation and Compilation propose 「The teaching guide of Mandarin Curriculum in Elementary School」 [6] that the generally elementary schools usually adapt word recognition which teaching process is (1) radical teaching (2) recognize strokes (3) the proper methods of writing (4) writing vocabularies. General word recognition is following this process to teach vocabularies. But this teaching approach of word recognition is lack of a sequence that can't make students learning step by step.

2.1.2 Distributed Word Recognition Teaching

The main principle of Distributed word recognition teaching is that composed Chinese words for learning, letting students can recognize words before reading. This approach is not only helpful to students classify and compare vocabularies, but also emphasis the structure of rules about Chinese words; it can promote children to understand Chinese words, helping them to realize words rapidly in smaller time[7]. The teaching approach of our graduating school is belonged to that.

2.1.3 Stimulus-fading Strategy

Li and Chen point out two stimulus-fading strategies "interior stimulus-fading strategy" and "external stimulus-fading strategy" can help teaching effective. In "interior stimulus-fading strategy", pictures add on words directly and gradually disappear. In contrast, "external stimulus-fading strategy" separate words and pictures, and pictures gradually disappear later[8].

2.1.4 Multimedia-video Prompt Delay Strategy

Multimedia-video prompt delay strategy involves Multimedia-video and prompt delay strategy. It utilizes specific, daily life, entertaining, and advantage of prompt effects in multimedia to help students learning. Prompt delay strategy is a behavior modification technique which increases the proportion of individual reaction by extending response time. The results showed that the immediate effectiveness of learning and retention can reach the preset mastery level, and the effectiveness of their learning generalization is also very good.

2.1.5 Phonetic Word Recognition Approach

In the beginning level of teaching Chinese to foreigners, it refers to “Early Reading” concept from phonetic word recognition approach. At first, teachers guide students to learn Chinese phonetics and then reading purely phonetic phrases, long sentences and texts, and then transition to Chinese word texts, and finally use the context which has no phonetic words. With this approach, Students can recognize words step by step. They don’t be afraid to Chinese words in the beginning level, and they don’t have interfere on listening, speaking, reading these three skills.

2.1.6 Rhyme Word Recognition Approach

In 1994, Chinese teacher Chang Peng-peng wrote “Modern thousand Word Texts”. He used 1234 words to compile 50 short catchy modern sentences. Every sentence includes about 20 words. He was doing a teaching experiment of a beginner’ s class. He asked student repeat to read aloud and to recite, and the outcome of recognizing words was very well.

2.1.7 Character’s Principle of Word Recognition Approach

This method was brought up by Jia Guo-jun in the Educational Science Institute of Yueyang city, Hunan province in 1991. Recognize Words by Character’ s Principle Method is base on the basis of the characters’ constitution and the constructing rule. It uses the relationship of the shape, the sound, and the meaning of the words to perform a method of the teaching of recognizing words. It is to teach pictograph and self-explanatory characters first, and then to teach understanding and Pictophonetic characters later. This recognizing word’s character method is not unaccommodating with Recognize Word by Character’s Part Method; instead, they can be arranged in pairs to use. Therefore, the research will refer to this teaching method and use it in part of the teaching.

2.1.8 Riddle Word Recognition Approach

In the area of teaching Chinese to foreigners, some experienced teachers occasionally use word recognition riddles which adapt elementary students in Chinese recognition level, such as “A big mouth involves a small mouth”(It means “back”). A number of Chinese textbooks such as “Bridge” have some after-class practices which need to guess Chinese words; such as “Only one mouth bites the tail of bull” (It means “tell”), and “One head is big, another is small” (It means “sharp”).

This approach is suitable for Chinese review stage, but not suitable to all vocabularies. Therefore, this approach does not a primary teaching approach in our research; it will be applied timely.

2.1.9 Story Reading Approach

Story reading approach is learning vocabularies from reading fairy tales. Though story reading instruction can improve students’ performance in grapheme, phonetics, and word meanings, the performance on writing Chinese words is not better than general teaching approach which recognizes words by words, and it doesn’t have apparently performance on the comprehension of reading. Therefore, the website which develops by our graduating school is not adapted to that.

In order to enhance students’ performance on word recognition, first we should teach them the proper strategies of word recognition. From the above word recognition instruction, in addition to story reading approach, all of them are relative to grapheme. Most of graduating schools applied word recognition instruction which is focused on the grapheme structures of Chinese words and also support word

recognition which analyzes grapheme has a good performance on recognize words. Furthermore, we can discover that each word recognition instruction is not totally different and can't connect. Therefore, using radical recognition instruction as a basis by increasing other approaches timely is also a feasible approach.

2.2 Radical Recognition Instruction

Chinese radicals are composed of strokes which are units of component to group functions in Chinese words. Students can group different Chinese words by utilizing their learning in radicals and to help them memorize how to write Chinese words. For example, we can teach students to write “么,公,去” when we teach in “厶”. This strategy can help students to familiar with the structures of Chinese words and memorize the shape of Chinese characters more easily. It is similar to structural Chinese teaching.

Chinese words are composed by specific strokes and radicals which follow some rules in square space. But these strokes and radicals are not composed together in random, in the contract, the components of radicals which may be associated with the semantic and phonetic messages, these are so-called “Chinese Character Knowledge”. For a native speaker in Chinese, he (she) can clearly understand and follow these rules after the appropriate age[9].

Shen & Ke [10] found that: between a radical of knowledge development and application exists the linear trend; it showed that a moderate positive correlation between the development of application skills in radical knowledge and Chinese vocabularies learning.

Chen, Allport, and Marshall [11] present evidence that the skilled readers to visual analyze are based on clearly defined orthographic constituents. These functional radicals are repeated, the overall stroke-patterns, and not individual strokes as previous thoughts. In the meanwhile, they propose evidence suggests that the type of individual strokes is easier to distinguish real characters than pseudocharacters and non-words.

We can see that radical recognition instruction can improve students' performance on grapheme, comprehension, and fluency word recognition. Therefore, the website which designs by our graduating school is adapted to this approach.

2.3 Chinese Teaching Website

In points of view for teaching Chinese, the proficiencies of learners are different. Thus, it's much difficult for teachers to teach every learner in different ways and every learner also tries to learn in a unified pace. To those slow-learning students, it's harder to follow the pace of courses than others. Because of that, connecting the Internet technology is maybe a good way to promote students' learning and boost teaching effects.

However, most of digital teaching systems don't use learning processes; causing teachers cannot know learners' learning condition. First, there is no discussion area which makes students cannot react with teachers and classmates when they have questions. Second, most of teaching websites don't have dictionaries and often make learners can't find what information they need until they finish the contents of teaching on websites.

According to the functionalities of digital teaching and learning we mentioned above, which are learning processes, discussion area, dictionaries, multimedia etc. and some websites relate to Chinese, the researcher can distinguish the differences between the research and other present digital Chinese learning websites through the level of users in contents and show it as table 1.

Table 1
Comparison between present Chinese teaching websites and the teaching website

	Learning processes	Discussion area	dictionaries	multimedia
Berkeley University Traditional and Simplified Chinese self-taught	X	X	X	X
Chinese wrong words	V	X	X	X
University of Southern California Listening, speaking, reading, and writing in Chinese	X	X	X	V
In search of Treasure in Wen Country (Little Mountain)	X	X	X	V
Chinese Character Learning System	X	X	X	V
zhongwen. Com's Word notations	X	X	V	V
The researching website	V	V	V	V

Information source: coordination of the researcher

3. Research methods

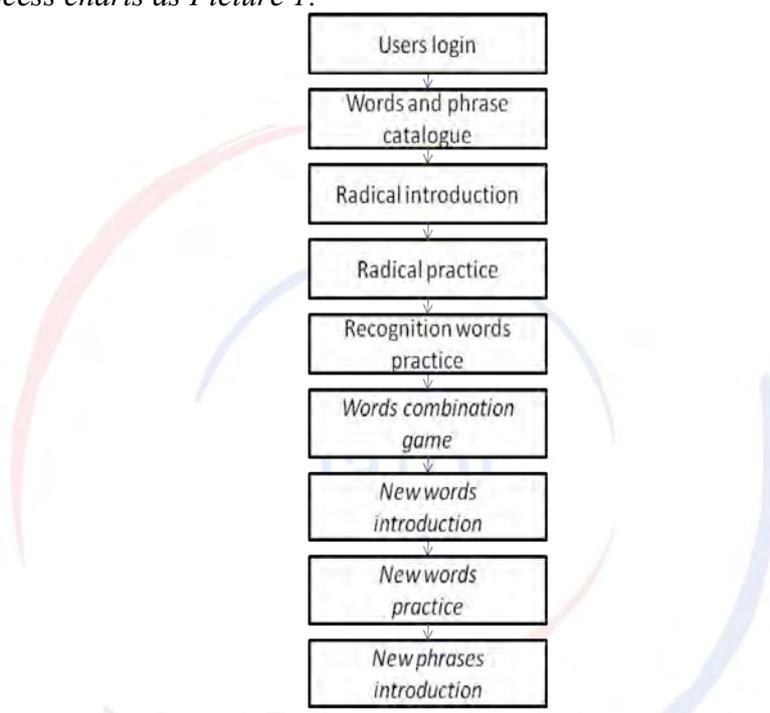
3.1 Research Design

This research bases on a Chinese word recognition instruction website on radical recognition instruction. Expect to have more benefit for the Chinese beginners whose mother language is not Chinese.

3.2 Research Tool

The research tool is a word recognition instruction website on radical recognition instruction. It bases on 40 level 3 radicals which calculated by Pei-Jung Huang[12], and deletes the radicals which larger than 400 in the combined character frequency list of classical and modern Chinese which deliver by the Minister of Education[13]. With this 20 radicals and combine with other 34 words. And match up the radicals and words to combine 51 phrases. Base on word recognition instruction to design Chinese word recognition instruction website.

The flow process charts as Picture 1:



Picture 1: The flow process chart of website.

3.2.1 Words and phrase catalogue: To show the radicals, characters, and words which are going to teach in class. Adopt Jerome Seymour Bruner’s concept of discovery learning theory. With the way of ask and answer to guide students find the concept of combining radicals become a character, and combining characters become words.

Radical	Character	Word
丿	天	不了、不在、不小、不可、不成
一	天	一人、一元、一里
人	臂、伴、伴、同	何人、有人、次人、人里、里人、人里、上人、小人、何人、成人

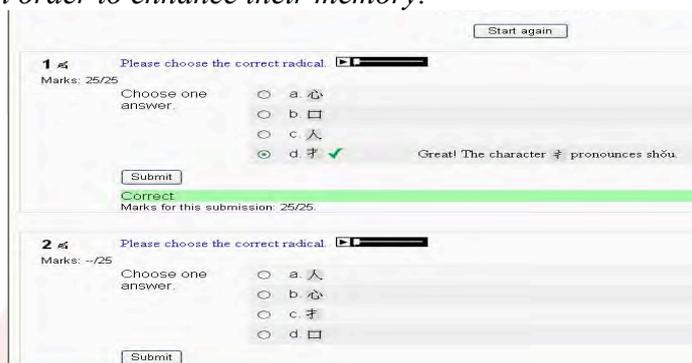
Ø Picture 2: Radicals, characters and words

3.2.2 Radical introduction: When we teach, we adopt Jerome Seymour Bruner’s concept of discovery. We do not explain and introduce radicals but ask students observe the develop process. With the way of ask and answer to guide students find the principle. And think over the positive meaning of radical. Last, teacher introduces the pronunciation, meaning explain and writing practice.



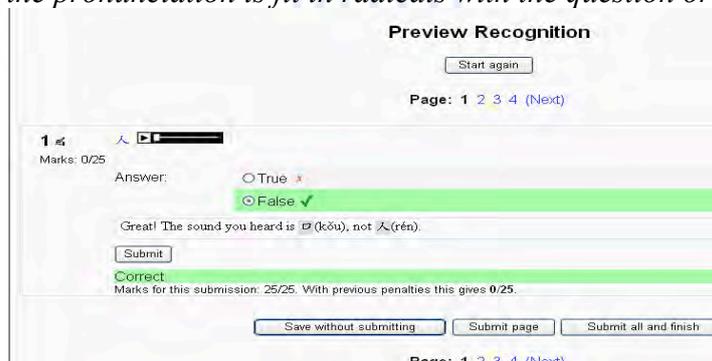
Ø Picture 3: Radical introduction chart

3.2.3 Radical practice: In the way of choice question ask students choose the right radicals, in order to enhance their memory.



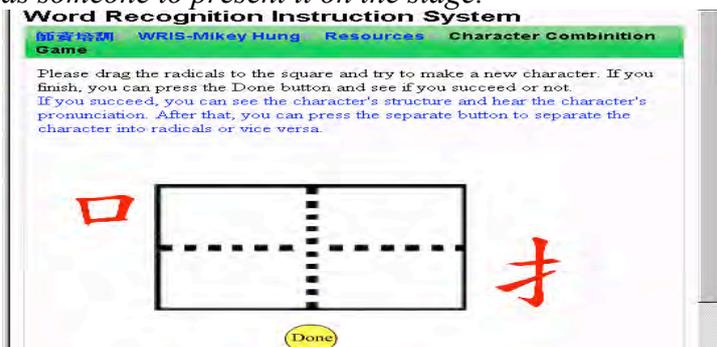
Ø Picture4: Radical practice

3.2.4 Recognition words practice: With true or false questions, ask students to recognize the pronunciation is fit in radicals with the question or not.



Ø Picture5: Recognition practice

3.2.5 Words combination game: Provide the radicals which teach in the class and tie in the concept of cooperative learning. Ask students try to compose characters and memorize the character's structure and the character's pronunciation. Each group sends someone to present it on the stage.



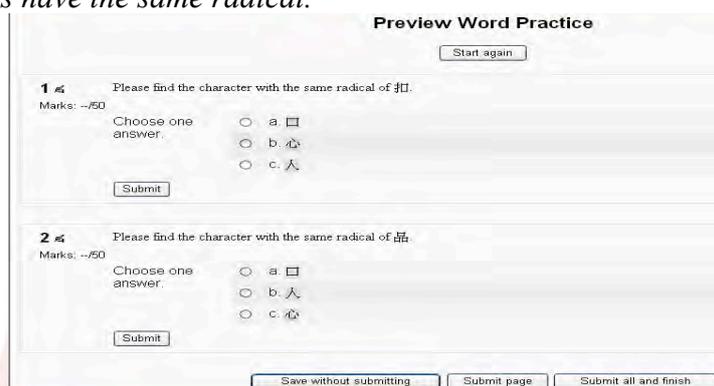
Ø Picture6: Character combination game

3.2.6 *New words introduction: Display the pronunciations and meanings of the new characters. And ask students practice typing the new characters.*



Ø Picture7: New characters introduction

3.2.7 *New words practice: With choice question to ask students to choose which characters have the same radical.*



Ø Picture8: New characters practice

3.2.8 *New phrase introduction: Introduce the pronunciations and meanings of the new words.*



Ø Picture9: New words introduction

4. Conclusions

For the people start to learn Chinese as second language, the Chinese words are the cube characters which are too difficult to them. In the Chinese teaching area, word recognition learning method is weak. The main reason is most Chinese teaching focus on teaching strokes of words and copies. It merely pieces up, not teaching them about radicals and components of Chinese characters, and it is not teaching them about “line” and “surface,” either. And the teaching activities focus on oral language and listening drills, including recognizing words. Besides, it occurs different obstacles according to different background of the students in class. According to each one’s personality, the author designs a program about teaching Chinese word recognition on the Internet, to offer learning opportunities to foreign students. Hope that they can gain authentic help while learning the Chinese word recognition.

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Title:

English loanwords in Japanese television programming: Assessing high-frequency baseword vocabulary usage

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Abstract

The Japanese language commonly employs foreign loanwords, many of which come from English. This widespread borrowing of English terminology was evinced from a previous examination of spoken discourse in various genres of Japanese television programming. Research results showed 18 distinct loanword categories, some of which involved terminology metamorphosis when English terms were adopted for use in Japanese.

Because of the unique and creative nature of this terminology metamorphosis, which at times involved part-of-speech shifts, the researchers questioned how comprehensible the loanwords found in the data set would actually be to Japanese television viewers. This question of comprehensibility, heretofore unaddressed in the literature, is crucial to ask because the television genres examined are meant to present unscripted or otherwise “natural” Japanese discourse for entertainment or informative purposes.

As a first step in ascertaining the comprehensibility of the loanwords found in the data set, the data’s English loanwords were compared with Daulton’s (2003) List of High-Frequency Baseword Vocabulary for Japanese EFL Students #2. The results of this comparison showed that relatively few data set words (roughly one-fourth) matched words in Daulton’s list. As such, questions regarding viewers’ familiarity with and comprehensibility of the loanwords presented them become warranted. Details about the research, as well as future research directions that include loanword comprehension based on viewer demographics, are presented.

English loanwords in Japanese television programming: Assessing high-frequency baseword vocabulary usage

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Like many other modern languages, Japanese has been shaped and influenced by borrowings from other languages. In the modern era, no other language has had as large an influence on Japanese as English. Studies examining English's impact on the Japanese language – particularly studies on English loanwords in Japanese – are numerous and range from examining how English loanwords in the Japanese language affect Japanese English as a foreign language (EFL) learners (Daulton, 2007; Kimura, 2004; Reedy, 1999) to how English loanwords are used in advertising (Shintani, 1995, cited in Rebuck, 2002; Takashi, 1990).

In our previous research (Ishikawa & Rubrecht, 2008, 2009), we examined English loanword usage in Japanese television broadcast programming, that is, programming primarily meant for consumption by a native Japanese television viewing audience. In that research, the amount, frequency, and kinds of English loanwords used in several different program genres were investigated. Results indicated that English loanwords occur with relatively high frequency in all of the genres examined and that many of the loanwords in the data could be classified into 18 distinct loanword categories, some of which had yet to be mentioned in the literature. Furthermore, regarding the content of the loanwords, it was found that some loanwords in our data experienced terminology metamorphosis (e.g., abbreviation, semantic narrowing) and in some cases even underwent a part-of-speech shift as they were supplanted into the Japanese language (e.g., nouns in English became verbs in Japanese). Such transitions in terminology adoption are not unheard of (cf. Sheperd, 1996), and our results were actually consistent with historical records of loanword adoption in the Japanese language (cf. Higa, 1973; Nakagawa, 1996; Oshima, 2002).

As illuminating as these results were, one question that remains to be asked is to what extent such borrowed terminology, when experienced through the medium of television, is actually comprehensible to Japanese television viewers (i.e., viewers who care little if at all about loanword categories or whether or not a noun loanword in Japanese was an adjective in its “previous life” in English). This question of the comprehensibility of loanwords uttered in television broadcast programming is crucial to ask, as such television programs are meant to present to viewers unscripted or otherwise “natural” Japanese discourse meant for entertainment and/or informative purposes. As it may be argued that loanword use may reduce viewers' comprehension of speech uttered in such programming if those loanwords are not comprehensible (particularly but not exclusively in news-related utterances or similarly informative programming), it

becomes necessary to determine if viewers experience comprehension difficulties due to loanword usage.

As a first step toward making such a determination, the present article details a comparison of our previous research data set with Daulton's (2003) "List of High-Frequency Baseword Vocabulary for Japanese EFL Students #2" (hereafter, List #2). This comparison was deemed to be a necessary preliminary step because a baseline understanding of how much Japanese television viewers may understand was needed before the required assessments (to be carried out via questionnaires and interviews with Japanese television viewers) could be conducted.

The literature

In a 1998 paper entitled "Japanese loanword cognates and the acquisition of English vocabulary," Daulton showed that English loanwords in Japanese can enhance by no small margin the acquisition of the English basewords from which those loanwords originate. This research contradicted the view, held by both Simon-Maeda (1995) and Sheperd (1996), that English loanwords could harm rather than help native Japanese speakers studying English. Daulton (1999a), upon conducting both a further literature review and in-class research, found indications that English loanwords may bestow positive effects in English vocabulary instruction in EFL contexts, for he found that learners may tap their English loanword lexicon and utilize it as a knowledge resource.

Building on Nation's (1990) statement that a learner with a vocabulary of 2,000 high-frequency headwords can read and understand 87% of the words in any given text, Daulton took West's General Service List (1953) and calculated that more than one-third (734) of the 2,000 high-frequency words have become basewords in Japanese (Daulton, 1999b). This result, Daulton claimed, indicates that Japanese EFL learners (a) already have familiarity with English terms and, consequently, (b) should find it easier to acquire the original English basewords if they already exist as loanwords in the Japanese language. He later acknowledged that his subsequently constructed "List of High-Frequency Baseword Vocabulary" underestimated the actual number of loanword cognates in Japanese and had reliability issues due to it relying on only one loanword dictionary as well as on an old source (i.e., the General Service List) to describe high-frequency English words. Daulton subsequently constructed List #2 (Daulton, 2003).

Although Daulton makes it a point to say that word lists are inherently problematic (Daulton, 1999b), this revised list was certainly more expansive and improved. He took as the universe of high-frequency English words the BNC 3000, which is a frequency list of the top most frequently used 3,000 word families developed from the British National Corpus by Paul Nation. He used this list because it has been calculated that if a learner understands terms in the top 3,000 word families, then s/he will have sufficient comprehension of informal conversation and reading terminology to understand around 95% of what they encounter (Daulton, 2005). Others have calculated that an understanding of these 3,000 word families actually provides around 98% comprehension (Hu & Nation, 2000, cited in Schmitt, 2008), which, as Adolphs & Schmitt (2003, cited in Schmitt, 2008) discovered, is congruent with Nation's

calculations at the 3,000 word family level. In addition to looking at a larger pool of high-frequency words, Daulton sought loanword correspondences from Motwani's "A Dictionary of Loanwords Usage" (1991), Kamiya's "Tuttle New Dictionary of Loanwords in Japanese" (1994), and frequency lists constructed from Mainichi newspapers in 2001, in addition to collaborating with a native informant and utilizing self-assessments by Japanese university students.

As stated by Daulton (2003), List #2 contains 1,777 loan types found within 1,360 BNC 3000 word families. He divided the words alphabetically (for the most part), separating the words into the top most frequent 1,000 words, the next most frequent 1,000 words, and then the next most frequent 1,000 words. Some words were placed out of alphabetical order because they were extracted from a BNC word family (i.e., they were from a head word, they were inflected forms, or they came from closely related, derived forms).

Taking all this information about high-frequency English words and comprehension into consideration, we wondered about the extent to which the words in our data set matched the words in Daulton's List #2. Stated differently, we wished to examine how well the English loanwords presented to the Japanese via the medium of television relate to the list of words Daulton claims to have correspondences to common English loanwords in Japanese. Our stance is that if the correspondence is high, then comprehension of the English loanword terminology would also be high. If the correspondence is low, then comprehension of these terms by Japanese viewers would therefore be questionable and would warrant further research. The following details the research that compares our data set with List #2.

The research

Our research data set was composed of samples of spoken discourse from six Japanese television programs that spanned six different genres. Sampling occurred over a three-week period. Table 1 presents information about the television programs.

Table 1: The television programs

Program title (with English translation)	Genre
たけしのTVタックル (Takeshi's TV Tackle)	talk show
ハケンの品格 (The Dignity of Temporary Staff)	drama
とんねるずのみなさんのおかげでした (Thanks to Tunnels' Viewers)	variety
ニュースウォッチ9 (News Watch 9)	news
どうぶつ奇想天外 (Amazing Animals)	quiz show
さんま御殿 (Sanma's Mansion)	variety talk show

More specific information about the selection of these shows and these genres are presented in the previous research (Ishikawa & Rubrecht, 2008). However, it should be

noted here that the genres were all unique and that these genres were chosen because (a) it was believed that the viewers of these programs spanned a relatively large demographic and (b) they would (on the whole) present natural or semi-natural spoken discourse. The broadcast time of the sampled programs ran from 2.3 hours to 3.0 hours, with a mean broadcast time of 2.4 hours.

In order to make comparisons between the words in our data set and those in List #2, List #2 was first scrutinized and standardized to match the criteria by which we constrained our data set. When examining List #2, it was noticed that numerous adjustments had to be made to it. First, words indicating countries and nationalities (e.g., America, Italian) were removed, as we had purposefully excluded such terms from our data set due to etymological uncertainties. Second, some List #2 inconsistencies were rectified. For instance, List #2 presents some words (e.g., batter, center) twice. Although there may have been a reason for these duplications, such as one instance to indicate a word used as a noun and another to indicate a verb, Daulton provides no explanation. Thus, prior to making our comparisons, all duplications were removed. In the end, 44 of the 1,777 List #2 words were dropped, giving a total for the revised List #2 of 1,733 words.

When conducting the comparison, a few judgment calls also had to be made, as it was soon realized that making comparisons between List #2 and our data set was not simply a straightforward matching task. First, due to differences in part of speech and the likelihood of homonyms, we concluded that any match in spelling between the two sources should be considered a match. For instance, our data set included the word “post,” which in the television programming was in the context of a job (e.g., “He was assigned the post for one year.”) and not as in, for example, mailing (e.g., “Please post this letter for me.”). Since it was unknown the exact context and part of speech of each word in List #2, we had to accept any word that matched, spelling-wise, our data’s words.

Second, partial matches were, by necessity, also counted as matches, meaning that if part of a word from our data set (e.g., in abbreviations of compounds or compounds with English and Japanese) matched a word in List #2, then it was counted as a match. For example, part of the word “communication” is used in the Japanese word *masukomi*, which means “mass communication.” *Masukomi* was considered a match because the word “communication” is found in List #2. Other examples of terms accepted as matches include “wear” from *sukiiuea* (“skiwear”) and “brush” from *haburashi* (“toothbrush”), in addition to abbreviations if part of the abbreviation was a term found in List #2 (e.g., “video” in DVD and both “office” and “lady” in OL).

Finally, List #2 includes various inflected forms of words including the singular and plural form of words (e.g., appointment and appointments; kilogram and kilograms) as well as possessives (e.g., men’s, women’s). Only complete matches were accepted. For example, the word “kilometer” was always used in the plural form in our data set (i.e., “kilometers”). Because the singular form of the word is in List #2 but not the plural form, no instance of “kilometer” was ever counted as a match.

Results

In total, there were 1,703 loanword tokens in the data set that matched List #2 words. Of these tokens, 449 words were loanword types, or unique loanwords. This number represents 25.9% of List #2, or slightly more than one-fourth of the words found in List #2. All things considered, this percentage may be said to be rather low. When examined by genre, it can be seen that some genres presented more loan tokens and types than others. Table 2 presents this information.

Table 2: Loanword tokens, types, and matches by genre

Genre	Token totals	Type totals	Type match totals with List #2	Percentage of types that are List #2 words	Percentage of type matches with List #2 words
Talk show	260	142	91	64%	5%
Drama	219	113	78	69%	4%
Variety	549	262	154	59%	3%
News	500	289	148	51%	9%
Quiz show	487	177	108	61%	6%
Variety talk show	431	220	136	62%	8%

As can be seen from Table 2 in the second column from the right, between 51% and 69% of the loanword types found within each genre matched List #2 words. Upon first inspection, this appears to indicate that in any of the genres analyzed, Japanese television viewers would have a relatively high probability of understanding the original English basewords of a majority of the loanwords presented to them from the programming. This can be stated because (a) these words have a high-frequency common corresponding Japanese word, and (b) as mentioned previously, it is assumed that the loanwords being used in the television programming are meant for entertainment and/or informative purposes. If the viewing audience cannot understand such terminology (generally speaking), then in most cases there would be little point in including such words in the dialogue (exceptions include loanwords that have recently gained popularity but have yet to appear in loanword dictionaries or loanword lists as well as loanwords that are simply commonly used in specific television genres or in television programming in general).

However, these calculations only indicate the percentage of List #2 words out of the total number of loanword types present in any particular genre. When one examines the percentages indicating how many within-genre loanwords actually match words from List #2, it becomes much clearer that the likelihood of Japanese television viewers comprehending the loanwords presented them is somewhat lower. The far right column in Table 2 shows that within-genre percentages range from 3% to 9%, meaning that for any particular genre, less than 10% of the loanwords used have a common Japanese English loanword base.

Conclusions and future research directions

After examining his List #2, Daulton (2003) found that 45.5% of the 3,000 most frequent word families of English have correspondences to common Japanese loanwords. While such a percentage can be called moderate at best, the current study's

result of matches between our data set and such common Japanese loanwords occurring 25.9% of the time – which is roughly half that of Daulton’s results – can scarcely be seen as indicative of broad familiarity or likely comprehensibility of loanword usage. This is not necessarily to say that Japanese television viewers are confused by or unknowledgeable of the English loanwords utilized in the genres and programs examined. However, it may be ventured that if roughly three-fourths of the English loanwords Japanese television viewers encounter are not in the top 3,000 high-frequency words, then comprehensibility becomes a definite question worthy of being asked.

To be sure, the conclusions from this research are tentative and cannot be generalized across the entire population of Japanese television viewers. Certainly, nearly all Japanese learn English, most formally at the junior high school and senior high school levels (LoCastro, 1990). English is not a required subject per se, but because a vast majority of university entrance exams test students on their English ability, English is provided as a default “elective” at 99% of the nation’s junior and senior high schools (Kitao, Kitao, Nozawa, & Yamamoto, 1985). In 2002, English was formally introduced at the elementary school level (Shimaoka, 1999), which means that with few exceptions, virtually all who experience learning in the Japanese education system have studied English.

Even so, as Stanlaw (2004) keenly points out, although English has become necessary to speak Japanese, Japanese interlocutors utilizing English in their verbal communication does not necessarily equate to mutual understanding. What would therefore be of incredible value and interest to EFL educators and linguists is research that directly addresses the question of what – and to what extent – Japanese television loanwords are understood by the Japanese population. Future research could therefore examine loanword comprehension by demographic. Indeed, Stanlaw (2004) continued by stating that “English loanwords are used by all Japanese people; that said, however, there are often great differences in English usage and acceptability depending on age, gender, education, occupation, social status, class, and personal feelings” (p. 300). Studies examining loanword comprehension by native Japanese in these various demographics is hence certainly warranted.

Biodata

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**INVESTIGATING ADULT-BABIES COMMUNICATION PATTERN IN A DAY
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Investigating Adult-Babies Communication Pattern in a Day Care Center in Malaysia

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Abstract

Effective adult-babies (infants and toddlers) communication is important as it could enhance the child's language development (Acredolo & Goodwyn, 2000), as well as their self confidence and self esteem. To create effective and meaningful adult-babies communication has been a struggle to many parents and caregivers working with babies, which has led to frustration and disappointment to both adults and babies. This is because babies have not yet developed their vocabularies and parents do not have an effective communication method with the babies. However, it is believed that parents and caregivers have been consistently trying to create a two-way communication with their babies, in creating an effective communication system. This study intends to observe how parents and caregivers in Malaysia communicate with their babies in a child-care setting. Participants were 30 babies (age between 6 to 28 months), 15 parents of the babies and 5 caregivers. Babies, parents and caregivers were videotaped and observed to see the patterns of communication among each other. Most of the babies are found to show some gestures when communicating with their parents and caregivers. Parents and caregivers are found to use speech most of time and some gestures at some part of their communication. These results show that babies, parents and caregivers do try to create an effective two-way communication in fulfilling their needs and interest.

Keyword: Adult, babies, communication, pattern

1. Introduction

Parent-child communication is an essential component in a child's development. It is an important element in developing the child's attachment relationship, sense of security, language and emotional development. Communication between parents and children begins at birth and becomes increasingly complex and situation specific as the infant develops (Stern, 1981). Spontaneously, parents start to communicate with their infants since birth in their own ways in conveying their feelings and thoughts and most

importantly to develop relationships with their child. Nevertheless, it has also been a concern among many parents to ensure that they are communicating effectively with their children, especially with the infants and toddlers. This is because, it has been a struggle among many parents and caregivers (adults) to communicate with their infants and toddlers (babies) effectively, as babies are not verbally capable in expressing their thoughts and feelings. To create a two-way interaction between parents and babies is not an easy process. Generally effective communication involves several components. First, the communiqué is “sent”, either verbal or nonverbal. Second, the receiver must “accept” the communiqué or message, which means that the receiver must listen to or observe what is being communicated and finally, the receiver must acknowledge and appropriately respond to the sender of the message (Skinner, Carruth, Houck, Moran, Reed, Coletta & Ott (1998). However, to create an effective communication with younger children especially infants and toddlers require communication styles and behavior of the adults, appropriate to the age of the child. It is important to use the appropriate body language, facial expressions, vocal and gestures when communicating with babies for them to understand the meanings and intentions that the adults is conveying. Besides, by understanding how parents communicate with their babies could help examine the quantity and quality of adults’ participation in the interaction (Clearly, Wetherby & Doldstein, 1999). Hence this study is to investigate how adults communicate with the babies and to examine the adult-babies communication pattern in a day care centre in Malaysia during normal routine activities.

Studies in interpersonal communication between parent and babies, vocalizations are considered to be one of the primary means by which infant communicate with others (Hsu & Fogel, 2003) and vice versa, regardless of the gender of the infant or the gender of the adults. This can be seen in some researches where adults are seen to use motherese with infants (Mahdhaoui & Chetouani, 2008) producing speech when communicating with children during playtime (Cleary, Wetherby & Goldstein, 1999) and to reduce behavior problems. Gestures have shown to be another communication method that has gained popularity among parents in communicating with their babies. This is because the use of gestures has proven to offer both parents and babies an effective two-way communication, reduces frustration, and engaged in an interactive communication (Acredolo & Goodwyn, 2001). Gestures are intentional motor actions, usually intended by children as communicative cues, which is part of a communicative behavior where it can be presented alone (without speech) or it can be accompanied by the movement of the hands, arms and fingers which are produced when speech is delivered (Vallotton, 2008). Some of the gestures types that have been proposed used by adults and children are the deictic gestures, such as showing and pointing (Iverson & Goldin-Meadow, 2005) and symbolic gestures (Acredolo & Goodwyn, 2001), which is more structured in its hand configurations and has specific conventionalized meanings to it (Haviland, 2006). In a study by Iverson & Goldin-Meadow (2005), it is found that children relied extensively on gesture to refer to objects, and it also provide a way for children to refer to objects at a time when they are not producing words for those objects. This happens when parents frequently produce both verbal and gestural ‘labels’ for objects when communicating with the babies and the babies tend to spontaneously imitate the adult gestural model while it was presented (Bates & Dick, 2002). Thus, many parents had

even chosen to introduce gestures to their hearing children hoping to promote earlier and clearer parent-child communication (Acredolo & Goodwyn, 2006) as well as promoting socially appropriate communication (Pizer, 2003).

2. Methodology

Participants

Participants were twelve typically developing infants and eighteen toddlers (age between 6 months and 26 months), fifteen parents (13 mothers, 2 fathers) and five caregivers (3 infant room, 2 toddler room) at a work-place childcare setting at Putrajaya. There are only 15 parents involved in this study as only one parent of each baby are seen at the childcare center. This is either because the other parent is working at a different department, or they work in a different sector. The participants were all from middle- to upper-middle-class bilingual Malay- and English- speaking families. The main language used at home and center is Malay, but English is also frequently used by both parents and caregivers when communicating with the babies.

Procedure

Each parent and caregivers were videotaped and observed during normal program routines (activity time, meal time, bath time, parent visit and drop-off) at the center. Videotapes and observations on caregivers and parents were collected for approximately two times in a month. Participants were videotaped and observed in their classroom and at the dining area during toddler's mealtime.

Parents. Each parent was observed for approximately 10 minutes in two sessions during drop-off and videotaped for approximately 60 minutes in two sessions during visits in the afternoon. All of the activities were videotaped and observed in the classroom. On average, each parent was filmed a total of 120 minutes (2 hours) and was observed at a total of 20 minutes, with an overall total of 140 minutes (2.3 hours).

Caregivers. Each caregiver was videotaped for approximately 60 minutes during playtime (for both infants and toddlers caregivers) and 15 minutes during toddler's meal time. Observations were made for approximately 10 minutes during infant's meal and bath time (for both infants and toddlers). On average, each infant caregiver was filmed a total of 120 minutes (2 hours) and was observed at a total of 40 minutes, with an overall total of 160 minutes (2.7 hours). Each toddler caregiver was filmed a total of 150 minutes (2.5 hours) and was observed at a total of 20 minutes, with an overall total of 170 minutes (2.8 hours).

3. Results

Based on our observations and coding video tapes, speech are seen as the main communication pattern between parents/caregivers (adults) and babies (infants and toddlers) as speech is found to be a spontaneous act among adults when there is a need and interest to deliver a particular message to the other person. Some adults are also seen

to naturally use gestures and speech synchronically when communicating with the babies. In fact, the gestures documented are not just conversational gestures, but also frequently used deictic gestures (such as pointing when requesting or showing) and symbolic gestures used in their daily activities (such as referring to object, rejecting, disagreement, and waving hand to say hello or good bye). However, it is found that only 10 parents (n=15) are seen to use gestures but all caregivers (n=5) are found to use gestures in their communication with the babies. This is probably due to limited time of observation and video recording on parents' interaction with the babies.

These adult-babies communication patterns (speech and speech with gestures) were observed and recorded during normal program routines (activity time, meal time, bath time, parent visit and drop-off) and it is found that speech and speech with gestures were documented during all of the normal program routines. However, parents were observed and recorded only during visits and drop off as parents were not at the center during other routines and caregivers were observed and recorded during activity time, mealtime and bath time.

	Speech	Speech with Gestures
Activity Time	5	5
Meal Time	5	4
Bath time	5	1
Parent visit	8	5
Drop off	15	9

Table 1.0 Number of adults who used speech and speech with gestures when communicating with babies during normal program routines

Table 1.0 shows the types of communication used by parents and caregivers with the babies. All of the adults (N=20) were seen to use speech during parts of the normal program routines at the center. All caregivers (n=5) were seen to use gestures during activity time, meal time and bath time, and all parents (n=15) were seen to use speech during drop off and only 8 parents were seen to use speech during visits. This is because only 8 parents came, during visit time at the center. However, only some of the adults were seen to use speech with gestures with the babies at different times of the program routines. In the other hand, all 5 caregivers were seen to use speech with gestures during activity time, 4 caregivers during meal time and 1 caregiver during bath time. Only 5 parents were seen to use speech with gestures during parent visit and 9 parents were seen to use speech with gestures during drop off. These results shows that speech is found to be the main source of communication between adults and babies compared to speech with gestures. This is probably due to lack of regularity and knowledge on symbolic gestures during speech.

Activity Time

During activity time, results show that all 5 caregivers use speech and speech with gestures when communicating with the babies. No parents were observed or video-recorded as no parents were available at this time of the infant and toddler routine. Adults

were seen to use speech when asking questions, showing concerns, showing encouragement and requesting for a behavior. However, not many gestures were observed and recorded used by caregivers compared to speech. Results show that adults only use gestures when requesting (using deictic gestures), showing a particular action and object and asking questions.

Speech	Speech with Gestures
<p>“<i>Buat apa tu?</i>” “What are you doing?” (looking at the child playing puzzles) “<i>Tak takut jatuh ke...?</i>” “Don’t you afraid of falling...?” (while looking at a child climbing a chair) “<i>Pandai...buat apa tu?...Pandai!</i>” “Clever...what are you doing?...Clever!” (encouraging child and smile) “<i>Duduk...duduk...</i>” “Sit...sit...” (and putting down the child)</p>	<p>“<i>Haa...itu.</i>” “Yes...that.” (pointing to a toy when asking a child to grab it) “Up..up...up” (raising hands up) “Run like this.” (show running gesture) “<i>Pipi.</i>” “Cheeks.” (pointing both pointer fingers to child’s cheek) “What is this?” (show what gestures)</p>

Meal Time

During meal time, all 5 caregivers are found to use speech in most of their conversation with the babies and only 4 caregiver are found to use gestures. Findings show that adults use speech when asking questions, requesting a behavior, informing an action and informing an object. In the other hand, not all of the caregivers use gestures in their speech. Most of them only use gestures to request children to sit at the dining table and reciting the prayer before eating. This is probably because of lack of communication that is going on between caregivers and babies during meal time compared to activity time and also probably the caregivers have lack of knowledge in using gestures during mealtime.

Speech	Speech with Gestures
<p>“<i>Siapa nak makan?</i>” “Who wants to eat?” (standing and looking at the children) “<i>Tini...tini...come!</i>” (while looking at the child) “<i>Lapar ye...Ok, kita minum susu!</i>” “You are hungry...Ok, we drink milk!” (while holding bottle) “<i>Ok..dah!</i>” “All done!” (taking bottle from baby) “Nappie.”</p>	<p>“<i>Cepat...cepat!</i>” “Faster...faster!” (show come gesture) {Cite prayers} (show prayer gesture)</p>

(putting nappie on child)	
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Bath Time

Bath time activity shows the least speech and gestures use between adult-babies communication compared to all other routine activities with the babies. Findings shows that all 5 caregiver do speak to the babies using speech but only 1 caregiver use gestures when communicating with the babies. However, it is also found that all of the caregivers only speak when showing concern and encouragement to the babies, informing an action such as when bath time is over. Based on our observation on the caregiver, it is found that the caregivers do not really communicate with the babies when they are in the shower room, except during the time when they need to bring in the babies into the shower and when bath time is done. Thus, this is probably the reason why bath time shows the least amount of communication between caregivers and babies. There are also lack of gestures used during bath time, where gestures are used only to request behavior. Again this is because caregivers are found not communicating enough with the children during bath time.

Speech	Speech with Gestures
“Why are you crying? Look...why are you crying? (looking at the child). Your friends are not crying. Come on! Let’s go to your friend.” “Ok...come!” (picking up the child) “All done.” (picking up the child)	“ <i>Jom mandi.</i> ” “Let’s shower.” (show come gesture) “No..don’t do that.” (show no gesture)

Parent Visit

During parent visits, only 8 parents were observed in their communication with the babies. Findings show that all 8 parents use speech and only 5 use gestures in their communication. This is because, not all of the parents came to the day care center to visit their children due to their work. Besides, during their visit to the center, parents are found not to communicate much with their babies as there are some other babies who are sleeping and these parents tend to be very careful when talking to their babies. Thus, not much findings were obtained from our observation and video recording during parent visit to the center. However, our findings shows that parents tend to use speech the most when communicating with the babies. When communicating, speech are found to be used when asking questions, requesting a behavior, showing encouragement, informing object, and informing an action. Gestures are found not to be used as much as speech, however, parents use gestures when asking questions and requesting a behavior from the babies.

Speech	Speech with Gestures
“What are you doing?” (looking at the child)	“Come here, sayang” (show come gesture)

“How are you doing? Are you happy? (looking at the child) “ <i>Nak susu? Come!</i> ” “Want some milk? Come!” (picking up the child) “ <i>Pandai....</i> ” “Clever....” (smiling to the child) “Oh! You have poop!” (holding and looking at the child) “ <i>No more. Dah habis.</i> ” “No more. Finish.” (showing bottle to child)	“Come.” (show request gesture) “Are you happy?” (pat chest) “Yeay!” (smile and raised hands)
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Drop off

During drop off, only parents were observed and videotaped to see their communication with the babies. Findings show that parents are communicating actively with their babies during drop off compared to parent visits, probably due to their anxiousness to drop-off their babies. However all fifteen parents are found to use speech with the babies at most of the time, and only 9 parents use gestures when communicating with the babies. It is found that parents to use speech when asking questions, requesting a behavior and informing a particular action. In the other hand, only gestures on showing a particular action such as goodbye and object are used when communicating with the babies. Not many types of gestures used during drop off time, since parents tend to shorten the drop off process and many of the parents only say goodbye to the children.

Speech	Speech with Gestures
“Come here (pick up child). Want some milk?” (while holding the child) “You stay with teacher ok...I’ll be back.” (looking at the child and smile). “Ok. Bye!” (touching baby cheeks) “ <i>Dah habis.</i> ” “Finish.” (showing empty bottle to baby) “Bye.” (while kissing the baby’s cheeks)	“Bye!” (show goodbye gesture to baby) “There! Ball!” (pointing to ball) “ <i>Dah habis.</i> ” “Finish.” (show finish gesture)

4. Discussions

Overall, results shows that adults are seen to produce mostly speech during the babies daily activity routine at the daycare, as well as deictic gestures and symbolic gestures when communicating with the babies. However, probably due to lack of parents’ participation in this research during other routine activities besides during parents’ visits and drop-off, has limited our findings on types of parents’ speech and gestures used

during speech with the babies. Furthermore, the limited symbolic gestures produced by both parents and caregivers are probably due to lack of knowledge and regularity in using gestures when communicating with the babies. Caregivers are shown to use gestures the most only during activity time, probably because that is the only time that they are actively engaged with the infants and toddlers and the need to produce various gestures with the babies. As recent research on symbolic gestures has found that the use of gestures among infants and toddlers has led to positive evidence on language development (Goodwyn, Acredolo & Brown, 2000) and it might facilitate the development of speech (see Goodwyn, Acredolo & Brown, 2000; Thompson, Cotnoir-Bichelman, McKerchar, Tate & Dancho, 2007), thus it is recommended that there is a need to introduce parents to symbolic gestures for them to use it in their communication with their babies as it could offer parents have more effective and engaging communication with their babies.

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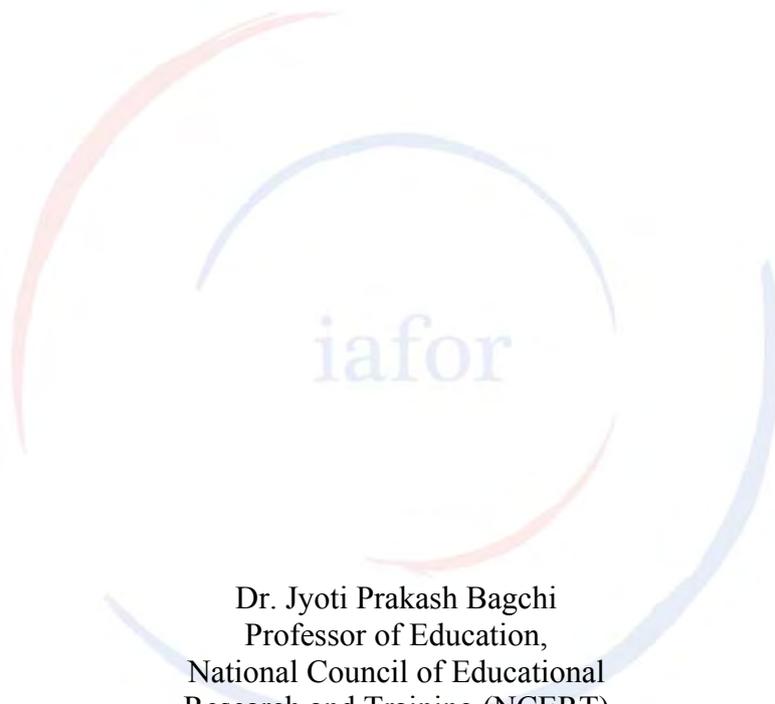
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Christianity, Plurality and Modernity in North-East India: Retrospect and Prospect



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ABSTRACT

The denominational institutions with particular reference to Christianity, in – vogue in the north – eastern region of India directly affects the ethnic culture of the region and continues to be a dominant factor influencing the most vulnerable group, the locationally disadvantaged tribal community and it's culture. The present approach is based on naturalistic paradigms. More broadly, it is the culmination of six years of vigorous academic engagement, underpins practices in polices and reforms beyond narrowly conceptualised notions of student learning attainment. It reexamines issues of social and cultural discontinuity and gaps, the elements that impede the inclusive growth in the region and social change against the issue of modernity. Further explains policy neglect – if not policy perversity – is leading to a crying paucity of quality educational institutions at the grass root level and emergence of 'Christian education' a euphemism for 'English education' legitimizing conservative religious instruments underscoring the plural and secular ethos of India. It describes succinctly what has occurred historically in the socio-cultural context leading to, in general apathy towards institutions, acute identity crisis and subsequent self-alienation, asks questions to deliberate the wicked problems and 'social messes'. In a neoliberal global era the article acknowledges the growing effect of western cultural imperialism, unfair policy, corporate interest in land and natural resources on marginalized section of the population. Demands pragmatic study of the existing state of turmoil or take it one notch higher and introspect or critically examine our present system of education to see if we are really in a state of dissatisfaction avoiding macho-political rhetoric or enter in the arena of politics of blame. The upshot is to identify ways to strategize to counter the forces and pressures that shape education and democracy.

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Due to globalization, as never before, the present civilization looks forward for a common destiny which beckons us to seek a fresh mapping of viewpoints, churning of ideas to provide a common ladder of opportunity to all. The strong current of globalization sweeps away the most vulnerable group, the tribal community and its culture. Since culture is the beginning point of one's identity, it is legitimate to realize its significance in educating the child without ignoring modernization of knowledge, skills and attitudes. The entire onus of the responsibility is with us that we may not end up in macho-political rhetoric or enter in the arena of politics of blame. The task is to move beyond mere articulation of wishful principles and carve a policy response amid all the craziness and freneticism that surrounds us so that we may not lose sight of what is truly human in ourselves.

Globalised India

On the eve of Independence on August 14, 1947, Jawaharlal Nehru in his speech on the 'tryst with destiny' not only talked about freedom from British rules, but also about his vision of independent India. A remarkable paradigm shift in our policy took place first in 1980 and then in 1992 under the leadership of our present Prime Minister (the then finance minister), Dr Manmohan Singh who unfolded his broad and outward-looking economic programme.

India is a very diverse country with wide range of pursuits, religious and ethnic diversity with vastly differing convictions and a veritable feast of intellectual pluralism notwithstanding its long tradition of skepticism and reasoning. The west often depicted India as a place of endless spirituality and unreasoning mysticism. Jawaharlal Nehru, India's first Prime Minister, emphasized on the toleration of heterodoxy and pluralism in Indian History (Nehru, 1946). With the progressive advancement in science and technology, in world literature, commerce and proven excellence in the field of information technology India ushered herself into a new era with a good deal of global interaction. Although it is oft-quoted that democracy is a quintessentially Western idea; however, there is something inherent in Indian ethos that makes it singularly suited to democracy although it may not be perfect. Shashi Tharoor (1997) with reference to understanding Indian ethos across its diversity such as religion, culture, linguistic etc. has made a powerful remark, "the only possible Idea of India is that of a nation greater than the sum of its parts".

Konar & Modak (2010) have succinctly and beautifully explained the interrelationship among globalization, localization, sustainability, human values and cultural diversity.

“Globalization is not only, or even primarily, an economic phenomenon...Globalizations is really about transformation of space and time...The current period of globalization is not simply a continuation of the expansion of capitalism and of the west...It is also ... directly bound up with the circumstances of local life. Globalization implies the idea of a world community, but does not produce it.... Globalizations lead also to an insistence on diversity, a search to recover lost local traditions and an emphasis on local cultural identity – seen in a renewal of local nationalisms and ethnicities”.

The process of globalization of world economy and politics is based on scientific and technological revolution that began in the 1940s and changed the world scenario drastically; there by causing a third industrial revolution. Alongside many advantages, it has also enlarged the technological gaps between the developed and underdeveloped regions. It has also destroyed the age old traditional practices and customs, deteriorated ecological balance at global level and threatened humanity's survival .This has led to poverty, to serious problem of social disintegration, social exclusion causing disharmony, tension and perpetual violence particularly significant in remote regions where indigenous population is predominant. If our approaches become humane we may explore possibilities to create a more just world wherein the social thoughts of the indigenous population and many of their customs and cultures need will be respected and given a formal recognition in our school curriculum. Educationists needs to see that the dominant, so called ‘conventional wisdom of the developed society’ and Eurocentric paradigm should not be thrust upon the most vulnerable group in the process of socialization and through institutionalized belief system. If we appreciate the strength of plural dynamism in the context of globalization, global negotiations while formulating policies are imperative and also social intervention is urgently called for. Besides having common strategies for overall development at global level unifying common interest there is also a need to evolve local developmental plan using local expertise for local communities especially deprived communities living in far flung areas who are continuously being doped in the name of various denominational priorities. Theotonio Dos Santos (2010) recommended that democracy and citizenship are the basis of a world order with an agenda of social justice.

North- East India

North-eastern India enshrouds within itself the vast unexplored and unknown tracts, some of which are perhaps still to witness the light of day. Mooshahary, 2010 aptly remarked the topographical features and typical characteristics of North- East India (NER) as the present deliberation is primarily focused on North- East India (NER) which is surrounded by five countries, viz., Nepal, China, Bhutan, Bangladesh and Myanmar and connected with the rest of the country by a small stretch of land corridor of 22 km wide often referred as India's ‘Mongoloid fringe’ or more popularly the ‘chicken neck’ near Siliguri. NER comprises about eight percent of the land area and three percent of population of India. It is one of the most

complex spots in Asia with over 200 hundred ethnic groups, languages and dialects and their own faiths and practices constantly creating conflicts of interest. This region has been the home to different migrating human civilizations. They came at different times of history and scattered throughout the region and became its autochthons. Inaccessibility of the difficult terrain isolated them from one another and in due course developed own languages, life styles, faiths, and practices locked from others. NER is the crucible of India's heterogeneity. People are not only isolated from the rest of the country but they keep apart even among themselves.

Since religion is the important agency of identity and fragmentation there is a need to mention the impact of belief system in the NER and its consequences. Contrary to general impression, the advent of Christianity in tribal territories of India is rather a recent phenomenon. The East India Company did not encourage missionary activities in British India. It was only after the passing of the Charter Act of 1813 that they were forced to allow Christian missions in their territories. Initially, the Christian missions attempted proselytisation of 'gentleman'. Their activities picked up only towards the end of 19th century in the tribal territory. Almost the entire tribal population in Manipur and Nagaland is Christian. An overwhelming majority of the tribals in Mizoram and a large majority in Meghalaya are Christian. In Tripura Buddhist population is about three times that of Christians. About one-fourth of the tribal in Assam and about one-sixth in Arunachal Pradesh are Christians too. Where as the scheduled tribes of Sikkim is entirely Buddhist. Enrolling the tribals into any major religious denominations, namely Christians and Hindu, is increasingly a source of controversy. Arguments are put forward that conversion in religion is not the same as conversion in politics. It does cause a tremendous amount of social tensions, and tend to make people ashamed of their past. Moreover, merging of elite religious denomination with the culture of tribal population leads to a dangerous trend of latter being submerged. It is opined that humanitarian work need not be an instrument for proselytisation and at the end of the day each faith need to be respected. The propagation of social justice and social service is not the monopoly of any particular denomination. It is also a political ideological construct as well (Shourie, 2007).

Religion versus Faith and Identity

The tolerance of religious diversity and a long history of heterodoxy are indisputably reflected in India, it being a home shared by Hindus, Buddhists, Jains, Jewa, Christians, Muslims, Zoroastrianism, Sikhs and Baha'is. The narrow reading of "Indian culture as Hindu culture" is fairly a bizarre idea. Certainly the *Vedas*, the sacred books of Hindus date back at least to the middle of the second millennium BCE and Hinduism is the most ancient religion in India. Buddhism was the dominant religion in India for nearly a millennium. Muslim invaders finally settled down and gradually they got assimilated here. For example, Emperor Akbar who reigned from 1556 to 1605 deeply interested in inter-faith dialogue among Muslims, Hindus, Jains, Zoroastrians and Christians. Most likely Jews came to India shortly after the fall of Jerusalem and India has the benefit of having Jews much longer than Europe. Zoroastrianism found home in India right from the time religious persecution began in Iran. There is also a long and illustrious tradition of atheism and irreverence, agnosticism, skepticism and materialism flourished from the first millennium BCE such as the '*Lokayata*' philosophy and '*Carvaka* system'. Christianity arrived on the Indian coast before reaching

even the shores of England in AD52 through Thomas the apostle, one of the first twelve chosen by Jesus Christ. Sen describing 'exoticist' approaches to India aptly quoted Schopenhauer. Schopenhauer opined that New Testament, in contrast with the old, 'must some how be of Indian origin: this is attested by its completely Indian ethics, which transforms morals into asceticism, its pessimism, an Indian ethos that makes it singularly suited to democracy though it is not perfect. James Buchanan (1954), the founder of the contemporary discipline of public choice theory, said, "the definition of democracy as 'government by discussion' implies that individual values can and do change in the process of decision making". The role of argumentative tradition of India applies not merely to the public expression of values, but also to the interactive formation of values, illustrated for example by the emergence of the Indian form of secularism. In principle it takes the form of 'shielding' every religious community against whatever that community seriously deems as blasphemy (Sen, 2005). In order to ensure political unity among multi-cultural and multi-religious communities religious identity has to be separated from national identity. The Emperor Akbar is vocal not to make reasoning subordinate to religious command, nor rely on 'the marshy land of tradition'. The reasoned choice is far superior to any reliance on blind faith. In the midst of religious obscurantisms and other atrocities that is happening with systemic brutal morality, if choice is guided by critical reasoning it is the only ray of hope to understand other people, other cultures, other claims, and examine different ground for respect and tolerance. The scholars equivocally said that Emperor Akbar is an ideal example of truly modern, cosmopolitan, plural as well as in principle having the spirit of globalized world exemplified by his kind gesture of acceptance of some Jesuits who arrived in Lahore in 1591 where he was the ruler. He displayed a great deal of goodwill towards them, lodging them in his palace and treating them with much respect and attention.

A few critical issues may be raised which chiefly pertain to the areas which either mark controversies or suffer lack of direction. A life-world for a society is constituted by a set of elements drawn from the history and existential determinants of human situation grounded in ideology legitimizing societal wellbeing. Internal identities of the tribes have been influenced by the outside imagery and the western cultural hegemony seems to be replacing indigenous culture. Without being contemptuous over 'our culture' and 'their culture' one may argue that in accentuating the distinctiveness of tribal culture educational endeavours need to preserve tribal particularism. Demythologization had introduced the notion of modernity and this has drifted traditional prophetic societies towards the modern scientific world-view of contemporary societies.

A tribal religion is not founded by any prophet. It is only the honest treasure, the embryo and relic of the state of imagination and ideas, upon which much of the organized religions have depended for their spiritual quest. History would tell us that most of the doctrinaire religions came into operation subsequent to organized states and cultures. The defeat of tribal religion may be ascribed to people aspiring for a better deal, better rendering and improvement of life's lot. A remarkable thing about the tribal people, right since the primitive period to the present, is that they are so secular minded that for them shifting of one's religion would not mean any act of hazardous commitment (Kanito Sema, 1980). Among the many markers of progress and modernity Westernization though socially repugnant is the most dominant one. Therefore the situation is further aggravated by the Western cultural imperialism, unfair policies, corporate interest in land and natural resources. All these forced indigenous people

to adapt the dominant culture as a way of life as they have already lost the hard rock of tribal ethos to fall back. Notwithstanding a culturally and ideologically skewed perspective, resting on its own assumption that one can't grade a culture and belief system and it is futile to make attempt to establish superiority of one over another. All are equally respectable for transforming and empowering individual. Global heavies who are throwing their status behind the present concern of conservation of human cultural identity in the midst of cosmopolitanism and globalised world it would be trivializing to dub 'tribal culture' as the 'next big thing'. In fact it is the original big thing. The modern system of education which is propagating, by default, the norm of large scale copying of ideas and life style, it is unusual for any one to embark on an unexplored path out of conviction alone.

Yogendra Singh pithily remarked that traditional society had sanctified the revealed tradition, the principle of sacred hierarchy, as well as transcendental sources of legitimization of values and cultural practices. In a modern society, not prophecy but reason, not hierarchy but equality, not vocation or calling but work, not sacred meanings but pragmatic instrumentalities and rational-legal rules govern the day-to-day life of the people (Singh, 1998). Amartya Sen argues that if we have to decide what policies to support in education the relevant question is how these policies would affect the lives of people, and that enquiry is not the same as the investigation of modernity or non-modernity of the policies in question. He further explains that in case of religious bigotry the priority should be on reading the tolerant poems of Kabir (from fifteenth century) or studying the political priorities of Akbar (in the sixteenth century) rather highlighting the intolerant approaches of Emperor Aurangzeb (in the seventeenth century), that discrimination has to be done in terms of the respective positions, rather whether Kabir or Akbar was 'more modern' or 'less modern' than Aurangzeb (Sen, 2005). Religion when it becomes an identity often it becomes much more damaging because of inter and intra-religious contradictions. Radhakrishnan asserted that nothing is so hostile to religion as other religions. This has disastrous effects for all religions. According to him the world would be much more religious place if all religions were removed from it. Extreme alienation to religious identity leads to sectarianism, the illogical belief in a single religion for mankind. This is because of mistaken belief based on intolerance and unreason which often results into ethno-centricism and regionalism. Education should foster a belief system as envisaged by Radhakrishnan, which will be akin to a vital religion; a live philosophy which will reconstruct the bases of conviction and devise a scheme of life which men can follow with self-respect and joy. Faith should not hinder contact with the given reality, fulfilling metaphysical requirements, balancing non-material wellbeing with scientific temper. Faith which is nondiscriminatory and all inclusive will not just lead to self-perfection but also to social redemption and harmony.

Role of Denominational Institutions in Education

Christians have been in Indian soil for 2000 years. Their work in social and educational fields, however, began some times in the middle of the sixteenth century after the Portuguese had well established themselves in the western coast of India. In the nineteenth century, when the British authorities initiated a system of English education, the Christians began to take a more active part in the founding of schools and colleges. It is also mentioned that the Christian schools instead of alienating itself from the local culture and community, attempted their insertion in local environment in a way that helped the school to be integrated in society; in the process it also enriched the local community as it pursued the path of fuller development for all (Emmanuel, 2004).

One may be lambasted for this act of cynicism for determining the contribution of denominational institutions without grappling with the complexity of empirical reality. There is a growing sense of vulnerability for having taken a brave decision to counter the self-alienation of tribal people. However, as they say educationists should be pragmatic and critically examine the existing state of education in order to understand it better; the present effort of the author is part of this tradition.

The western system of education was grafted on the stock of Indo-Persian education system which was believed to be undernourished at that time, which can be traced back to Thomas Babington Macaulay, whose famous or infamous, depending on individual's point of view, Minute on Education of 1835 institutionalized the teaching of English to Indian 'natives' and in the process turned them into brown-skinned Englishmen. The idea was to create a body of English-literate scribes and clerks to help the bureaucracy of British India. Gradually this bureaucratic insensitivity and Kafkaesque circularity of procedures and rules created apathy towards institutions largely among people in a primitive state of existence. In the central swathe of India: Madhya Pradesh, Andhra Pradesh, Orissa, Jharkhand, and Chattisgarh are the areas most affected by tribal dissatisfaction. The system inertia is particularly prominent in geographically or location ally disadvantaged community residing in the eight north-eastern states: Assam, Meghalaya, Manipur, Nagaland, Tripura, Mizoram, Arunachal Pradesh and also Sikkim.

In India during colonial times and also in the post colonial globalised era there is wide spread conversion towards Christianity. In the NER it began with the treaty of Yandabo, between the English East India Company and the Kingdom of Burma on 24th February, 1826. The region was politically linked with major Indian power. The British administration following the Treaty of Yandabo brought widespread changes. The Christian missions and the indigenous Christians both played an important role (Downs, 1992). It is true that 'Christian education' which is a euphemism for 'English education' delivered by the denominational institutions has while on one hand brought modernity and civic amenities on the other has largely lacked un-institutionalized tribal ethos and culture. The present trend in Western, Central and Eastern Europe has become increasingly secular: indeed one can say irreligious societies. Churches are empty and consequently they play far less of a role in European daily life than they did only half -a- century ago. However the scenario in the north east is quite different. In the post-colonial NER many Christian dominated states do not offer a simple binary 'nativism' versus cosmopolitanism or globalism but rather a picture of a state of acute

identity crisis. There is a simultaneous co-existence in different degrees ethnic, religious and national identity. This view point is contested among scholars and there is no unanimity.

Equality and Pluralism

The imagery of any society is based on human development, human freedom and human distress. True development is attained when there is confluence of development and freedom with minimum or nil human distress. It is desirable to understand four different types of societies exist: stratified, heterogeneous, hierarchical and plural. All societies are stratified on the basis of gender, age etc. If the population of a society is drawn from the same ethnic origin, same religion, and /or linguistic group, it becomes homogenous. Conversely poly ethnic, multi cultural, multi religious polities is heterogeneous. In a society where inequality is a formal feature i.e., Greek slave or caste system are examples of institutionalized inequality of hierarchical society. Culturally diverse society is also stratified. Hierarchical societies are also stratified and heterogeneous. But plural societies are stratified and heterogeneous although they may or may not be hierarchical. Inequality in homogeneous societies arise due to differential performance which can be eliminated through socialization and adequate training and education whereas inequality in stratified society is minimized by social engineering with the augmentation of social mobility among gender, class etc. But in a plural, heterogeneous and hierarchical society inequality can not be eliminated simply by social engineering. In such society eradicating inequality is to change the dominant collectivity's evaluation about the quality of performance of the dominated collectivity (Oommen, 1996). Failing to address this problem may eventually lead to social unrest and violence and some vested interest group in the garb of any ideology or belief system may try to control and dominate and due course may pose threat to the very fabric of the society and governance. Equality is defined as when individuals in the society are bestowed with the opportunities so that they may exhibit their potential and in turn their claim for differential reward is legitimate.

The term 'pluralism' has varied connotations. According to Furnival (1948), he used this term to mean 'coexistence' of two or more segments of the population within a polity who produce and transact goods and services but do not transfuse culture or blood (Kuper and Smith, 1971). According to Oommen (1996), pluralism is a congenial attitude of the 'in groups' towards 'out groups'. Thus understanding diversity/heterogeneity as a social fact and pluralism as an attitude towards 'out groups', value orientation to that social fact can be articulated as the dignified coexistence of a variety of groups in a polity. He further clarified that what is needed to be emphasized that no society can or should ignore the process of modernization but borrow selectively those elements of modernity which augment its quality of life. Viewed thus, pluralization is a process of synthesizing tradition and modernity. Pluralism legitimates new life styles and activities. In plural society boundaries which are inter- societal as well as intra- societal are often a matter of cultural proximity: natives and aliens are required to open up not because of self-interest or economic reason alone but also as a moral issue. In pre-modern societies, kinship provided an important boundary. The essence of challenge that is faced by educationist is to develop learning experiences so that these sociological issues become a vibrant reality enabling us to de-sacralize obsolete

practices originating from old values, belief systems and social structure and thus re-sacralize modern ethos and culture based on our fresh understanding of reality. Modernity, secularism and rationality mean nothing if they do not help in creating and sustaining individual and collective choices, which is another word for pluralism(Oommen, 1995).

Overcoming Barriers

The major problems that affect tribal people are:

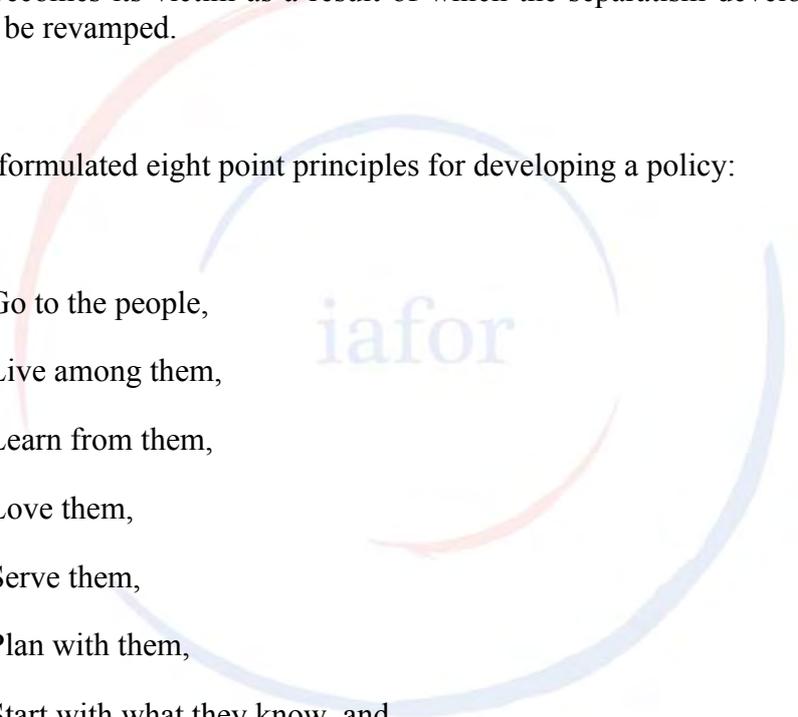
- Land and their alienation from it,
 - Forests and their access to it,
 - Large scale displacement due to development project,
 - Social oppression,
 - Lack of educational opportunities,
 - Basic amenities and facilities,
 - Threat of extinction of heritage, indigenous knowledge, culture, language and belief systems,
 - Autonomy,
- and
- Constitutional safe guards.

Mitra (1999) finds in the existing major western models the absence of terms of political discourse that are authentic, effective, comprehensive, and largely endogenous in character. He emphasizes the need of the search of a more effective paradigm, set within terms of discourse derived from Indian political experiences and articulated in endogenous political vocabulary. The approach adopted by the author is what he calls 'critical traditionalism' which posits an endogenous modernity as the main core of the process of change. This is an 'actor-centered' approach conceptualizing the politics of modern institution and social change in traditional post-colonial settings as processes that enrich each other. In contrast with the conventional approaches to social change which take the goal of change as given, this approach seeks to derive from the 'perceptions and objectives of the actors themselves'. This approach assumes that 'actors, many of them straddling the worlds of modernity and tradition, engaged in the goal oriented and unified action, drawing on all resources they can draw on in order to move the world to a position they prefer, are the main agents of change. It is this 'methodological individualism' applied to specific aspect of the politics of social

change in India that will truly give cohesion. It must be understood that pluralism in the present context does not mean cultural relativism which retains societies and culture in their pristine purity. Actor-centered social transformation is imperative not necessarily retention of every aspect of tradition that may perpetuate obscurantism and fundamentalism

The sense of identity is crucial in evolving social policies and desired actions. It is necessary to differentiate all inclusive role of identity and separatist impulses due to departure from the rest of the members. Further there is no denying of the fact that there is inequality and extreme imbalance in power structure resulting in gross injustice causing strong protests within nation. The ardent need is to address global asymmetry within and outside nation. Today's human civilization is because of the impact of globalization. There is no dearth of evidence to prove that we could grow up because of continuing global interactions. Therefore it is wrong to assume that globalization is a folly. If it creates disparities, the vulnerable and disadvantaged becomes its victim as a result of which the separatism develop; the domestic policies need to be revamped.

Pati (2002) has formulated eight point principles for developing a policy:

- 
- Go to the people,
 - Live among them,
 - Learn from them,
 - Love them,
 - Serve them,
 - Plan with them,
 - Start with what they know, and
 - Build on what they have.

After a long deliberation, it is now pertinent to state the fundamental characteristics of tribes. A living and creative symbiosis with nature is what characterizes much of tribal religion in India whether it is of the north-east or other tribal community. It is the overpowering proximity to nature that has been the source of strength of most of the tribal population. The state as well as denominational endeavour stands for the modern where as community often for non-modern. Both the approaches are ahistorical and politically unhelpful. It is disempowerment and imposing a regime of cultural authenticity on social actors and limiting their range of political expression.

The need of the hour is to enable tribal children both to compete on equal terms in the world of formal employment and not just at the lowest levels, and to affirm their tribal culture, languages and knowledge. When the government talks of 'mainstreaming' it has only the former in mind, but even this mainstreaming is aimed at integrating them only into the lowest levels of the market economy (Sundar, 2009). The policy makers so far preferred incrementally raising funds, initiating various kinds of incentives, and exemptions rather than making people at the grass root level people proactive. There is a need for preferentially including in the mainstream educational curriculum traditional tribal particulars such as Morung system (youth dormitory) of Nagaland.

The think tanks can't hide behind their own clichés and let this horrendous example of institutional failure to continue. The economic, educational and spiritual famine has resulted into two kinds of insanity: confused vision and thoughtless conduct. Collectively we have to extricate from this psychological chaos and develop the ability to spread happiness. If we believe this is rooted to structural violence in most subtle form one obviously need to ask: how can the structures be changed. Among the alternatives available some of the most conspicuous approaches could be (Liongson, 1988):

1. Using existing structure as an instrument to reform the system;
2. Banking on non-violent means to challenge the system;
3. It is not so much on the resources or logistics rather is based on the outcome of the struggle with own potential and divergent views and fresh attempts for replacing the system: and finally
4. Indulging in violent struggle to overthrow the system.

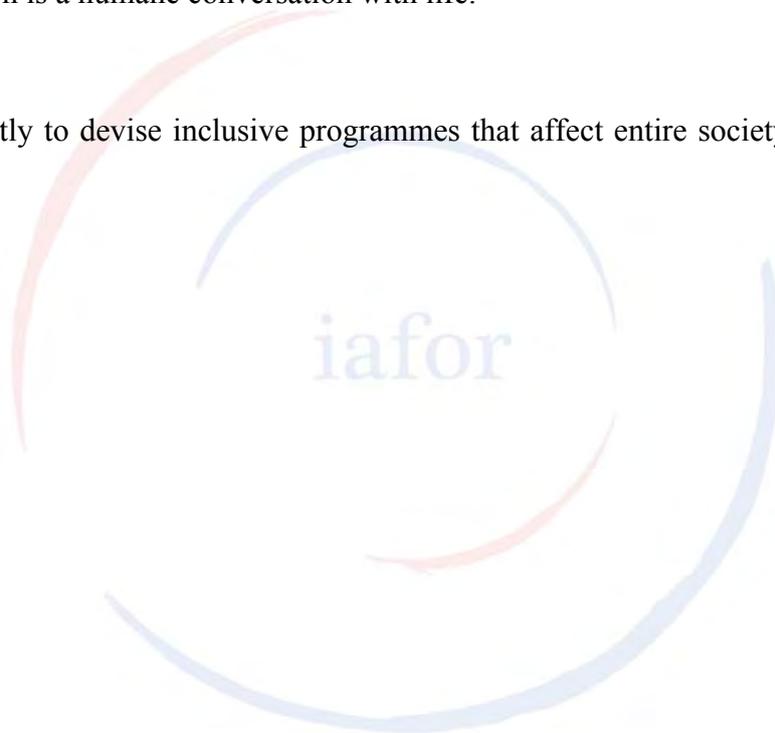
Since Indian culture strongly believes that the end justifies means therefore violence is not only morally evil but also tactically counter productive. Thus in a country based on the liberal democratic ideology and plural religio-cultural identity for centuries strongly affirm the belief that nonviolence is the only humane way to bring revolution. Education should extend an opportunity to indigenous people to absorb and learn cutting age technology through mutual sharing of indigenous knowledge on equal footing to spread happiness, transcending geography, culture and relationships. National Curriculum Framework (2005) obtained necessary guidelines from the constitutional vision of India as secular, egalitarian and pluralistic society, founded on the values of social justice and equality. One of the guiding principles of curriculum development is nurturing an overriding identity informed by caring concerns within the democratic polity of the country. In fact it begins with the following remark:

“India is a free nation with a rich variegated history, an extraordinarily complex cultural diversity and a commitment to democratic values and well being for all” (NCF, 2005).

Further though it is a tough and hard journey, the policies got to be framed to eliminate the poverty which also wastes human potential. Suggestion by Virginia Floresca-Cawagas (1988) are relevant here. Some of its salient features are given below:

1. For infusing a liberating consciousness so that we can be freed from narrow parochial mindset, belief systems and structures that hinder authentic development.
2. Education must not alienate learners from their roots and there is a genuine development.
3. Education should make us more deeply attuned to the diverse life processes at work in our planet.
4. Education is a humane conversation with life.

And subsequently to devise inclusive programmes that affect entire society so that we may swim together.



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**DEVELOPMENT OF
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AS ASSESSMENT TOOL FOR ENVIRONMENTAL EDUCATION**

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by

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Abstract

Environmental crisis and ecological problems become a global call to involve all residents of the Earth. Global warming, climate change, rise of sea level, glacier decrease, food crisis, health hazards, deforestation and others are among the problems, affected by human attitude. For that, environmental attitude development becomes more serious as UNESCO declared that 2005-2014 as 'the decade of education for sustainable development'. Environmental attitude must be measured best with affective outcomes; factual knowledge and behavior intention component to meet behavioral component. There is lack of study about the affective impacts of the environmental-related courses especially using a comprehensive instrument of environmental attitude. This research is aimed to design an efficient and effective environmental attitude assessment to be used in order to assess the attitude effects among the students of environmental course. The proposed instrument is a set of 60 items with 10 dimensions, representing **global accepted** attitude in 6 dimensions and 4 special dimensions, to **suit local and tropical needs**. The global dimensions are about attitude in energy conservation, mobility and transportation, waste avoidance, recycling, consumerism and vicarious behavior towards conservation, while the following dimensions are about religious attitudes which are compiled into 4 dimensions which are specific ethical living with flora and fauna, water and air, human being and metaphysical entities, according to religious book. All items have been matched with the 15 items of established NEP as a worldwide guide, which was endorsed by UNESCO. This instrument was purposely designed for outcome-based education (OBE) in assessing values outcomes or within affective domain. The structure of the instrument was constructed with positive and negative attributes to identify the truthfulness of respondent's behavior or attitude changes, **with reference to several most worldwide accepted tools of environmental attitude assessment**. Then, it was converted to **an electronic test, digitalized and online**. e-HEAT® is a validated innovation by prominent scholars, and reached the high reliability's score, using Rasch model analysis (r item =0.94).

Keywords: educational assessment, environmental attitude

1. Introduction

Education for affective dominant courses must stress on hearts-on rather than merely minds-on or hands-on which are more relevant to knowledge-dominant and skill-dominant courses. In educational instruction, teaching and learning must go through identifying objectives, transferring and assessing the outcomes of the course. In this case, **assessment of such affective-dominant courses must be using proper instrument to identify attitude or behavior effects after completing the course.** It should not be paper exam-oriented as our current practice in Malaysia. The instrumentation process went through two main stages which are instrument's construct development and electronic-based tool development. The development of HEAT was done through several procedures; initial review on previous researches and instrument, matching with the current global and local environmental issues, dimensions and items construct, face validity and construct validity using Rasch model analysis. While the system development in order to make the instrument electronic and online was done using flash software with supports of php and SQL databases software.

2. Instrument Development

The environmental attitude test stresses on original six dimensions by Kaiser (2007) while other four dimensions are constructed according to universally religious teachings. The six original dimensions are: energy conservation, mobility and transportation, waste avoidance, recycling, consumerism and vicarious behavior towards conservation. These three dimensions were remained and topped up with other four religious dimensions, according to universal values from Islamic teachings. The universal Islamic dimensions are: ethical living towards flora and fauna, ethical living towards air and water, ethical living towards human and ethical living towards metaphysical entities.

2.1 Items Construct

Originally, the instrument was constructed with six dimensions and forty items in order (Kaiser, 2007) but it was redesigned to mix the items all around to be cross checked each other. After all, sixty items out of ten dimensions were blended together as shown below:

Dimensions	Number of Items
Attitude Towards Energy Conservation (EC)	1, 11, 21, 31, 41, 50
Attitude Towards Mobility and Transportation (MT)	2, 12, 22, 32,
Attitude Towards Waste Avoidance (WA)	3, 13, 23, 33, 42, 51, 52, 53
Attitude Towards Recycling (R)	4, 14, 24, 34, 43, 54
Attitude Towards Consumerism (C)	5, 15, 25, 35, 44, 55, 56, 57
Attitude Towards Environmental Conservation (VB)	6, 16, 26, 36, 45, 58, 59, 60
Attitude Towards Flora and Fauna (EFF)	7, 17, 27, 37, 46
Attitude Towards Water and Air (EWA)	8, 18, 28, 38, 47
Attitude Towards Human Being (EHB)	9, 19, 29, 39, 48
Attitude Towards Metaphysical Entities (EME)	10, 20, 30, 40, 49

Table 1: Items Distribution vs Dimensions

The final draft of the instrument was completed and was distributed to two groups; the first group is environmental ethics students and another group is university's staff. The two pilot tests were planned for the purpose of comparing the strength of item's and respondent's reliability.

2.2 Face Validity

Face validity essentially looks at whether the scale appears to be a good measure of the construct "on its face". The early draft of questionnaire was submitted to two national prominent scholars in environmental studies and Islamic education; namely YBhg Prof Datuk Dr Zaini Ujang from Universiti Teknologi Malaysia and Prof Dr Sidek Baba from International Islamic University Malaysia for validating the instrument. Validity wise, both endorsed the questionnaire as the valid and reliable instrument for the research use. Use reliability wise, it was agreed that the use of such instrument would lead the way to understand nature and the process of nurturing student's attitude towards being pro-environmental.

2.3 Construct Validity

Construct validity is referring the analysis or outcome of the theories and ideas on the study being carried out. The actual instrument construct that is developed should reflect the theories initiated (Azrilah, 2008). A consultant for Rasch measurement training was referred to pre-validate the construct of the instrument. After a minor technical adjustment, the instrument was finalized and distributed to a group of students for pilot test. The test was done on the 1st April 2009 and the result showed that the instrument was good, reliable and valid ($r=0.82$), but respondent's reliability was low ($r=0.57$). The test was replicated onto other group, which was not the targeted group of the research. The respondents were among administrative staffs, who were not related with environmental ethic course, at all. The result confirmed that the instrument was reliable ($r=0.78$) while respondent's reliability was fairly reliable ($r=0.79$). During the real test, the item's reliability value showed that the instrument is very highly reliable ($r=0.94$ and 0.92) (Fisher, 2007; Bond, 2007; Azrilah, 2009).

Reliability Tests	Pilot 1	Pilot 2	Test 1	Test 2
Real Item Reliability (Real RMSE)	0.82	0.78	0.94	0.92
Real Person Reliability (Real RMSE)	0.57	0.79	0.66	0.72

Table 2: Item and Person's Reliability

Even though the instrument was tested and fairly reliable, a few changes were done after a thorough revision with accordance to detail analysis, using Rasch model. After the second analysis and consideration, all those questions were remained as the responses were expected to be very unique; either the highest score or the least score. But, as response to these cases, the score scale was restructured to be 1 (absolutely don't), 2 (rarely do), 3 (usually do) and 4 (absolutely do). The tiny gap between the original score for 2, 3 and 4 would mislead the respondent's response and hardly to be defined. As the result, the environmental attitude definition for overall mean score was regrouped into 1 (anti-environmental), 2 (not committed pro-environmental), 3 (pro-environmental) and 4 (very committed pro-environmental).

The validated instrument further enhanced to be a system, electronic and online which is later known as e-HEAT. This e-HEAT is a tool, developed using flash and databases-related software, and fully source code controlled. It is unique tool which is capable to measure the reliability of question items and reliability of student's responses of their confession on behavior, using Rasch model (refer to the Figure 1 below).

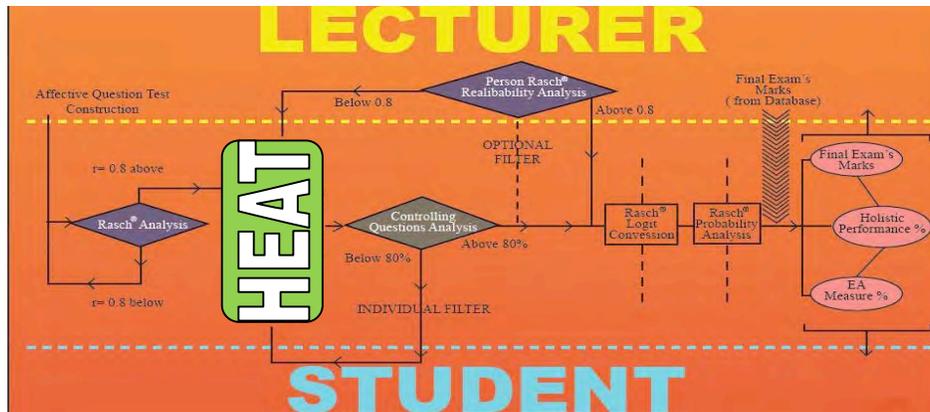


Figure 1: e-HEAT Design

The e-HEAT functions as an analysis system for validating the questions construct, to test instrument. A valid set of question will be distributed to the students to identify the affective effect which is environmental behavior-base attitude. Responses from every student will be analyzed to confirm the consistency, truthfulness and reliability of the answer, using 10 controlled items within the question set. Then, reliable answers will be analyzed using Rasch reliability analysis to reconfirm the responses' reliability. Only reliable answers will be accepted to further analyzed and converted to be educational test score or grades.

According to Rasch model, raw score will be converted to ratio-based measure which is in *logit* unit. Later, the system will convert the measure score to be in percentile marks or score and would be easily used and fixed to the normal examination grading system. It could be used together with paper-based examination score to be holistic assessment or it could be independently graded by itself.

3. Results and Discussions

The research was done by meeting with all respondents or students who enrolled the Environmental Ethics course and they were tested at the beginning of the semester to identify their level of environmental attitude and retested at the last week of the semester to identify the changes of their environmental attitude. A set of questionnaire were distributed. A comprehensive briefing on how the test would be done, was held before the test. Since this kind of test needs truthful responses, ten (10) controlled items were constructed within the questionnaire set as identifier of the consistency of their answer and confession. During the briefing session, the students were also reminded to be truthful and sincere in giving the answer as God knows everything, suited with the hadhari concept.

Using the Rasch measurement model, the question would be observed and designed to the best reliable and valid to fit the purpose. As example, it led to few changes that were done to ensure the reliability of the instrument would be accepted. Among changes which were done were:

1. Rating scale was regrouped into four, instead of five previously. The scale was redefined into; 1=extremely don't, 2=rarely do, 3=always do and 4=extremely do. The previous scale of 3=usually do was omitted due to confusion and very tiny gap between scale 2, 3 and 4.

2. Layout of the questionnaire was redesigned to guide the respondents answer the questionnaire. The scale's banner was put on top of every page of the questionnaire, guiding the respondents to refer consistently, the right scale.
3. The briefing was given in detail and the responses were taken within the invigilation and guides from the researcher, to ensure the respondents got the right understanding.
4. However, the items in the instrument were remained as they were endorsed by the scholar and they went through a few processes of validation.

Since the analysis process of such test is quite complicated, compared to normal paper-based test, it is preferable to be electronic and online within a system. For that purpose, e-HEAT was developed to assist the assessment process to be done, faster and more accurate.

Previously, affective learning outcome was very hard to be assessed. The assessment of the EA as learning outcome could be simplified, using Rasch measurement model with application of Winsteps software. A few simple steps could be recommended to be considered, as follow:

STEPS	ACTIVITIES	TOOLS
1 st Step	Test Administration	eHEAT
2 nd Step	Reliability Analysis (using 10 controlled items)	HEATrel Template
3 rd Step	Reliability Analysis (using Report Summary)	Excel & Winsteps
4 th Step	Interview or investigation for disorder and low consistency students (if any) Ratio-based Analysis (using Item & Person Measure)	
5 th Step	Probability Analysis for Percentile Educational Grade	Excel & Winsteps
6 th Step		M2M Template

Table 3: Proposed Procedures and Tools for EA Assessment

These simple steps with ready-validated templates may be used as tools for accurate assessment of EA, to be calculated in percentile (%) as normal used scheme in educational test and examination. These simple steps may allow all parties and individuals to easily understand and utilize in any environmental courses or programs which aim for EA instillation towards students or community. Affective effects which are assessed using this method, will give the real picture of effectiveness of the course or program.

This study uses common statistical measurement where it accepted the range of reliability score between 0.5 to 1.0 as reliable and acceptable. It same goes to Cronbach Alpha value which accepts the value between 0.5-1.0. However, in the real practice as formal assessment towards students, it is recommended to accept only excellent reliability of student's answer to be more valid and highly accepted which is between 0.8 and 1.0 only. This is more equivalent to common measurement scheme in education which is between 80% - 100% to be considered A. Otherwise, the students will be required to retake the test, or it would be recommended to investigate the real factors behind of the inconsistency of the responses.

On the other hand, this e-HEAT with Rasch measurement model can recognize true normal good students or students with problems, or abnormal (unique) students, individually. This is very important to be observed and wisely taken into consideration, as the assessment is done onto human behavior.

As for example, a study was conducted among two groups of environmental students in a Malaysian public university found that the difference between student's achievement in paper-based examination and real attitude achievement is significant. There are many students who achieved A grade in their examination, but obviously not affected in their behavior. The following Table 4 showed the comparison between examination's score or grade and EA score or grade which is supposed to be more accurate to be measured:

No	Institution	Student ID	Exam Grade	Student ID	EA Score
1	UiTM FSG	2007275204	88	2007275204	61
2	UiTM FSG	2007275196	85	2007275196	54
3	UiTM FSG	2007289864	91	2007289864	48
4	UiTM FSG	2007296516	79	2007296516	53
5	UiTM FSG	2006201074	Absent Exam	2006201074	NA
6	UiTM FSG	2007127385	84	2007127385	55
7	UiTM FSG	2006816827	Absent Exam	2006816827	NA
8	UiTM FSG	2006816635	Absent Exam	2006816635	NA
9	UiTM FSG	2007297278	75	2007297278	64
10	UiTM FSG	2007275198	90	2007275198	54
11	UiTM FSG	2006816708	Not Included	2006816708	NA
12	UiTM FSG	2008399961	Not Included	2008399961	NA
13	UiTM FSPU	2006136163	50	2006136163	54
14	UiTM FSPU	2008283904	70	2008283904	51
15	UiTM FSPU	2006121705	67	2006121705	50
16	UiTM FSPU	2008283906	62	2008283906	45
17	UiTM FSPU	2008283922	69	2008283922	62
18	UiTM FSPU	2006140675	76	2006140675	45
19	UiTM FSPU	2008407574	55	2008407574	38
20	UiTM FSPU	2006129779	65	2006129779	56
21	UiTM FSPU	2008283892	71	2008283892	53
22	UiTM FSPU	2006800680	53	2006800680	39
23	UiTM FSPU	2006129789	59	2006129789	40
24	UiTM FSPU	2006129791	66	2006129791	51
25	UiTM FSPU	2008283928	71	2008283928	48
26	UiTM FSPU	2006136149	14	2006136149	54
27	UiTM FSPU	2006186145	15	2006186145	51
28	UiTM FSPU	2006132217	67	2006132217	52
29	UiTM FSPU	2008283924	63	2008283924	47
30	UiTM FSPU	2008283914	74	2008283914	41
31	UiTM FSPU	2008283912	55	2008283912	48
32	UiTM FSPU	2008283902	53	2008283902	50
33	UiTM FSPU	2007126907	50	2007126907	53
34	UiTM FSPU	2008283884	72	2008283884	53
35	UiTM FSPU	2006129783	54	2006129783	40
36	UiTM FSPU	2008410362	63	2008410362	42
37	UiTM FSPU	2006129767	61	2006129767	57
38	UiTM FSPU	2008283926	71	2008283926	47
39	UiTM FSPU	2008407572	68	2008407572	48
40	UiTM FSPU	2006129775	67	2006129775	62
41	UiTM FSPU	2006132199	70	2006132199	50
42	UiTM FSPU	2008283916	59	2008283916	56
43	UiTM FSPU	2006156701	77	2006156701	40
44	UiTM FSPU	2008283898	70	2008283898	53
45	UiTM FSPU	2008283918	50	2008283918	37
46	UiTM FSPU	2006129759	77	2006129759	47
47	UiTM FSPU	2008283880	70	2008283880	42
48	UiTM FSPU	2006132205	62	2006132205	46
49	UiTM FSPU	2008407568	Not Included	2008407568	NA
50	UiTM FSPU	2008407576	Not Included	2008407576	NA
			65.30		43.88

Table 4: Sample Result Using e-HEAT Instrument

In comparison, the study further analyzed the result of EE student's final examination which was conventionally administered among them. Their final result was collected from the faculty's authority to compare with their EA performance. At this stage, only the valid 43 students were considered and analyzed. As their result was analyzed, the study found that the highest exam's score

among the students was 91% while the lowest exam's score was 14%. The average score among the EE students was 65.30%. This led us to a very common issue, which is unbalanced performance between cognitive and affective performances. There are many students who achieved A grade in their examination, but obviously not affected in their behavior. This result is not satisfying finding as the students involved are among the core-people who are in environmental field of study, they completed the environmental related courses since primary to tertiary and in addition, they learnt environmental ethics course as value dominant course with value, attitude or behavior as the major learning outcomes.

4. Conclusion

The findings of the research reveal that the affective educational practices especially assessment must be revisited and revised. For example in the current practice of teaching and learning environmental courses did not produce graduates with committed pro-environmental attitude, even they got very excellent grades in their examination. This research leads to a clear recommendation of paradigm shift in designing contents, learning outcomes and instructional activities to achieve the objective of affective education. The instrument of evaluation learning outcomes among the students should be enhanced and it is recommended to assess their attitude performances using right instrument and right methods. The current method stresses much on examination rather than attitude changes as learning outcomes. The grading system via merely cognitive-based examination is not accurate to evaluate the learning outcomes of environmental course, which is value dominant or affective-major course like others; morale, ethics and etc. The goals of this kind of courses must be attitude changes, value appreciation or behavior effects. This e-HEAT should be the future model and solution for value education or holistic education, from primary to tertiary level.

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“Be not equitable to every other, and trample upon me alone”: Education in *Frankenstein*

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“Be not equitable to every other, and trample upon me alone”: Education in *Frankenstein*

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Part One Education in *Frankenstein*

From the opening pages of M. W. Shelley’s *Frankenstein*, a concern for education is apparent. First, the narrator, Robert Walton, notes in a letter to his sister, “My education was neglected, yet I was passionately fond of reading”.¹ In order to achieve his dream of becoming an explorer and a discoverer of important data which could benefit the human race, Walton “commenced by inuring [his] body to hardship” (p. 8). Thus, for Shelley, education encompasses both the body and the mind. Moreover, Walton feels that “nothing contributes so much to tranquillize the mind as a steady purpose, -- a point on which the soul may fix its intellectual eye” (p. 8). This concept of having a goal or a dream and working to achieve it continues throughout the novel, as do concerns with education, including the education of Victor Frankenstein, his friend, Henry Clerval, his childhood companion and future wife, Elizabeth Lavenza, and most importantly, the creature itself. Issues involving internationalization or globalization can be seen through the eyes of the creature who, because of his differences, was rejected out of hand by the entire human race. This brings up problems of inclusion/exclusion, values, authority, and basic human kindness and respect for all living things. This paper, therefore, will consider ways in which Shelley’s perspective can be used to highlight current issues in educational theory which impact internationalization or globalization.

Walton himself became a poet, “and for one year lived in a Paradise of [his] own creation” (p. 8); however, he failed at that for reasons which are not made clear. Fortunately, at the exact moment of his failure he inherited some money from his cousin, and was thus able to pursue the enterprise he had long hoped for, which was to explore the North Pole. By doing so, he desired to discover the secrets of magnetism, to learn of celestial movements, and to “sate [his] ardent curiosity” (p. 7). He had committed himself to this task six years previously, during which time he worked as a sailor, and “voluntarily endured cold, famine, thirst, and want of sleep; I often worked harder than the common sailors during the day, and devoted my nights to the study of mathematics, the theory of medicine, and those branches of physical science from which a naval adventurer might derive the greatest practical advantage” (p. 8). In fact, although Walton is an explorer rather than an athlete or a P.E. teacher, the areas of study which he chose are quite in line with modern concepts of physical education, for “In both medicine and physical education, professional preparation is undergirded by disciplinary knowledge arrogated from various disciplines. For physical education the range encompasses the biophysical sciences, psychosocial sciences, humanities and pedagogy.”² Clearly, being in top mental and physical condition, in addition to possessing adequate scientific knowledge to support the voyage, are necessities for Walton and his crew en route to the North Pole.

Walton laments not having a friend in whom he can confide and who will guide him to improve himself by pointing out his faults, but he quickly notes that “it is a still greater evil to me that I am self-educated” (p. 10). One of the main reasons for this is that as a child he was unaware of

the benefits of learning languages, and therefore did not study any at that precious time when one can learn languages quickly. He feels that at twenty-eight years of age he is “more illiterate than many school-boys of fifteen” (p. 10), and again reiterates that a friend would be able to help him overcome some of these serious handicaps. Concerning learning languages, Percy Bysshe Shelley placed a high value on it as well, for he did not believe that the great authors could be fully appreciated in translation. He encouraged a female friend (perhaps his future wife, Mary) in the following regard in 1816:

What is a translation of Homer into English? A person who is ignorant of Greek need only look at *Paradise Lost* or the tragedy of *Lear* translated into French to obtain an analogical conception of its worthless and miserable inadequacy. Tacitus or Livius or Herodotus are equally undelightful and uninformative in translation. You require to know and to be intimate with those persons who have acted a distinguished part to benefit, to enlighten, or even to pervert and injure human kind.³

Therefore, it can be seen that in the first fourteen pages of the novel, poetry, mathematics and physical sciences, the learning of languages, and the guidance of a friend have all been identified as important facets of education by Mary Shelley in *Frankenstein*.

When Walton meets the guest (Victor Frankenstein, the creator of the creature), it appears that he possesses all of the attributes of a well-educated being:

He is so gentle, yet so wise; his mind is so cultivated; and when he speaks, although his words are culled with the chicest art, yet they flow with rapidity and unparalleled eloquence. . . . Yet, although unhappy, he is not so utterly occupied by his own misery, but that he interests himself deeply in the employments of others. . . . There is no pedantry in his manner; but all he does appears to spring solely from the interest he instinctively takes in the welfare of those who surround him (p. 15-16).

They discuss friendship, and Victor agrees with Walton that having one true friend can heal wounds and help one surmount grave difficulties. Moreover, it is revealed that Victor Frankenstein is a lover of nature:

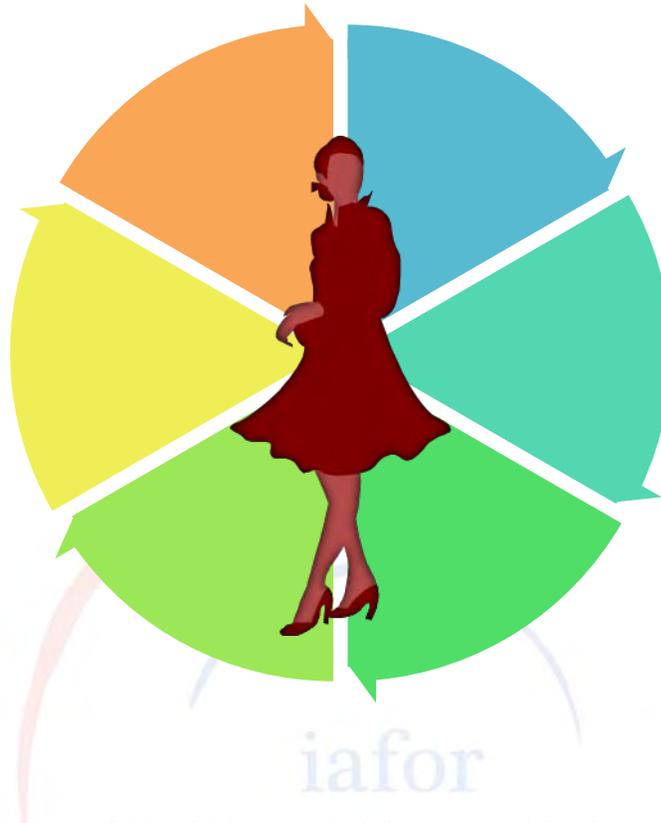
Even broken in spirit as he is, no one can feel more deeply than he does the beauties of nature. The starry sky, the sea and every sight afforded by these wonderful regions, seems still to have the power of elevating his soul from earth. Such a man has a double existence: he may suffer misery, and be overwhelmed by disappointments; yet when he has retired into himself, he will be like a celestial spirit, that has a halo around him, within whose circle no grief or folly ventures (p. 16).

Walton considers the guest to be a “divine wanderer” (p. 16), and it seems that, based on the example of Victor Frankenstein, love, respect and a sense of awe of nature enable the spirit to endure hardship and provide adequate strength and fortitude to overcome the vicissitudes of human existence. Thus, education in *Frankenstein* encompasses far more than book learning (see Figure 1).

Figure 1 Aspects of Education

<i>Category</i>	<i>Manifestation</i>
Affective	Love of nature, respect and awe for creation; sensitivity to others, lack of self-aggrandizement, eloquence in speech
Subjects	Poetry, Mathematics, Natural Sciences, Languages, Writing
Physical Education	Inure oneself to hardship via severe training; maintenance of health via daily exercise
The Will	Firm and resolute commitment to a dream or quest; strength of the will is to be fostered
Teacher	The role of a teacher is critical because one needs the guidance of one who possesses valuable knowledge
Friendship	The role of a friend is necessary for comfort, encouragement, the sharing of experiences, and to provide advice and guidance when one begins to err

It must also be noted that self-education, or what today would be called home-schooling, is to be discouraged unless the person doing the home-schooling possesses the expert knowledge which Shelley considers essential. In order for a person to become a well-rounded individual, diverse fields of knowledge must be studied, ranging from languages to physical sciences, and therefore interaction with teachers steeped in these skills is desirable and to be sought after (see Figure 2). In addition, going to school can help one find a friend who will support one forever, so the social aspects of schooling are on a par with the transmission of knowledge.

Figure 2 A well-rounded individual

An example of the power of friendship occurs right away, with Victor Frankenstein deciding to unburden his tale of woe to Walton, who, through his kindness and quest for knowledge, has “altered [Victor’s] determination” (p. 17) to take these secrets with him to the grave. Victor even calls Walton “my friend” (p. 17), though previously he had assured Walton that “[he] had lost every thing, and cannot begin life anew” (p. 16) and therefore, they could not begin a fresh friendship. Yet this is not simply to be the telling of stories; the stories are told with the intention that listening “may enlarge [Walton’s] faculties and understanding” (p. 17). Similar to the Socratic method or even a Christian parable, learning takes place between trusted friends through listening and processing information.

Part Two Victor Frankenstein’s Family Environment and the System of Education Employed

Victor’s father, having had children late in life, “relinquished many of his public employments, and devoted himself to the education of his children. Of these [Victor] was the eldest, and the destined successor to all his labours and utility” (p. 19). Henry Clerval, Victor’s childhood friend and companion, shared in this education, as did Elizabeth Lavenza, Victor’s cousin and future wife who came to live with them when Victor was four years old. As Victor recalls, Henry was an imaginative child who wrote a fairy tale at nine years of age “which was the delight and amazement of all his companions. His favourite study consisted in books of chivalry and romance; and when very young, I can remember, that we used to act plays composed by him out of these favourite books, the principal characters of which were Orlando, Robin Hood, Amadis, and St. George” (p. 20). Thus, theater and drama are important to the family.

Mary Shelley intuitively knew what John Holt would describe approximately 150 years later in his groundbreaking book, *How Children Learn*, when he encouraged “parents and teachers to take children more seriously, to observe them more closely, to think more carefully about the meaning of what they do, and to like, trust, respect and enjoy them more.” Moreover, as Holt points out, children are “smart, eager to learn, eager to play a useful part in our world.”⁴ Shelley would agree, as can be seen from an early section of the novel which contains many of the educational tenets she holds dear:

- * happiness
- * indulgent parents
- * studies not forced
- * studies internally motivated to achieve a desired end, rather than for emulation
- * lack of punishment
- * a sense of equality between parents and children
- * commands were not uttered by anyone
- * mutual affection led to obedience and sensitivity to others (p. 20, 24)

As a result, the emphasis was not on quantity but quality. As Victor notes, “we loved application, and our amusements would have been the labours of other children. Perhaps we did not read so many books, or learn languages so quickly, as those who are disciplined according to the ordinary methods; but what we learned was impressed the more deeply on our memories” (p. 20). The children also went to school, and so their time, both in school and at home, was surrounded with educational opportunities and endeavors. This coincides beautifully with Holt’s admonition to “Trust Children” – a task which is not an easy one:

What we have to do is break this long downward cycle of fear and distrust, and trust children as we ourselves were not trusted. To do this will take a long leap of faith – but great rewards await any of us who will take that leap.⁵

Victor also became the teacher of his younger brothers, mentoring them and cementing a close bond between them. One brother, Ernest, had suffered from a childhood illness, and was incapable of concentration for any length of time, and the other brother, William, was still an infant. Shelley’s awareness of the differing abilities of siblings, and her attempt to have their educational needs met with compassion, is remarkably prescient and forward thinking.

In addition, however, for Shelley the role of the teacher or parent takes on a great significance and exerts a powerful sway over the formulation of a child’s being. This is in line with the thinking of the famous educator, Ralph W. Tyler:

Learning takes place through the active behavior of the student; it is what *he* does that he learns, not what the teacher does. . . . The teacher can provide an educational experience through setting up an environment and structuring the situation so as to stimulate the desired type of reaction. . . This theory of learning does not lessen the teacher’s

responsibility because it recognizes that it is the reactions of the learner himself that determine what is learned.⁶

While Victor's father did many things right, including conducting electrical experiments on a machine he made for his son (p. 23), he also made some mistakes, or perhaps only one mistake. Victor notes that his curiosity concerning Cornelius Agrippa was offhandedly criticized by his father, which only fostered his desire to learn more, because "the cursory glance my father had taken of my volume by no means assured me that he was acquainted with its contents; and I continued to read with the greatest avidity" (p. 21-22). In some sense, therefore, Victor's pursuit of the natural sciences leading to the birth of the creature can be traced back to a lack of care and attention in his father's response to this matter, for Victor remarks that had his father responded differently, "It is even possible, that the train of my ideas would never have received the fatal impulse that led to my ruin" (p. 21). Thus, for Shelley, the role of the parent, teacher, mentor, guide and even friend cannot be overemphasized, particularly in the formative stages of a child's life.

College was also deemed important, and Victor and Henry both went to Ingolstadt. Sadly, Elizabeth was not permitted to pursue her education and remained at home. This is Shelley's way of subtly commenting upon the inferior status of women, and must not be interpreted as an acceptance of the status quo.⁷ Moreover, Henry's father was a merchant and was not in favor of higher education beyond bookkeeping, so it was with great difficulty that Henry persuaded his father that this was a wise course of action. Henry notes that his father could not understand his desire to learn Greek, but that "his affection for me at length overcame his dislike of learning, and he has permitted me to undertake a voyage of discovery to the land of knowledge" (p. 36). Again, it shows that for Shelley, affection is at the root of human relations, and overcomes all difficulties and disagreements, including those between father and son. This can further be seen in the friendship between Victor and Henry, for Victor had given birth to the creature only hours before Henry arrived in Ingolstadt, and as a result he had a breakdown before Henry's very eyes. Henry abandoned all activities, especially his studies, to devote himself to nursing Victor back to health. Victor notes with a poignant sense of remembrance, "I was in reality very ill; and surely nothing but the unbounded and unremitting attentions of my friend could have restored me to life" (p. 37-38).

Part Three The Education of the Creature

Much of Volume II of the novel, from Chapter III onwards, is devoted to detailing the creature's early education. He learned from nature, and also by watching a family of foreigners exiled from France, including an Arabian female, Safie. As Victor's childhood involved theater and drama, this family enjoyed music and reading. Safie was taught to speak, read and write French; the creature observed this and learned these skills quickly as well. They studied from Volney's *Ruins of Empires*, which enabled the creature to learn a bit about the history of the world and "it gave me insight into the manners, governments, and religions of the different nations of the earth" (p. 80). He also learned about the family structure, and painfully became aware that he did not have any parents or loved ones who doted on him. This offers the first glimpse that knowledge can bring pain, or at least offer data to explain certain customs and traditions, which, when thrown in relief next to one's own situation, may bring a painful new awareness that things are not fair. Shortly thereafter, the creature found a bag of books one day, lost by a traveler, which contained

within it *Paradise Lost*, a volume of *Plutarch's Lives*, and Goethe's *The Sorrows of Werther*. These books also deeply impacted him, and he began to ask the same questions that many young people do: "Who was I? What was I? Whence did I come? What was my destination? These questions continually recurred, but I was unable to solve them" (p. 86).

In addition, he discovers Victor's journal written while Victor was painstakingly fashioning his being morning, noon and night, and learns all the technicalities of his creation. This heightens his awareness of being different, of being considered ugly, deformed and unwanted. As Anne McWhir points out, he has learned through his reading that he does not belong anywhere.⁸ In order to find a sense of sociability, he at last decides to introduce himself to the exiled family, the De Lacy's, starting with the elder man who is blind. Unfortunately, this backfires terribly; those who can see reject him with the utmost cruelty, beating him out of fear and loathing. Though upset and physically powerful, he retreats without retaliation, and holds out hope that they will embrace him now that they have seen him once. He has, after all, for many months performed good deeds for them in secret, such as gathering firewood in the winter at night. This, however, turns out for the worst as well, for the family flees, "breaking the only link that held me to the world. For the first time the feelings of revenge and hatred filled my bosom, and I did not strive to control them, but, allowing myself to be borne away by the stream, I bent my mind towards injury and death" (p. 93). His solution is to track down his creator, Victor, and to request a female companion like himself, so that he may remove himself to an isolated part of the world and live in some semblance of peace and contentment. Victor at first agrees, but then abandons the plan, tormented by the murders the creature has already committed. This sets another cycle of violence in motion, violence breeding violence, with no end in sight. Yet as Percy Shelley notes, his crimes are not:

the offspring of any unaccountable propensity to evil, but flow irresistibly from certain causes fully adequate to their production. They are the children, as it were, of Necessity and Human Nature. . . . Treat a person ill, and he will become wicked. Requite affection with scorn; -- let one being be selected, for whatever cause, as the refuse of his kind -- divide him, a social being, from society, and you impose upon him the irresistible obligations -- malevolence and selfishness. It is thus that, too often in society, those who are best qualified to be its benefactors and its ornaments, are branded by some accident with scorn, and changed, by neglect and solitude of heart, into a scourge and a curse.⁹

Part Four The Importance of Being Earnest

At the opening of Volume II of *Frankenstein*, Victor laments his fate after the creature has murdered his brother, William, and Justine has been framed and found guilty of the crime, the punishment of which is death. It is worth reproducing these paragraphs, for where Shelley previously emphasized harmony, selflessness and affection in human relations, here she emphasizes the importance of one's state of mind. This state of mind can affect one's desire to live and to manifest harmony with others, or what Jonathan Edwards has termed, "Consent to being":

Nothing is more painful to the human mind, than, after the feelings have been worked up by a quick succession of events, the dead calmness of inaction and certainty which follows, and deprives the soul both of hope and fear. Justine died; she rested; and I was alive. The blood flowed freely in my veins, but a weight of despair and remorse pressed

on my heart, which nothing could remove. Sleep fled from my eyes; I wandered like an evil spirit, for I had committed deeds of mischief beyond description horrible, and more, much more, (I persuaded myself) was yet behind. Yet my heart overflowed with kindness, and the love of virtue. I had begun life with benevolent intentions, and thirsted for the moment when I should put them in practice, and make myself useful to my fellow-beings. Now all was blasted: instead of that serenity of conscience, which allowed me to look back upon the past with self-satisfaction, and from thence to gather promise of new hopes, I was seized by remorse and the sense of guilt, which hurried me away to a hell of intense tortures, such as no language can describe.

This state of mind preyed upon my health, which had entirely recovered from the first shock it had sustained. I shunned the face of man; all sound of joy or complacency was torture to me; solitude was my only consolation – deep, dark, death-like solitude (p. 59).

Thenceforth in the novel, though Victor experiences rare times of respite, in general his health is in decline both mentally and physically, he is tortured by his past actions and their consequences, and he is continually seeking escape from societal interaction. Many people cannot understand why, for no one knows that the creature exists, and when he finally breaks down and discusses it with a magistrate after the deaths of both Elizabeth and his father, he is thought to be mentally ill. In fact, prior to approaching the magistrate he suffered another breakdown and was locked up in a mental ward though he could not remember it: “For they had called me mad; and during many months, as I understood, a solitary cell had been my habitation” (p. 138).

At the end of the day, Victor’s state of mind and inability to cope with the creation of the monster led to a total loss of freedom and happiness. He felt forced to pursue revenge, which alone gave him a sense of purpose and perhaps even dignity:

My present situation was one in which all voluntary thought was swallowed up and lost. I was hurried away by fury; revenge alone endowed me with strength and composure; it modeled my feelings, and allowed me to be calculating and calm, at periods when otherwise delirium or death would have been my portion (p. 140).

By this time not only does Victor not “Consent to being”, he actively pursues disharmony and revenge, and wanders the world to do so, wanderings “which are to cease but with life” (p. 140). It is a total commitment to vengefulness, whereas he began with a commitment and a desire to help others, as had Walton. Shelley demonstrates that once things begin to go wrong, they can go terribly wrong, and it is difficult under current family, social, legal, and educational systems to recover and reintegrate once one has fallen through the cracks. In Homi K. Bhabha’s discussion of the location of culture, he mentions Nadine Gordimer’s novel, *My Son’s Story*, in which she describes what it meant to be ‘coloured’ in South Africa. First, they could not be named or defined, so they didn’t fit in anywhere; second, they represented a “hybridity, a difference ‘within’, a subject that inhabits the rim of an ‘in-between’ reality”.¹⁰ This is very similar to the state of not only the creature, who is abjectly rejected by the world, but also of Victor himself, who was from a good family and had every advantage, but becomes an outcast due to his actions and is considered mad. As human beings (including Victor himself) have shunned the creature, Victor in turn shuns the world.

Thus they are both locked in a dance of separation, vengeance and disharmony, the consequences of which are not limited to the creature alone, for Victor suffers them in equal, if not more severe, measure. Arjun Appadurai has commented that “the isomorphism of people, territory, and legitimate sovereignty that constitutes the normative charter of the modern nation-state is itself under threat from the forms of circulation of people characteristic of the contemporary world. It is now widely conceded that human motion is definitive of social life more often than it is exceptional in our contemporary world.”¹¹ In addition, as people move about, often for economic reasons, instabilities arise, causing tensions which can make people withdraw from social interaction, either physically or emotionally, in order to find a measure of security and peace. Those who fight against injustice are equally isolated, enduring the “disjunctive, displaced everyday life of the liberation struggle,” recalling Gordimer’s novel: “like so many others of this kind, whose families are fragmented in the diaspora of exile, code names, underground activity, people for whom a real home and attachments are something for others who will come after.”¹² This is similar to what Victor and his creature endured, though not completely. Victor and his creature endured a life of wandering fueled by hatred once it was determined that happiness and satisfaction could not be found. They did not have hope of a better life for their loved ones or those who would come after, but were locked in a terribly cycle of revenge from which there was no escape and no improvement. In this sense, *Frankenstein* is quite perceptive concerning the unending nature of violence and terrorism, both on a private and public level, which at some point loses all meaning and takes on a life of its own.

Appadurai finds that cities have a brutal quality in the modern era: “In the conditions of ethnic unrest and urban warfare that characterize cities such as Belfast and Los Angeles, Ahmedabad and Sarajevo, Mogadishu and Johannesburg, urban zones are becoming armed camps, driven wholly by *implosive* forces (chap. 7) that fold into neighborhoods the most violent and problematic repercussions of wider regional, national and global processes.”¹³ This brutality is fostered by a lack of understanding between diverse ethnic populations who come from different religious and linguistic backgrounds and are crowded together in these cities, not to mention the availability of guns and other weapons of destruction. Yet the weapons themselves are symbolic on a deeper level of a lack of respect for others, a lack of trust in others, particularly in those who are different, and an unwillingness to learn about them and to treat them with tolerance. John Holt’s words quoted earlier, that children are deserving of trust and respect because they have a positive contribution to make to the world, can be extrapolated to all human beings.

Ultimately, if *Frankenstein’s* diverse messages concerning education and globalization can be distilled into one main precept, it would come from Shelley’s ideal system of education: happiness, indulgent parents, studies which are not rigid, forced or punitive, but are internally motivated by a desire to achieve a specific end, rather than for emulation, a sense of equality between parents, teachers and children, a lack of authoritative commands uttered by anyone, and mutual affection which leads to obedience and sensitivity to the needs of others. This would culminate in what the noted American theologian and philosopher, Jonathan Edwards has termed “Benevolence to being”. If Shelley’s lofty goals for education could be extrapolated to all people this would result in respect and a sense of inclusion and well-being, rather than exclusion, revenge and hatred, and would surely lessen violence and terrorism. As Edwards describes his conception of it, “True virtue most essentially consists in benevolence to Being in general. Or perhaps to speak more accurately, it is that consent, propensity and union of heart to Being in general, that is immediately exercised in a general good will.”¹⁴

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¹ Mary Wollstonecraft Shelley. *Frankenstein (The 1818 Text)*, in *Frankenstein*, ed. J. Paul Hunter (New York: W. W. Norton & Co., 1996), 8. Hereafter, all references to the novel will be supplied from this edition in the body of the paper immediately following the data or the quote.

² Saul Ross, *Physical Education Reconceptualized, Persons, Movement, Knowledge* (Springfield: Charles C Thomas, 2001), 233.

³ Percy Bysshe Shelley. *The Prose Work of Percy Bysshe Shelley, Volume I*, ed. E. B. Murray (Oxford: Clarendon Press, 1993), 164.

⁴ John Holt, *How Children Learn* (London: Penguin, 1967, 1983), 298.

⁵ Holt, *How Children Learn*, viii-ix.

⁶ Ralph W. Tyler, *Basic Principles of Curriculum and Instruction* (Chicago: The University of Chicago Press, 1949), 63-64.

⁷ Numerous details point to this throughout the novel, but it is difficult to explore them all in this particular context. In fact, Justine Moritz, who came into the family as a servant, was educated and treated with dignity (see p. 40).

⁸ Anne McWhir, "Teaching the Monster to Read," in *The Educational Legacy of Romanticism*, ed. John Willinsky (Waterloo: Wilfrid Laurier University Press, 1990), 74.

⁹ Percy Bysshe Shelley, "On Frankenstein" in *Frankenstein*, ed. J. Paul Hunter (New York: W. W. Norton & Co., 1996), 185-186.

¹⁰ Homi K. Bhabha, *The Location of Culture* (London: Routledge, 1994), 13.

¹¹ Arjun Appadurai, *Modernity at Large, Cultural Dimensions of Globalization* (Minneapolis: University of Minnesota Press, 1996), 191.

¹² Bhabha, *The Location of Culture*, 13.

¹³ Appadurai, *Modernity at Large*, 193.

¹⁴ Smith, John E Smith et al., eds., *A Jonathan Edwards Reader* (New Haven: Yale University Press, 1995), 245.



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ICT IN ELT IN KAZAKHSTAN: TEACHERS' BELIEFS AND PRACTICES

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Abstract

Information and Communication Technologies (ICT) are becoming the major driving forces of globalized and knowledge-based economies of the new world era creating a very competitive environment and posing certain challenges and opportunities to developing countries. Recognizing the challenge of the “information age”, and considering that ICT can play a key role in its efforts, the government in Kazakhstan is currently pursuing the technological track in education and has made considerable steps to keep up to the imperatives of the technological revolution. But the major questions remain about actual use of ICT in classrooms which largely depends on teachers as the main agents of change. Their attitudes and beliefs about ICT are major factors related to both the initial acceptance of computer technology as well as future behaviour regarding their usage. That is why it is very important to understand not only how but also why they use technology. A pilot survey has been conducted to investigate the current use of computer technology in English language teaching (ELT) in Kazakhstan and to develop an initial understanding of how and why teachers use technology. The survey was completed by 66 university and secondary school English language teachers who were the members of NATEK – National Association of Teachers of English of Kazakhstan. The survey included questions related to teachers' administrative and pedagogic use of computers, their beliefs about the pedagogical benefits of computers and their beliefs about computers and their integration in the classrooms. The main findings from this survey study are presented and discussed in this paper.

1. INTRODUCTION

Rapid advancement of ICT, coupled with its pervasive use in every facet of our, has made computer technology an important feature of the educational landscape not only in the developed countries, but in developing countries as well. Globally, computer technology occupies a central part in education reforms and economic progress of nations. As Pelgrum notes, “ICT is not only the backbone of the Information age, but also an important catalyst and tool for inducing educational reforms that change our students into productive knowledge workers” [14, 2].

The capability and usage of ICT in education, especially in foreign language education, expanded rapidly during the last twenty years. The global adoption of computer technology into foreign language instruction has often been premised on the potential of the new technological tools which has been widely recognized. Much literature reports on the capability of technology in enhancing language teaching and learning. The review study on recent developments in technology and language learning written by Zhao shows that the

application of technologies can be effective in almost all areas of language education [19]. Numerous studies report that modern technology can help enhance the quality of input, authenticity of communication, and provide more relevant and useful feedback. Particularly communication technologies such as the Internet and satellite television have been found to be widely used as way to bring authentic materials into the classroom, involve learners in more authentic communications with distant audiences, and provide researches the opportunity to better examine the language learning process Chappelle [3], Egbert [6], Salaberry[16], Warschauer & Healey [18], Zhong [20].

The reported revealed potential of ICT, the need to better prepare students for the information age and accelerate national development efforts present certain challenges and opportunities for the developing countries, having generated there a number of speculations about the necessity of educational reforms that will accommodate the new technology. Governments in most developing countries have responded to the challenge by initiating national programs to introduce computers into education.

Kazakhstan as one of such developing countries is aware of the need to provide our students with knowledge and skills to succeed and compete in an information-based society. Since its independence gained in 1991 its education system has undergone a number of reforms aiming at creation of such a model of education that will meet the national goals and match international standards. Recognizing the challenge of the “information age” the government reveals growing commitment to ICT integration in education by adopting a number of official documents and taking different initiatives for accommodating new technologies.

In accordance with the adopted policy documents significant progress has been achieved in the ICT integration into education, especially in the amount of computer technology going into our nation’s schools. Thus, for example, 100% of schools computerization has been completed, digital resources for school students cover 60% of school programs, 96 % of schools in Kazakhstan have access to the Internet. The ratio of secondary school students to computers in Kazakhstan is now 21 to 1 (in 2001 it was 62 to 1, in 2004- 54 to 1), which is considered by the UNESCO data as one of the highest among countries of Commonwealth of Independent Countries. At the same time as compared with such developed countries as the UK and the USA where at the beginning of 2004 it was 5 to 1 and 4 to 1 accordingly, this ratio is still high [10,11,15].

The statistics show also permanent growth of the Internet users number in Kazakhstan from 70,000 of the total population (0, 5%) up to 2,300,000 (14.9%) by September 2009. But nevertheless it is still low as compared with the developed countries. For comparison, in South Korea, Singapore, Japan this percentage was 67 %, in Great Britain - 63 %, Denmark - 70 %, USA and Canada - 68 %, Russia - 16,5 % and Estonia - 50 %. Since 2007-2008 academic year online education is being implemented into education process with the creation of such educational portals promoting e-learning and interactive teaching on a national level as “e-Learning Kazakhstan” and “Educational Portal of Kazakhstan” . Within the last 5 years more that 11,000 teachers were trained by the government contracted work for ICT professional development. [8, 12, 15]. In accordance with the Network Readiness Index

Rating 2009-2010, developed by the World Economic Forum, Kazakhstan ranks 68th out of 133 countries, leaving behind all other countries of CIE, including Russian Federation [17].

The statistics and data presented above show that Kazakhstan makes considerable steps to keep up to the imperatives of the technological revolution through the development and integration of ICT in education.

But despite numerous ICT integration policy documents and initiatives in Kazakhstan, as well as vast expenditures for computer and Internet accessibility, major questions remain about the actual use of technology by teachers. Can it be assumed that the placement of ICT in Kazakhstani classrooms equals effective integration for teaching and learning?

Previous research shows that educational change cannot simply be attained by placing computers in schools. As researchers state, technology, on its own, is not enough to improve language learning: there are many other variables involved. Zhao [19] remarks that it is a worldwide phenomenon that computers in classrooms have not been used frequently enough to realize the claimed educational benefits of these expensive machines and that complaints of technology not being used or underused have been voiced by policymakers and the general. As stated by Albirini, studies also show that the implementation of technology at schools and higher educational institutions in developing countries have been of limited success because they were not being guided by research [1].

Research shows that there are various factors that play a part in effective integration of computer technology into educational system. Among them teachers are considered the most critical factor and a significant part of the educational process of change. As Hativa notes, they are “the most crucial decision makers regarding the adoption and use of technology in the schools” [4]. That’s why they must understand how to use technology and believe that it can enhance teaching and learning.

To date, little is known about actual practices of computer technology use in Kazakhstani classrooms, in English language classrooms in particular. In today’s world it is important to get information that helps us to see what we are doing, fix problems and document achievements Ehrmann [7]. Technology changes quickly and unpredictably. Lacking data, faculty and administrators make big investments of time and money with their eyes closed. Most administrators in Kazakhstan assume that if faculty gets this hardware and software, they automatically and quickly change their teaching tactics and course materials to take advantage of it. Practically, no information is gathered regarding teachers’ actual use of new technologies, their beliefs about it and interaction with different factors influencing its integration. Within this context FL teachers in Kazakhstan are left with multiple challenges generated by different agendas. They often find it difficult to address these challenges due to different factors under which they operate. That’s why it is important not only to investigate teachers’ practices of using ICT but also find out their beliefs about it because teachers’ beliefs guide the decisions they make and actions they take in the classroom. As stressed by Pajares, any inquiry into teachers’ practices should involve a concurrent investigation into teachers’ educational beliefs, as beliefs profoundly influence teacher’s perception and judgements, which in turn influence their classroom behaviour [13].

This study intends to partially address this gap and develop an initial understanding of how and why teachers use technology by presenting the results of the survey on current use of ICT by English language teachers in Kazakhstan and their beliefs about it.

2. METHODOLOGY

2.1 SURVEY

A survey has been conducted to investigate EFL teachers' use of computers in Kazakhstan and their self-reported beliefs of computer technology. A questionnaire was chosen as the main method of data collection for our study. It was developed following the recommendations of Brown [2] and Dornyei [5]. There are three sections in the questionnaire: Section A: Type and frequency of computer use; Section B: Beliefs about the use of computer technology in the classroom; and Section C: Demographics.

2.2 POPULATION AND SAMPLE

The population of interest for this research is comprised of English language teachers who are members of a professional National Association of Teachers of English of Kazakhstan (NATEK). The survey questionnaire was distributed at the 10th NATEK conference in June 2009 among its 120 members. They represented 19 NATEK branches from 5 regions of Kazakhstan and came from diverse settings: public/private, rural/urban, secondary schools/universities. The total sample was 66 English teachers and the total response rate was 55%. Results from the Demographics section of the questionnaire showed that the sample consists of 86.4% females and 13.6% and mostly represented by experienced teachers with 39.4% having sixteen or more years of teaching experience and 27.3% with 11-15 year experience. The sample is almost equally represented by secondary school (51.5%) and university (48.5%) teachers. The majority of respondents (81.8%) teach in schools/universities located in urban areas with the remaining 18.2% teaching in rural areas.

3. DATA ANALYSIS

This paper presents a summary of the analysis for the first research question "How do English language teachers in Kazakhstan use computer technology" which was discussed and presented in detail before [9] and focuses on the analysis of the second section of a survey that addresses the research question "Why do English language teachers in Kazakhstan use computer technology?"

3.1 USE OF COMPUTER TECHNOLOGY

The first research question "How do English language teachers in Kazakhstan use computer technology" was answered through responses to the first section of the questionnaire "Type and frequency of computer use". It examined how English teachers use computer technology both pedagogically and administratively. Pedagogical use of computers is defined as the use of computers during teaching, by either a teacher or students, while administrative tasks in this study are defined as behind-the-scenes computer use or any use of computers that occurs outside of teaching the course.

Findings from this study suggest that computers have become to a certain extent tools that help teachers to do their everyday tasks. When directly asked, 59.1% of teachers in our study report using computers more for administrative rather than for pedagogical purposes. Most common administrative uses of computers by teachers are connected with their everyday activities, such making handouts for students, writing lesson plans or notes and looking for

teaching resources. The least common administrative tasks where over 50% of respondents report no use of technology are for corresponding with parents, posting students' assignments on the Internet and building electronic teaching portfolio.

It should be noted that there is certain correlation between the reported administrative use of computers by teachers and the requirements of their schools. Very few schools are reported to require correspondence with parents, posting students' assignments on the Internet and building electronic teaching portfolio. This leads to these tasks not being used by the majority of teachers. At the same time, for example, such task as submitting work-related forms required by 45.5% of schools, suggests correspondingly its use by the majority of teachers: 43.9% (occasionally), 30.3% (weekly) and 7.6 (almost daily). Such requirements support exposure to a computer. This finding suggests that the more computer technology is required for use by schools, the more teachers will tend to use it. If such requirements are in place, access to computers should be provided by schools.

The most common pedagogical uses of computer technology by teachers themselves are Presentation software and Microsoft Word programs. Less often they use such technology as digital video and CD-ROMs. Although some technologies (e-mail, digital video, CD-ROMs, the Internet, presentation software, MS word, spreadsheets and digital images) are limited in use, the majority of respondents report integrating them at least into 1 or 2 lessons during a course. Not surprisingly that practically the same computer technologies that teachers use themselves, they also most frequently assign to students. Microsoft Word, presentation software and interactive board are frequently assigned to students.

Finally, teachers report that they use technologies with the focus on specific language skills. Presentation software, Microsoft Word and digital video seem to be mostly beneficial for developing the majority of language skills. In sum, the findings suggest that the amount of pedagogic use is not very large with many of technologies not used or used minimally.

These findings demonstrate how EFL teachers in Kazakhstan use computer technology, both pedagogically and administratively. On the other side it is important to investigate why teachers use technology. Previous research shows teachers' beliefs are considered as significant deciding factor in computer use and an important issue in understanding teachers' classroom practices, decisions and change. The analysis of the second part of the survey addressing teachers' beliefs about computer technology provides the answer to this question.

3.2 BELIEFS ABOUT THE USE OF COMPUTER TECHNOLOGY IN THE CLASSROOM

The second research question "Why do English language teachers in Kazakhstan use computer technology" was answered through responses to the second section of the questionnaire "Beliefs about the use of computer technology in the classroom". It examined teachers' reported beliefs about the use of computer technology for instruction. This section was comprised of nineteen questions connected with beliefs. The first question asked respondents to indicate which of the following instructional tasks they believe are beneficial for learning with a computer: Listening, Speaking, Reading, Writing, Grammar, Vocabulary, and Culture. As seen in Table 1, this question was weighted on a scale from 1 "Not at all" to 4 "Extremely beneficial."

Table 1 Beliefs on benefits of computers for language learning

Tasks	N	Not at all %	Slightly beneficial %	Moderately beneficial %	Extremely beneficial %
Listening	66	6.1	15.2	28.7	50.0
Speaking	66	24.2	36.4	24.2	15.2
Reading	66	3.0	13.2	42.9	40.9
Writing	66	6.1	24.2	37.9	31.8
Grammar	66	4.5	16.7	48.5	30.3
Vocabulary	66	6.6	13.2	40.8	39.4
Culture	66	1.5	12.1	24.2	62.2

Teachers believe that computers are extremely beneficial for culture (62.2%) and listening (50%). In fact, culture is reported as the most beneficial aspect for learning and teaching with computers with only 1.5% of teachers thinking that computer technologies are not at all beneficial for culture. There are also very few of those teachers who feel that computers are not at all beneficial for reading (3.0 %). Computers are believed to be moderately beneficial for learning grammar (48.5%), reading (42.9) and vocabulary (40.8%) and to a lesser extent for writing (37.9%). Computers are reported not to be as beneficial for speaking, with 24.2% reporting not at all beneficial, and 36.4% reporting they are slightly beneficial for speaking.

The other eighteen statements investigate three types of respondents' beliefs about computer technology: its pedagogical potential, management of computer technology and the computer itself. These statements were grouped into three sets which all were weighed on 6 point Likert scales, ranging from *1 Strongly Disagree* to *6 Strongly Agree*. The even numbered scale lean to the positive or negative side of the statement. *Strongly Agree*, *Agree*, *Slightly Agree* correspond with positive beliefs about computer technology, while *Strongly Disagree*, *Disagree*, *Slightly Disagree* with negative ones.

The first set comprised of six questions addressing the pedagogical benefit of computer technology. It aimed at determining teachers' feelings on whether or not the computer is beneficial for learning a language in regard to potential for learning, resources offered, and sophistication.

As seen in Table 2, practically all of the responses in this set of statements express strong beliefs on the positive end of the scale corresponding the answers: *Slightly Agree*, *Agree*, *Strongly Agree*. For example, 94% of teachers believe that students need to learn computers for the 21st century with the strongest response of 59.1% of them reporting that they strongly believe in this statement. There is also large percentage for statements that computers can help students learn a foreign language (87.9%), that there are appropriate cultural materials on the Web for meaningful learning (85.5%) and that the Internet is a better foreign language resource than a school library (79.7%) which suggest that teachers have positive beliefs about the pedagogical potential of computers for learning English.

Table 2 Beliefs about pedagogical benefits of computer technology

Questions	N	Strongly Disagree, %	Disagree, %	Slightly Disagree, %	Slightly Agree, %	Agree, %	Strongly Agree, %
The Internet is a better foreign language resource than my school's library	64	3,1	10,9	6,3	14,1	25,0	40,6
Computers are not sophisticated enough to teach language skills	60	6,7	11,7	21,7	30,0	26,7	3,3
I feel that computers can help students learn a foreign language	66	0,0	4,5	7,6	21,2	48,5	18,2
Students need to learn computers for the 21 st century.	66	3,0	0,0	3,0	6,1	28,8	59,1
The value of computers in learning a foreign language is overrated	61	3,3	11,5	19,7	24,6	32,8	8,2
There are appropriate cultural materials on the World Wide Web for meaningful learning	62	0,0	6,5	8,1	14,5	45,2	25,8

The second set of statements included six questions determining teachers' beliefs on management of computers in a language classroom. They focus on finding respondents' feelings about language and task management and integration of computers into lesson plans. As seen in Table 3, the answers to many of the questions indicate more or less evenly distributed responses. Question on whether or not it is easy to integrate computers into their regular lesson plans, for example, shows that teachers have divided beliefs with 51.5% disagreeing that integration of computers is easy, and 48.5% revealing their positive feelings towards this statement.

Table 3 Beliefs about management of computer technology in the classroom

Questions	N	Strongly Disagree, %	Disagree, %	Slightly Disagree, %	Slightly Agree, %	Agree, %	Strongly Agree, %
It is difficult to maintain students' attention while working on computers	66	7,6	12,1	22,7	12,1	30,3	15,2
I worry that my students will use Internet resources such as online translators to do their tasks for them	64	7,8	31,3	25,0	12,5	20,3	3,1
While using computers with my class, it concerns me that I have to use so much English to explain what to do	62	3,2	27,4	22,6	12,9	29,1	4,8

It is easy to integrate computers into my regular lesson plans	64	7,8	28,1	15,6	20,4	25,0	3,1
Managing a classroom of students on computers is more difficult than managing a classroom of students without computers	62	3,2	12,9	24,2	21,0	29,0	9,7
Planning a lesson that uses computers involves more work than planning a lesson without computers	63	3,8	14,9	10,1	23,2	37,5	10,5

Nearly 60% recognize that managing a classroom of students on computers is more difficult than managing a classroom of students without computers with only 3.2% strongly disagreeing with this statement. It should be noted that more or less agreement is observed only on the last statement in which teachers report that planning a lesson with the use of computers involves more work than planning a lesson without them. In fact, 71.2% agree to some extent with this statement with 22.2% slightly agreeing, 37.5% agreeing and 10.5% strongly agreeing.

There are also six questions in the final sub-section which is focused on teachers' beliefs about computer itself. It addressed issues related to computer trouble-shooting, its reliability, respondents' confidence and trust when using a computer. As seen in Table 4, most of the responses lean more towards the positive side of the scale. For example, 78.1% of participants strongly agreed (14.1%), agreed (42.1%) or slightly agreed (21.9%) that their experiences with computers have been positive. 73% of teachers trust computers as seen by 9.5% strongly agreeing, 41.3% agreeing and 22.2% slightly agreeing. Teachers also felt somehow positive about their confidence when using computers (65.6%). But still more than half of the respondents reported being hesitant to use computers (62.1%) and not doing well with them (69.9%). Overall, this set of statements reflects that though mostly teachers report feeling comfortable around the technology, still there are some of them lacking confidence and comfort about their use.

Table 4 Beliefs about computer itself

Questions	N	Strongly Disagree, %	Disagree, %	Slightly Disagree, %	Slightly Agree, %	Agree, %	Strongly Agree, %
I am not the type to do well with computers	63	5.2	7.3	17.6	7.9	34.9	27.1
I am confident when using computers	64	1.6	14.1	18.7	23.4	32.8	9.4
I am hesitant to use computers because I don't know what to do if something goes wrong	66	6.1	9.1	22.7	21.2	30.3	10.6
My experiences with computers have been positive	64	4.7	4.7	12.5	21.9	42.1	14.1
Computers are too unpredictable-they "crash", or the software doesn't work right	63	5.8	20.0	24.8	14.9	29.2	5.3
I trust computers	63	3.2	6.3	17.5	22.2	41.3	9.5

4. DISCUSSION

Findings from section two suggest that teachers reveal positive beliefs about pedagogical potential of computers with 87.9% agreeing to a certain extent that they can help students learn a foreign language. Moreover, 94% have strong beliefs in that students need to learn computers for the 21st century. The majority of them believe that computers are moderately to extremely beneficial for learning culture, listening, grammar, reading and vocabulary. But computer technologies are reported not to be as beneficial to developing speaking skills. Teachers' experiences with using computer technology have been positive in general. With the majority of them trusting computers, still there are many of them feeling themselves hesitant in using computers. Finally, teachers have divided beliefs about the management of computers in the classroom. Half of them seem to worry about issues related to management such as planning, language management, task management, and integration. The other half reports certain confidence. One shared issue is that planning a lesson that uses computers involves more work than planning a lesson without them.

5. CONCLUSION

The findings suggest that ICT is gradually being adopted in schools and universities in Kazakhstan as seen through teachers' administrative and pedagogic use of computers and their beliefs about it. Even though the research results do not reveal much of the pedagogic use of computers, it can be implied that those teachers who use it more for administrative purposes are more likely to transfer these skills to a more wider and effective use of computers for instruction. It can also be implied that as teachers' beliefs about computer technology evolve, more and more teachers might change their practices and become serious users of computers. Schools and universities need to support administrative use as well as pedagogic use of computers and provide sufficient training.

The study of the research questions like the ones under discussion can help us avoid adopting new technologies simply because they are new, fast, or engaging for the user. It will work towards establishing a picture of the current state of ICT integration in EFL teaching practice in Kazakhstan, focusing on teachers as main agents of change and developing their positive beliefs about new technologies. The analysis of the computer use by teachers, its correlations with teachers' beliefs can help the policymakers and administrators make informed decisions related to technology integration and develop strategies for more successful and effective use of computer technology by EFL teachers in Kazakhstan.

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At the crossroads of ‘diversity’ and ‘unity’ in learning: the case of Malaysian banks

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At the crossroads of ‘diversity’ and ‘unity’ in learning: the case of Malaysian banks

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Abstract

Diversity has long been a unique characteristic in the Malaysian education system. Malaysia’s diverse education system is attributable to the nation’s multi-racial and pluralistic society. Unlike most mono-ethnic societies like China or Japan, Malaysia’s diverse education system was put in place to champion the rights and reflect the varied cultures, identities and values of a multi-ethnic society comprising Malays, Chinese, Indians and other minority groups. Nonetheless, this diversity in education is predominantly at the school level. Subsequently, as one enters the world of work, organizational learning at the workplace blurs all aspects of diversity where multi-ethnic employees subscribe and identify themselves to a common culture, that is, the organization’s business culture. This is in line with most globalisation literature that posits a homogenisation of culture, or even the integration of global concepts at the local level. Inevitably, in the Malaysian case, to what extent Malaysian bank employees choose to homogenise their values and cultures while learning alongside colleagues, or do they still prefer to uphold their diversity (while learning), is the primary concern of this paper. Thus, based on these lines of enquiries, this paper aims to map out the chronicles of Malaysia’s educational milestone shifting from ‘diversity in education’ to ‘unity in organizational learning’ and its implications on Malaysia’s existing education system. Specifically, this paper illustrates the intersection and dynamics of two dichotomous concepts of ‘diversity’ and ‘unity’ in education and learning amidst reforms and transformations in the key sector of Malaysia’s economy – the banking industry.

Introduction

‘Diversity’ and ‘unity’ – two dichotomous yet relevant terms are widely used to describe the Malaysian society in general and the country’s education system in particular. Unlike most mono-ethnic societies like China or Japan, Malaysia inherited a diverse education system due to the nation’s multi-ethnic society (i.e. Malay, Chinese, Indian). This paper argues that as Malaysia integrates into the global economy, continuous learning at the workplace is of paramount importance. In tandem, a shift in learning has occurred when one exits Malaysia’s diverse education system to enter the homogenised learning environment of the modern workplace. This paper maps out this shift for Malaysia’s banking industry. Section one provides the background and contextualises the concepts of ‘diversity’ and ‘unity’ for Malaysia. The methodology for this study will be discussed in section two while section three reviews the literature on banking restructuring worldwide. Banking restructuring in Malaysia and its impacts on workplace learning is also discussed here. Section four discusses how all these changes implicate on Malaysia’s education system and finally section five concludes this paper.

1. Background

The formation of Malaysia's 'diverse' society gathered momentum during the 1800s when immigrants from Indian and China came to Malaya in hordes in search for a better livelihood. Together with native Bumiputeras who are predominantly Malays, Malaysia has flourished to be one of the most vibrant and diverse society in Southeast Asia. Specifically, the word 'diversity' is widely used to depict Malaysia's pluralistic society comprising of 'diverse' cultures, beliefs and values upheld by the different ethnic groups (i.e. Malays, Chinese, Indians, etc.).

Diversity amongst the ethnic groups was particularly distinctive during the British colonial era. A 'divide and rule' policy was deliberately adopted by the British to enhance their control and administrative grip on a multi-ethnic Malaya during then (Lee 1997: 28). As a result, the Malayan society back then was intentionally segregated based on identification of ethnic groups with economic functions. The Malays were predominantly peasants in rural areas. By contrast, the Chinese engaged in commerce and eventually monopolized the urban economy, while the Indians made their livelihoods in the rural rubber estates and civil service. Unknowingly, such diversification in economic functions also shaped the diverse education system in Malaya. The period before Independence (1957) manifested a highly fragmented educational orientation based on two systems, namely, the vernacular system and the English system (Fong 1989: 16). The vernacular system comprising of Malay, Chinese and Tamil schools, was employed to accommodate the aforementioned diversity in Malaya's multi-ethnic society.

The time after World War 2 and prior to Malaya's independence was also a critical period for Malaya. Realising that political independence was imminent and unavoidable, the British attempted to mobilise education as a 'unifying factor'. However, lobbying for a unified educational system in a diversified Malaya was very challenging. Educational planning soon turned into a highly 'sensitive and contentious' issue. Though, under the Barnes Committee, there were propositions to establish a 'single national-type school' but it was not forthcoming following objections from the Chinese community (Fong 1989: 19). Eventually, it was agreed upon that the vernacular system should remain. All efforts to unify the educational system should be undertaken gradually and through evolution (Fong 1989: 20).

Indeed, this was the unique scenario in Malaysia with diverse types of education systems (for the different ethnicities) co-existing alongside each other. Obviously, students studying in these schools mingled and studied amongst their own kind without being exposed to learning with the other ethnic groups. The segregation based on medium is shown in Table 1 below. Since 1938, the pattern of school enrolment for primary and secondary education had been clearly segregated into four mediums of Malay, English, Chinese and Tamil respectively.

Table 1: Primary School Enrolment by Language Medium in Malaysia, 1938-1956

School type	1938	1947	1956
PRIMARY	211,000	453,000	867,000
Malay medium	57,000	171,000	392,000
English medium	42,000	57,000	136,000
Chinese medium	86,000	190,000	291,000
Tamil medium	26,000	35,000	48,000
SECONDARY	24,000	17,000	89,000
Malay medium	-	-	3,000
English medium	20,000	13,000	59,000
Chinese medium	3,000	2,000	27,000
Tamil medium	<500	<500	<500

(Source: Fong 1989: 21)

However, the post-independence period saw various efforts to merge all these diverse systems to create a ‘cohesive national education system’ (MOE 2001: 9). Post-independence was also a period of reconstruction, consolidation and nation-building (Snodgrass 1980: 243). Importantly, ‘education’ was identified as the key towards achieving these aspirations (MOE; see also Arshad 2007). Specifically, the Razak Report accepted all four streams into the national education system and suggested that the basis of integration should be towards a common curriculum instead of a single medium of instruction (Tan 1996: 16). At that time, the distribution of political and economic powers persisted along racial lines. The Malays were the political administrators while the Chinese and Indians controlled the economy. As political stewards, the Malays emplaced socio-economic policies to overcome this imbalance. The Alliance government was later formed comprising of a coalition of Malays, Chinese and Indian elites to bargain for their respective ethnic groups. Despite such accommodative policies, the socio-economic status of most Malays was still deplorable. Only the few Malay elites and foreign, non-Malay local capitalists benefited from these policies (Lim & Canak 1981 in Molly 1997: 30). Soon, disillusionment and resentment amongst the Malay underclass triggered the wretched racial riot on 13 May 1969.

However, after the racial riot in 1969, efforts were directed towards making Malay (the National Language) as the main medium of instruction to unite the diverse Malaysians. Under Clause 21 (b) of the 1961 Education Act, the Minister of Education has power to convert teaching from English to Malay. Thus, following the Minister’s announcement on 1970 and beginning 1971, English primary schools gradually switched to teach in Malay. By 1976, primary schools completed the conversion process while all secondary schools began a similar conversion to Malay in 1977. Ultimately, in 1983 Malaysian universities also changed over to lecture in Malay (Tan 1996). This is indeed a turning point in Malaysian history where besides sharing a common curriculum, all levels of education now use a common language – Malay – except for primary vernacular schools. This defining moment in Malaysian’s educational reform is summarised by Tan,

The first important change in this period, therefore, was the final realization of a national system of education conducted mainly in the national language. However, the Chinese and Tamil primary schools were left intact (Tan 1996: 17).

From the above analysis, though countless policies were employed to create a unified Malaysian education system at all levels, but elements of ‘diversity’ are still inherent in Malaysia’s educational system, in this case at the primary level. One may even argue that such ‘diversity’ at the primary level should be noted given that the first six years of primary education (from ages seven to 12) is the period in which young pupils are most vulnerable and malleable in their character. It is during this period that the values and lessons imparted to students will shape their mindsets and personalities in life later on. The popularity of vernacular schooling in Malaysia is still evident today when comparing the primary school enrolment figures of past and present students as featured in Tables 1 and 2. Even though the number of students in Malay medium schools (or later known as national schools) have increased in leaps and bounds from merely 392,000 in 1956 to 1,770,004 in 1990 and further rose to 2,391,223 in 2005; the presence of Malaysians studying in Chinese and Tamil primary schools is still widespread in this era. As evidence, the students in Chinese medium schools have doubled from 291,000 students (1956) to 581,082 students (1990) and then further increased to 645,669 students in 2005. Similarly, students in Tamil primary schools also increased almost two-fold from merely 48,000 students in 1956 to 96,120 students in 1990, and subsequently with a slight increase to 98,579 students in 2005 (MOE 2006: 22).

Table 2: Primary School Enrolment in Malaysia, 1990 - 2005

School type	1990	1995	2000	2005
National primary school	1,770,004	2,126,123	2,219,252	2,391,223
National-type Chinese primary school	581,082	596,341	623,343	645,669
National-type Indian primary school	96,120	102,776	89,175	98,579

(Source: MOE 2006: 22)

Despite the above prevalence of ‘diversity’ in Malaysian primary education, the term ‘unity’ is quintessential in everyday Malaysian parlance. ‘Unity’ is often resonated as policy rhetoric to unite Malaysia’s diverse people to achieve socio-economic goals. As succinctly described by a Malaysian scholar,

“There is hardly a month that would pass by without the issue of national unity being raised in the local media. It would be raised either by politicians or men in the street. There is always that constant call for the different racial groups in Malaysia to unite and promote inter-racial harmony so there can be political stability and, with political stability, to promote economic and social development.

This call for national unity has been echoed many times since the country's independence (Arshad 2007: 1).

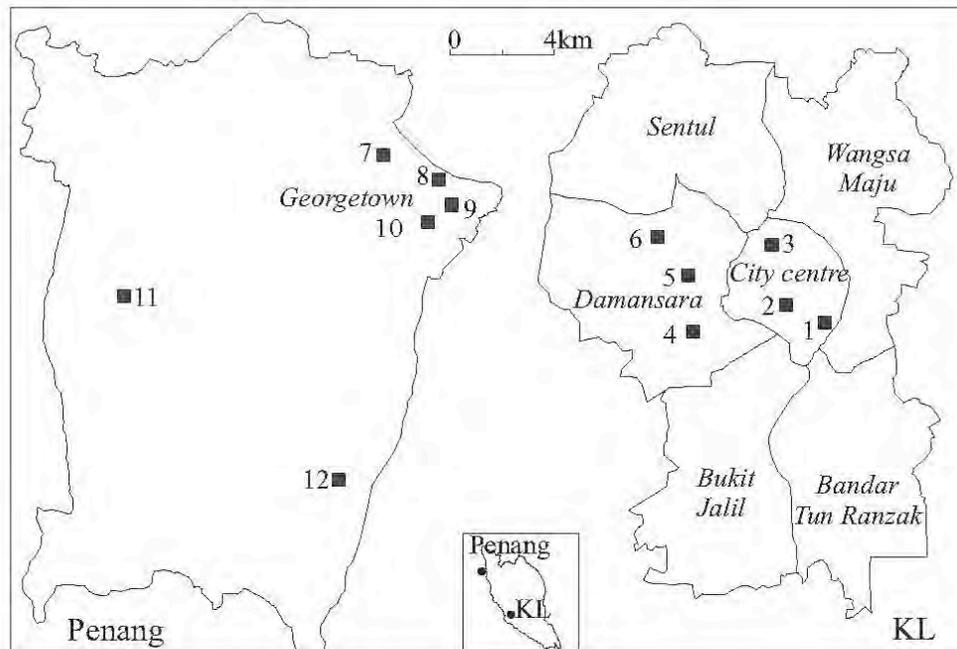
Likewise, former Prime Minister Mahathir Mohamad also quoted Malaysia as being "...a united nation in diversity" (Faaland, Parkinson & Saniman 2003). One may ask, "Why is unity so crucial to Malaysia?" In the context of this paper, unlike mono-ethnic cultures like Japan and China, Malaysia's diversity has had and will continue to have implications in the way Malaysia's educational system is being shaped and reformed.

Since the 1990s, a shift in focus of Malaysia's educational agenda is notable. Instead of emphasizing on issues pertaining to promoting Malaysian unity and identity, or on restructuring/redistributing educational opportunities and wealth (Molly 1997: 33), the focus is now on human resource development and skills upgrading of labour at the workplace (Fleming & Soborg 2002). Clearly, this switch in emphasis from 'educating at the school level' to 'learning at the organizational level' needs to take into consideration the aforementioned 'diversity' in the Malaysian primary education system. As one exits the world of schooling to enter the world of working, arguably organizational learning at the workplace blurs all aspects of diversity that was previously practised in Malaysian primary schools. Multi-ethnic employees will have to subscribe and identify themselves to one common culture, that is, the organization's business culture. Against this backdrop, this paper aims to map out the dynamics of these two dichotomous concepts of 'diversity' in education (at the school level) and 'unity' in learning (at the workplace). Specifically, this paper contextualises these concepts for the key sector of Malaysia's economy – the banking industry. Before that, the following section will discuss the methodology for this study.

2. Methodology

This study was carried out in two urban centres in Malaysia (i.e. Kuala Lumpur and George Town) during two periods. The first period was from January to July 2008 while the second time for one month during February 2009. A case study approach was adopted where in-depth qualitative methods (i.e. interviews, focus groups, observation) were used to collect data in two of Malaysia's prominent domestic banks. Due to confidentiality purposes, these two banks will be referred to as Case Bank 1 (CSB 1) and Case Bank 2 (CSB 2) from hereon. To add depth and credibility to the study, 12 case bank branches were surveyed as shown in Figure 1 below. These branches are sprawled between urban, suburban and village areas in Kuala Lumpur and George Town.

Figure 1: Location of the 12 case study branches surveyed in Kuala Lumpur & Penang



KUALA LUMPUR

- 1 = Bukit Bintang (urban)
 2 = KL Main (urban)
 3 = Jalan Tun Perak (urban)
 4 = PJ Seapark (suburb)
 5 = TTDI (suburb)
 6 = The Curve (suburb)

PENANG

- 7 = Belissa Row, Pulau Tikus (urban)
 8 = Menara BHL (urban)
 9 = Penang Main (urban)
 10 = Jelutong (suburb)
 11 = Balik Pulau (village)
 12 = Jalan Mahsuri (suburb)

At each branch, three levels of employees (i.e. frontline, middle officers, branch managers) were interviewed to understand how transformation in banking labour processes and the new corporate culture have altered their culture of working and learning. At CSB 1, 25 bank employees were interviewed where 7 were branch managers, 12 middle officers and 6 frontliners. 31 bank employees were interviewed at CSB 2 comprising of 5 branch managers, 16 middle officers and 10 frontliners. The ethnicity of the employees for this study is tabulated in Table 3 below.

Table 3: Ethnicity of bank employees interviewed

Position	Malay	Chinese	Indian	Total
Branch manager	6 (50%)	6 (50%)	-	12 (100%)
Middle officer	12 (43%)	13 (46%)	3 (11%)	28 (100%)
Frontliner (i.e. teller)	10 (62%)	3 (19%)	3 (19%)	16 (100%)

In this study, most branch managers are either Chinese (50%) or Malay (50%). There is no Indian branch manager. The distribution of Malay (43%) and Chinese (46%) employees working at the middle level is equitable, but with an Indian minority (11%). At the frontline level, most employees are Malays (62%) followed by equal representation of Chinese (19%) and Indian (19%) bank employees.

In terms of ethnic distribution, this study indicates that Malaysians of all ethnicities work in the banking industry. This means bank employees may have colleagues who might have been educated in the national or vernacular primary schools given that Malay, Chinese and Indian bank employees are now working alongside each other. The following section will provide an overview of banking restructuring worldwide; banking restructuring in Malaysia and the way it impacts on learning and training by contemporary bank employees.

3. Banking restructuring in the literature

The world of banking has changed radically. Studies in advanced economies show that the banking sector is the industry that is most dramatically transformed by forces of economic globalisation, namely, deregulation and technological innovations (Bertrand & Noyelle 1988; Baethge, Kitay & Regalia 1999a; CEDEFOP 2003). Financial deregulation has collapsed all forms of boundaries between different financial institutions (i.e. bank, finance companies, investment banks). This inevitably produced products that carry 'hybrid' features of banking, investment and insurance. Removal of barriers also intensified competition amongst banks and non-banking institutions (Harper & Chan 2003).

These studies also documented the way technology impacted on banking work. The most distinctive change is the way banking work has shifted from Fordist to post-Fordist methods of production (Baethge, Kitay & Regalia 1999a; Rasmussen & Jackson 1999; CEDEFOP 2003). In the past, traditional banking work resembled that of a Fordist production line where banks merely disbursed loans and received deposits. At the branch, there was a clear segregation of work between the branch manager and low-level employees (i.e. teller, clerks). Autonomy and decision-making powers were solely in the hands of bank managers while tellers merely executed menial, repetitive work that required minimal conceptual skills. As critiques argue, Fordist working methods resulted in a 'control and execute' labour relationship between superior (i.e. branch manager) and subordinates (i.e. tellers). In the process, subordinates are said to be 'de-skilled' (Braverman 1974). However, in modern day banking, all these have changed. These studies showed that technological innovations via e-delivery channels (i.e. as Automated Teller Machines, telephone banking, Internet banking and EFTPOS) have taken over all manual work previously carried out by tellers. The conventional roles of banks have also transformed from traditional banks to become Universal Banks or 'financial supermarkets' where a comprehensive array of banking products (i.e. credit cards, debit cards, insurance, investment products, mutual funds, etc.) are all sold under one roof

(Forester 1987; McLoughlin & Clark 1994; Morisi 1996; Baethge, Kitay & Regalia 1999a).

In Malaysia, the changing work patterns in Malaysian banks mirror such global trends. Changes in macro policy have drastically revamped the work culture in Malaysian bank branches. On 15 January 2004, under the BAFIN framework, a Malaysian commercial bank and finance company (within a domestic banking group) is merged into a single entity (BNM 2005: 11). In response, traditional commercial banks gradually transformed to become Universal Banks. This resulted in a phenomenal change in the bank's modus operandi and work culture. Contemporary bank branches are now converted to function as 'sales platforms' or as 'one-stop financial supermarkets' to launch and sell the bank's latest products and services. Besides offering traditional commercial banking services (i.e. deposits, loans, remittances, etc.), modern Malaysian bank branches offer a wide range of latest financial products/services such as unit trusts, investment-linked products, insurance, structured deposit and such.

The advent of technology in Malaysian banks is evident. The fleets of Self-Service Terminals (SST) placed at the lobby of contemporary bank branches are performing the manual work (i.e. cash withdrawal, cash/cheque deposit, etc.) previously undertaken by tellers. Thus, one may ask, "How has the job scope of branch employees transformed vis-à-vis these changes?" Interviews with all levels of employees revealed that the most distinctive change is the rise of the 'sales culture' – a culture that inevitably altered the culture of working and learning among today's bank employees. Senior managers mentioned that in the past, key banking operations only emphasized on two components, namely 'operations & compliance' (things happening behind the scene) and 'services'. Nonetheless, since the BAFIN framework and the rise of Universal Banking, Malaysian banks have adopted a third aspect of 'sales & marketing'. With this radical change, bank employees are repeatedly reminded to view all these three elements as a single entity instead of separately. Thus, these elements are now incorporated into the work model of every Malaysian bank employee, regardless of their level of hierarchy or seniority within the branch organisational structure. These changes have inevitably impacted on the work and skills requirements of bank employees. Simply put, in the past, there was a distinctive separation and division of labour between backroom operation employees and frontliners. However, the shift to sales warrants for integration of work functions amongst these employees. In the words of the bank employees interviewed, integration of work functions means "teamwork" in working and learning amongst colleagues. The following sections will illustrate how "teamwork" is being played out at the various branches.

Teamwork and collective intelligence

"*One ship, sink or swim,*" exclaimed Bukit Bintang's branch manager. This is the perfect phrase to depict the emergence of a 'teamworking' division of labour and the importance of 'collective intelligence' at a typical Malaysian branch nowadays. This

study refutes Braverman's (1974) theories of 'control and execute' and the 'de-skilling' of low-level employees. As mentioned above, a segregation of labour amongst employees is no longer existent. This study empirically supports Illeris' (2002) contentions that the introduction of technology in a post-Fordist service-oriented workplace has 'reintegrated' instead of 'separated' the 'mental' and 'manual' skills of employees. Similarly, this study coincides with the findings from other recent studies (CEDEFOP 2003: 103; Hughes and Bernhardt 1999) and contemporary notions that emphasise the importance of 'collective intelligence' (Brown 2001: 42; Brown & Lauder 2001: 8). According to these scholars, a post-Fordist era is akin to 'collective intelligence' where 'mutual dependence' of working and learning together amongst colleagues is of utmost importance. Obviously, such findings accentuate another key characteristic of a high performance post-Fordist workplace – team work (Baethge, D'Alessio & Oberbeck 1999b: 302). Given that all branches are now given a 'collective branch target' to achieve, 'teamwork' at two levels are required. First, vertical level refers to the work relationship between superiors and subordinates. Second, horizontal level refers to the peer working relationship amongst colleagues regardless of age, gender, ethnicity and such.

To illustrate the importance of 'teamwork' amongst bank employees, interviews from the sales team (i.e. financial executives, relationship managers, personal financial advisors) are the best testimonies. According to one senior financial executive:

I am in charge of life insurance, investment, etc. The target given to me is a 'branch target'. I myself definitely cannot achieve it. I need people to help me. For instance, in terms of investment I shall get help from our Fixed Deposit department or those frontliners whom have close contact with customers. When customers want to place Fixed Deposits, then my colleagues can try to cross-sell and refer these potential customers to me. Only then will my job be easier. Otherwise, if you're waiting for me to do it alone, I don't think I can do it. The 'branch target' basically needs a lot of people to chip in. Obviously teamwork is very important as far as my job is concerned.

Likewise, a frontliner (i.e. ambassador) manifests her role as a team player.

As ambassador, I help the other officers a lot by driving the right customers to the right officers. This is by itself a form of teamwork already.

Although some employees felt that "working in a team" was already prevalent even prior to the introduction of technology, but most of the senior branch employees and branch managers interviewed affirmed that 'teamwork' began to gain importance with the current emphasis on sales. The subsequent section will analyse how the sales culture has

impacted the culture of working and learning amongst multi-ethnic Malaysian bank colleagues.

Ethnic division of labour: new ways of working and learning

In this study, the phrase ‘ethnic division of labour’ differs from the earlier notion where the Malaysian workforce was ethnically segregated based on economic functions which subsequently resulted in diverse forms of education for the various ethnic groups. Instead, this study illustrates that the current competitive environment has remodelled corporate strategies in Malaysian banks. A new ethnic division of labour that blurs and homogenises the diverse ethnicities has prevailed. Significantly, this study illustrates the emerging importance of ‘teamwork’, ‘collective intelligence’ and ‘high trust’ (amongst employees) at the branches has redefined the meaning of ‘workforce ethnicity.’ In this era, ‘ethnicity of the workforce’ contributes positively towards productivity and profitability. In this regard, most of the bank employees interviewed asserted that ‘ethnic diversity’ at the branch is viewed as “*strength*”, especially with the shift towards the new sales and marketing culture. At the Pulau Tikus branch that serves a predominantly Chinese clientele, a Malay customer service manager relates the following:

It is strength especially here in the Pulau Tikus area. There are more Chinese. So if you do not have a Chinese staff here, what will happen? Sometimes if you have a multi-racial workforce, it will attract customers. The ‘muhibbah’¹ factor. When it comes to skills, it is to do with work and it has nothing to do with your race. Race is your own. When you come to the workplace, everybody is the same. You don’t see anything multi-racial here. What is required is your skills and your professionalism. We don’t see...Oh, you’re Chinese, you should be better than Indians. No, no such thing. So when you’re working under the same roof ... regardless whatever race you are, you need to have the same skills and professionalism to attend to the customers.

Similarly, another Chinese financial executive discloses how she capitalised on her colleagues’ diverse ethnicity to help her in achieving her sales target. According to her:

There are different types of Malay customers. Some are modern while others conservative. When you handle Malays, you call another Malay staff even the colleague is not from your department. I will ask my Malay colleague to elaborate more and they will talk in their language. It will help. It is not the language, they want to see their people. Though some Chinese customers know how to speak in English and yet they still want to see Chinese bank employees. This is because they feel we are in a group. We are in the same ship. This kind of

¹ In Malaysia, the term “*muhibbah*” is broadly understood as the ability of the diverse ethnic groups (i.e. Malay, Chinese, Indians, etc.) to live, work and acknowledge each others existence in a harmonious and amiable manner.

scenario is unique to Malaysia. If you go to China which is mono-ethnic, then this problem does not arise. For the modern Malays, it is alright. They can accept whoever serves them. Otherwise you will have to pull along a Malay colleague which makes the customer comfortable. I can talk to you because you are now in the same boat already.

From the above discussions, it is obvious that the organization's culture – sales and marketing – prevails and dictates the style of working and learning among contemporary bank employees of diverse ethnicities. A new form of integration or 'unity' in working and learning is now happening amongst Malaysian bank employees. For instance, in order to close a sales deal or to fulfil a collective sales target for the branch, this study shows that Malay, Chinese and Indian bank employees unite as a team to achieve these goals. It is then pertinent that contemporary Malay, Chinese and Indian bank employees have to renegotiate their ways of working and learning alongside colleagues from other ethnicities. At this point, a question can be posed whether these Malay, Chinese and Indian bank employees originated from vernacular or national primary schools. How do these employees who once-upon-a-time ago attended a diversified model of primary schooling can now co-exist and learn in unity with their multi-ethnic colleagues in the modern workplace? Undoubtedly, there will be some Chinese and Indian bank employees who originated from vernacular primary schools during which their early exposure towards education was amongst their own kind and detached from other ethnic groups. However, as they enter into the world of work, the new corporate culture (i.e. sales culture) requires vertical and horizontal integration in terms of working and learning amongst colleagues. As illustrated in this study, vertical integration collapses the hierarchical barriers between high (i.e. branch manager) and low-level employees (i.e. tellers); whilst horizontal integration homogenises the multi-ethnic workforce to work in unity so as to achieve the collective branch target. In the context of Malaysian banks at least, this paper clearly shows how employees of diverse ethnicities are co-existing and working alongside each other.

4. Implications on the Malaysian education system

The findings from this study have great implications on Malaysia's education system. In taking heed of the calls of our forefathers and political leaders, elements of 'unity' should be inculcated at all levels of education given that ultimately at the modern workplace; the models of working and learning promote unity amongst colleagues regardless of their colour, creed or ethnicity. When one enters and works in the modern world of banking, they now identify themselves as the 'common citizenry' of that particular organisation and they stand in unity to collectively achieve all goals of the organisation.

The way corporate strategy outweighs factors such as an employee's "*colour, creed or ethnicity*" is best manifested by a senior human resource head of CSB 2. It is also these similar corporate strategies that determine human resource development for the entire banking workforce. Without qualms, he related the following:

At the end of the day, our skills development effort does not skew to a particular race. It is skewed towards what we want to do for our customers. We don't see certain courses for certain races. We don't have that. Even with the introduction of Islamic banking, training for Islamic products/services will be for everybody regardless whether your Relationship Manager is Malay, Chinese or Indian because they have to service the customers. I think our lens only has the colour of the company. So we see everybody through the same set of 'coloured lens. It is not a 'race lens'.

This suggests that in the present competitive environment, Malaysian bankers relate to skills and *not* ethnicity in their aspiration to compete globally and move ahead.

5. Conclusion

The concepts of 'diversity' and 'unity' in Malaysian education will remain as litany and policy rhetoric indefinitely. However, as the Malaysian economy liberalises, modernises and gradually integrates into the global economy, the emphasis on human capital development has never garnered as much interest and importance as compared to now. In this study, much has been disclosed. It has highlighted how a shift has occurred from 'diversity in education' (i.e. Malaysian primary schools) to 'unity in learning' in modern banking organisations. If ultimately Malaysians will co-exist, work and learn alongside each other at the modern workplace, thus perhaps, integration/unity in education should even begin at the most elementary level (i.e. pre-school) of Malaysia's educational system. As more and more Malaysian industries deregulate and get integrated into the global economy; there is now urgency to revisit the power relations and structure of the occupational hierarchy (i.e. vertical level) as well as the dynamics of work relationships of Malaysia's diverse workforce (i.e. horizontal level). Importantly, Malaysia's education system has to respond to these issues to ensure that the Malaysian learning process is no longer placed at the crossroads of 'unity' and 'diversity'.

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**Course Development of English for Non-English Department Students:
Procedures, Practices, and Policy**

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Course Development of English for Non-English Department Students: Procedures, Practices, and Policy

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Introduction

English language has played an essential role to support Indonesian university students in achieving their academic and occupational success. Having good English proficiency can lead students to high interest in reading books or references written in English, in presenting ideas during the classroom discussion or faculty seminars using English, in writing tasks or reports in English, and communicating with fellow students from other countries. Moreover, high ability of English will facilitate students in finding potential jobs that always offer good salary, benefits, and facilities. Consequently, English has been considered as a compulsory course in all faculties of both state and private universities in Indonesia.

This autonomy leads to the different practices of English course. First is the kind of English courses. It can be English for General Purpose, English for Academic Purpose, English or Specific Purpose, or the others. It can be identified with the kinds of teaching materials. However, English curriculum for non-English major students has not been satisfactorily designed to prepare students to achieve mastery of English as their field of study as well as of their future profession (Floris, 2008). Many faculties have not implemented some procedures of course development, such as need analysis, goals formation, materials and course organization, and evaluation (Kusni, 2007). So, students' interests in studying English are indicated low (Florish, 2004; Marcelinno, 2008; Setyorini, 2009). Second, the credits of English courses may be given for only one semester, two semesters, or three semesters. The time is not adequate for upgrading students' English levels. Third is the teaching procedure. This is various depending on the types of lecturers. Last is evaluation system that can be different from one lecturer to the others at the same department/faculty. No fixed guidance is provided by the universities. As a result, the students' scores in one department or faculty are not standardized.

To the extents, this paper intends to figure out the actual procedures, practices, and policies on English course development in some departments/faculties of non-English majors in Indonesia. It takes one main question: how to develop the English courses in non-English departments/faculties? In finding the phenomenon deeply, this question is elaborated into five minor questions: What kinds of English courses are applied? Who develops the course design? What are the steps or procedures in developing the English courses? Is there a faculty policy to support the English course design? And what are students' attitudes towards the English courses in their departments/faculties? All will be carried out by applying survey research. The results are expected to provide valuable insights for foreign language education delivery in Indonesia.

Literature Review

Appropriate English courses are designed to meet certain study goals for certain students in certain situations (Hutchinson and Waters, 1987; Widdowson, 1988; Brown, 2007; Gebhard, 2009). Theoretically, course design is addressed to some steps, such as: need analysis, goals and objective development, content course organization, and evaluation (Dubin & Olshtain, 1988; Dudley-Evans &

John, 1998; Frendo, 2005; Long, 2005, Gatehouse, 2001). In detail, Brown illustrates the language curriculum development process as the figure 1 that consists of identifying situation and analyzing needs, formulating goals, determining course content, designing course unit and modules, constructing lesson plans, teaching, and assessing three subjects (students, teacher, program) in order to revise further curriculum (2007: 151).

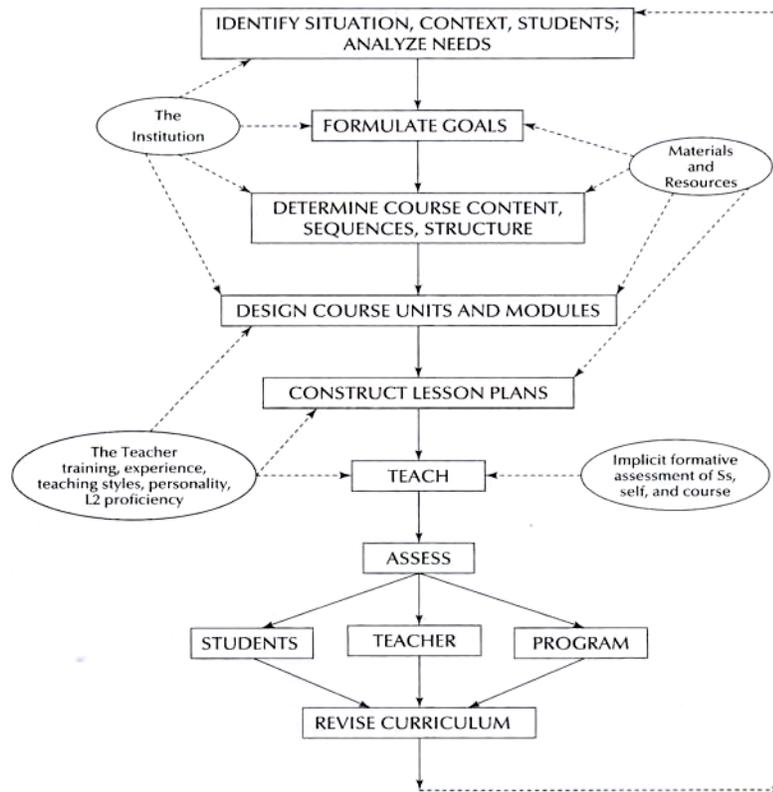


Figure 1: Second language curriculum development process (Brown, 2007)

Based on Brown's illustration, need assessment should be taken into two forms. First is a situation analysis. This is done to know about the educational setting, class characteristics, faculty characteristics, course content formation, and evaluation requirements. Another is needs analysis is done to classify the purposes that students expect for studying English, certain language skills that students wish to focus on, particular teaching strategies that students prefer to study, and constraints that student may have to accomplish the proficiency levels.

The results of needs assessment will be the general parameter to arrange the goals and objectives of study. The term 'goal' here refers to broadly aims or purposes in education context as a whole course; while the term 'objective' refers to more specific aims or purposes of an activity within a lesson to achieve one goal of study (Brown, 2007; Graves, 2000). A clear example is from an ESP course done by Jiajing (2007) for students of the department of International Business, at the Guilin Institute of Technology in China. The goal of study is students should be able to familiarize with business terminology and communicate competently in English. Then, it is elaborated into some objectives including four skills, such as: to understand telephone messages and conversations in business setting (listening skill), to respond effectively to telephone messages and job interviews

(speaking skill), to comprehend a telephone messages and business reports (reading skill), and to write business letters or-emails (writing skill).

The third step is content development. This is a planning process in determining what relevant contents are for certain students, creating course units and lesson plans to achieve the goals and objective of the course. Good content development of English course should link to the curriculum used in a particular department, be authentic in terms of texts and tasks, be able to stimulate classroom interaction (pair work or group work), lead students to formal aspects and to realistic usages of the target language, and be able to encourage students to develop their language skills (Nunan, 1988). Besides, relevant English courses should correspond to students' present and future usages (Richards, 2001) for their academic and occupational success.

The last step in course development is evaluation. The evaluation should be considered to the students, the teacher, and the program (Brown, 2007). Evaluation to students can be in the forms of formative and summative assessment. The first provides information about what students have achieved and what they need to work on; while the second is taken in the end of the course to know the student's overall achievement within the course (Graves, 2000). Evaluation to the teachers gives an impact to a great extent to their ability to teach and to manage the classroom. And evaluation to program is needed to know the relevance of the course with the students' needs. If a student is successful in studying an English course, it is not only from the student's performance. The cause could be attributed to good teacher or relevant curriculum. Likewise, low motivated students and insufficient program could make the best teacher looks bad. In short, relevant and interactive program that is guided by motivated and inspired teacher may increase students' motivation to study in the classroom (Ellis & Johnson, 1994; Setyorini, 2010).

Successful English courses are achieved with the support of many parties. If the non-English department students have good proficiency of English for general communication as well as good command of English for work, so they will have a competitive advantage in the global market. Accordingly, faculties or universities have to think more carefully about what English courses should be taught and what added value they can offer to students (Harmer, 2007). In regard with the Indonesian universities cases, Kusni (2007) recommend to apply a collective collaboration in developing ESP course. The collaboration includes the English teacher who is professional in language teaching, the expert of ESP course design who is experienced in creating and organizing ESP modules, the teacher of field study who is specialist in particular terms or actions as the content of English materials, the head of study program who is in charge of making a policy, and the people who works for practical situation as the field of study. In brief, the collaboration will create realistic and applicable curriculum as the students' needs to study as well as to work.

Methodology

This research applies survey analysis that is often used in language education, such as curriculum development projects (Brown and Rodgers, 2002). Survey can be collected in the forms of questionnaire and interviews. Questionnaires can yield a respondent's factual condition, behaviors, and attitudes. Data from questionnaires are more standard and accurate since they are self-administrated and can be given to large subjects at the same time (Seliger and Shohamy, 2008). During the research, different questionnaires were distributed to 35 English lecturers (in the departments of accountancy, management, elementary education, Islamic study, science, information system, mechanical engineering, and civil engineering); 4 faculty policy makers (of economics,

education, science and engineering); and 1008 students of non-English department in state and private universities/colleges in East Java. Moreover, interviews were done to acquire information that cannot be conveyed in written replies (Dornyei, 2007).

The questionnaire items were different to English lecturers, head of faculties, and students. All were selected in order to answer the research questions. Questionnaire to lecturers consisted of nine closed and open-ended questions about (a) what types of English were available in their department, (b) who developed the English course in their department, (c) what their roles were in course development, (d) what steps of course design were done in their department, (e) what categories of content were given to students, (f) whether there were regular workshops or meetings for course development in the department or not, (g) what was a particular policy with the English course development, (h) how were their students' interests in English class, and (i) English proficiency levels of their students. Questions to faculty members were 6 items, about the roles of faculty/department during the process of English course development. And questions for students included 6 questions in regard with their attitudes towards English learning as general and English course program in their departments. The results were presented in percentages or in the forms of graphs.

Kinds of English Course Development

The process and practice of English course development in non-English departments were various depending on the faculty policy. The kinds of English given to students were also different based on the faculty policy. From 35 departments of non-English departments, 31% addressed English for General Purpose (EGP) as their materials, 23% assumed as English for Specific Purpose (ESP) that related to their field of study as well as to future profession, and 46% applied both EGP and ESP that consisted of materials for daily communication and of materials that relate to their field of study.

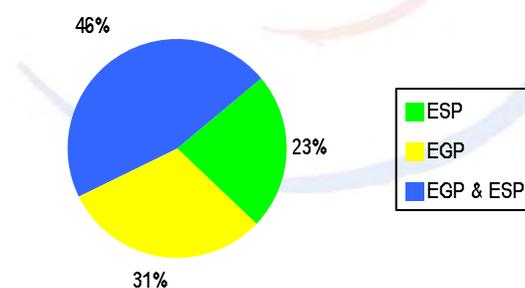


Figure 2: The kinds of English courses (questionnaire results)

The course of EGP was described as contents in terms of various texts about common activities and of general dialogues, such as: education, school life, family, and so on. ESP course was addressed to particular materials and tasks that relate to their study as well as to their future profession. For example, English for Accounting and English for Management were applied at STIESIA Surabaya. The contents of English for Accounting were in the forms of texts and tasks about accounting, financial statements, bookkeeping, auditing, accountant, and etc. English for Management was in the forms of various texts and tasks regarding with company formation, production and operation,

marketing, characteristics of managers, and so on. In addition, many of departments applied combination of EGP and ESP materials that provide texts and tasks for daily communication and for further comprehensions as students' field of study. For example, English given to students in the first semester was general purposes in the purpose to refresh students' understanding on English sentence patterns; but in the second semester was specific purpose as students' major. As the interview results, the different choices of English were considered mostly based on the lecturers' impression on what was appropriate to students and on the limited resources of up-to-date texts or genres of English as students' majors.

Designers of English Course

The designer of English courses for non-English departments were also various. All respondents said that the main creator was the English lecturer or group of English lecturers in one department. According to Brown (2007), effective English course design should be done together with some parties, for instance with the faculty members, with the lectures of field study, with the experts of English for specific purpose, and professionals. In fact, the highest collaboration was with the subject teacher. 77% of respondents said that they discussed formally and informally with the lecturers who majored in the field of study at the same faculty. For example, an English lecturer of STIKOM Surabaya asked for information about certain terms of computer system program to some computer lecturers in order to find out appropriate meaning and had no misconception to the terms. The second interest was with ESP experts. 51% respondents said they were easy to share with their lectures of master study. The professors are experts in applied linguistics who still welcome for informal discussion about course development. There were two departments of accounting and management that took an ESP expert formally to help them in conducting ESP modules and their faculty paid him.

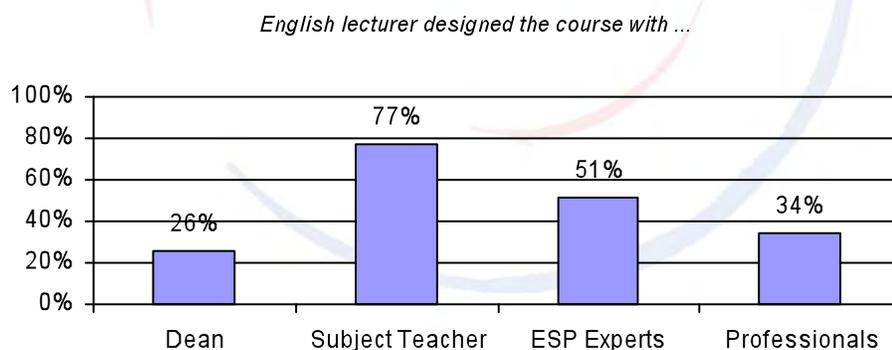


Figure 3: The English Course Designers (Results of Questionnaire)

Moreover, 34% of lecturers also discussed with professionals or people who work as the field of study. For example, an English lecturer of an Accounting department at State University of Surabaya asked for some new terms with an accountant in one company. This lecturer did so because her educational background was not accounting. This way was very helpful in finding appropriate meaning as the terms were about so she can explain the terms well to her students. And it was a surprise that only 26% respondents had a discussion with the head of faculty or department.

Steps of English Course Development

English lecturers surveyed were all from English departments for their undergraduate as well as master studies. They had learned on how to develop appropriate English courses. As a matter of fact, not all lecturers applied the procedures of language course development as the theory suggested. As the interview commends, not all English lecturers surveyed were permanent lecturers or governmental employees. Some were part-time lectures in their faculty. These groups did not have an authority to develop an English course; in other words, they just taught English as the modules had prepared by senior lectures. However, they knew exactly the process of English course design happened in their department.

Ten departments took appropriate procedures in designing English course, such as: (1) assessing needs, (2) formulating goals and objectives, (3) determining course contents, (4) designing materials, and (5) doing evaluation. In contrast, twenty five departments just applied two or three steps. The second group mostly did not do the first step, i.e. need analysis.

No	Steps of English Course Design	Departments
1	Assessing needs	11
2	Formulating goals and objectives	26
3	Determining course contents	24
4	Designing materials	27
5	Doing evaluation	25

Table 1: The numbers of departments doing English course design (results of questionnaires)

The absence of need analysis addressed to the basic problems in further course development, such as: imprecise variety of English taught to specific students, unclear aims to achieve, unfixed and various allocated time to take, irrelevant materials to study in the classroom, and unreasonable evaluation to do. The importance of assessing needs also existed on previous researches, such as Kusni (2007) in three universities in Indonesia, Floris (2008) in Petra Christian University, Surabaya, Indonesia, Algadrie (2002) in department of science and technology, ITS Surabaya, Indonesia, Jiajing (2007) in the department of business international, at Guilin Institute of Technology, China; Setyorini (2010) in accounting and management departments, STIESIA Surabaya, and so on.

Policy of English Course Development

All universities in Indonesia has autonomy in designing English curriculum, however, not all faculties of non-English majors made a particular policy to guide English lecturers and teamwork for running for better practice of English subjects. A policy, in this research overview, referred to a legalized and stated commands by the dean or head of department in designing English courses as the procedures, in applying English for academic as well as future profession purposes, in upgrading the method of English courses in the classroom, and in requiring students to take an English proficiency test. Out of the research expectation, the policy made by the faculty was just in requiring students to take TOEFL test, not in advancing the process of English course development. The head of departments argued that curriculum consideration had been given to English lecturers. It was clear that there was not control management in many faculties of non-English majors.

Students' Attitudes

As to know the relevancy of English course given to non-English departments, questionnaires also were distributed to 1008 students. The students were in the third to sixth semesters. They had learned English for six up to ten years. 89% of students agreed that English mastery of English was very important. When asked to rank the importance of language skills, they needed speaking 42%, reading 32%, writing 15%, and listening 12%. And regarding to the authenticity of English courses, 41% students claimed the contents were relevant. This needed to be improved by applying procedural course design in the non-English departments.

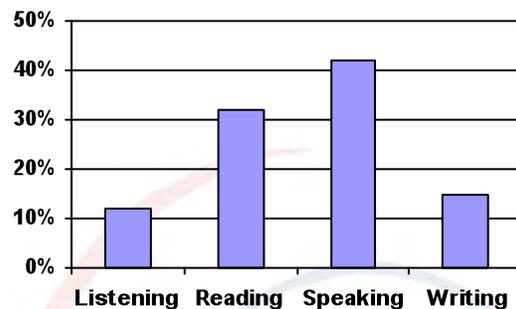


Figure 4: Students' attitudes to language skills (results of questionnaires)

Conclusion

English plays essential roles to support Indonesian university students' academic and professional development. If they have good English proficiency, they can read and share many up-to-date information for their educational and occupational improvement. Unfortunately, authentic English curriculum for the non-English departments are not satisfactorily designed to prepare students to achieve mastery of English for academic purpose as well as future profession. Therefore, this paper presented the actual procedures, practices, and policies found in designing courses of English in 35 departments of non-English studies in Indonesia. Data are taken from the results of questionnaires and interview to English lecturers, faculty policy makers and students, and previous researches to clarify the findings. As a results, English course design to non-English students were still far from the theoretical ESP procedures, English lecturers did not follow all course design procedures, and a few faculties made certain policies in guiding the ESP course design. Students' attitudes towards ESP classroom were low since the contents were mostly not relevant and applicable to their future profession. In brief, students' ESP achievement might be improved well when there are collaboration work among the ESP lecturers, faculty policies, and motivated students; and these are evaluated regularly for more positive outcomes.

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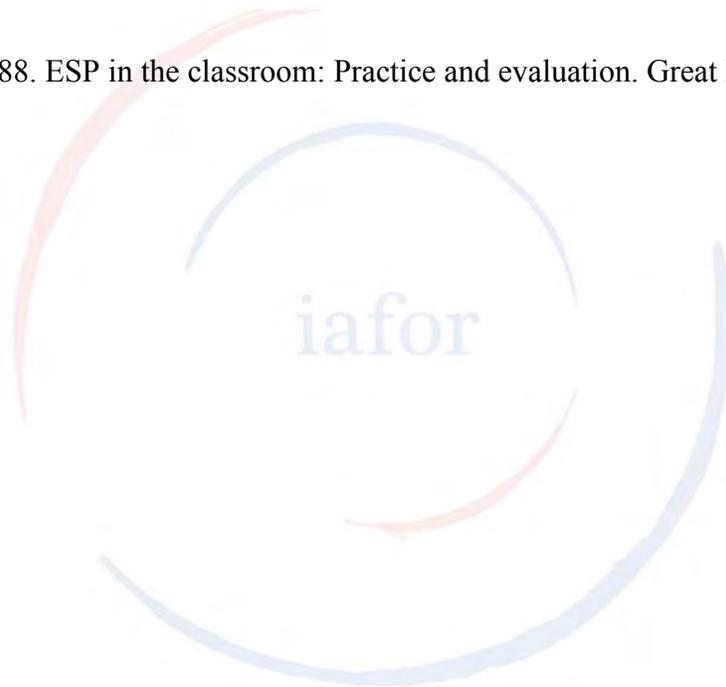
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INTERNATIONALISATION OF SINGAPORE HIGHER EDUCATION

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ABSTRACT

Singapore, which is often referred to as ‘the little red dot’ of Asia, is renowned as a nation with the fastest development in Southeast Asia. Driven by the forces of globalisation and an ambition to establish and promote the city-state as a premier education hub, the government has invested much to constantly reform the education system, including the internationalisation of Singapore education. This paper examines the internationalisation landscape of higher education in Singapore. It starts with a descriptive and critical analysis of the government’s policies and initiatives to develop Singapore as a regional hub of higher education. An explanatory model of policy analysis is employed to seek an understanding of the background, rationale and intended outcomes of the policies. This is followed by a discussion on the implications of these approaches which include how the internationalisation approaches structurally alter the landscape of the Singapore higher education market in both the public and private higher education institutions. This paper also identifies the gaps between policy rhetoric and reality by discussing several key issues in the internationalisation processes, such as: the commodification and commercialisation of education programmes; the increase in foreign ‘degree mills’ and low-quality education providers; and competition with foreign students to enter local universities. The paper concludes by exploring potential areas for future research in Singapore higher education.

Keywords: internationalisation; higher education; globalization; transnational education; education hub; Singapore

INTERNATIONALISATION OF SINGAPORE HIGHER EDUCATION

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Singapore has been increasingly influenced by the growing impact of globalisation in almost all aspects of the nation's development, which includes political, economic, social and cultural domains. Education too has not been left immune. Coupled with the proliferation of technology, globalisation has direct consequences on education policies (Koh, 2004; Mok, 2005). As a response to globalisation, and driven by an ambition to establish and promote the city-state as a premier education hub, the government has been continuously reviewing its education system, and has carried out various reforms to improve the quality of education in order to enhance their competitiveness in the globalised economy. One of the education reform efforts is the internationalisation its higher education.

This paper aims to examine how Singapore tries to develop its city-state to become a premier education hub in respect to the internationalisation of higher education. It discusses policy motivation, implementation approaches and implication of these internationalisation approaches on the landscape of the Singapore higher education market in both public and private higher education institutions. The paper also discusses issues and problems resulting from the internationalisation of higher education institutions. These key issues include the commodification and commercialisation of education programmes; the increase in foreign 'degree mills' and low quality education providers; competition with foreign students to enter local universities; and the threat of brain drain as local students seek university qualification overseas.

Understanding internationalisation

Internationalisation is often interchangeably used with globalization (Altbach, 2004). Others often debate on the relationship between globalization and internationalisation (Mok, 2008; Mok, 2007, Altbach & Knight, 2007; Jiang, 2008). Some scholars argue that internationalisation is not a recent phenomenon (Jiang, 2008; Knight, 2006; Altbach & Teichler, 2001). What is new and evolving is only the intensity and the extent of internationalization activities, especially when universities are influenced by diversification, privatization, marketization, expansion, and other trends. The main driving force is obviously globalization which has increasingly accelerated the pace of internationalisation (Mok, 2006). In addition, massification and marketization of higher education in the past few decades have led to severe competition for funds as well as for students and faculty (Chan, 2004).

Despite increasing debates about the internationalisation of higher education over the last decade, a clear and comprehensive definition of internationalisation has not been produced. This could be due to differences in the rationales for the internationalisation and different objectives and roles of higher education as perceived by different researchers (Jiang, 2008). While

globalisation is characterised by increasing flows of trade, investment, people, ideas and knowledge, internationalisation generally refers to relationship between and amongst nations based on the respect for cultural identity, national policies and state's sovereignty. In this regard, exchanges of culture and ideas are highly accentuated in the internationalisation of higher education. Internationalisation efforts are manifested in the forms of international programmes which aim to imbue international and cross-cultural mindset for the staff and students and to enhance the curriculum. Amongst others, some of the initiatives include overseas engagements, curriculum enrichment, using foreign language as medium of instruction, and sponsorship for foreign students. Internationalisation, in this context, is normally not for profit making. Instead the motivation would be to enhance competitiveness, reputation and strategic partnerships (Altbach & Knight, 2007)

Increasingly through free trade and liberalisation of capital mobility coupled by low cost of transportation and communication, globalisation brings together national economies into one global economy. National boundaries are blurred. Exploitation of knowledge is becoming more important for wealth generation. Internationalisation in this context are exclusively for economic reason as narrowly defined by global neoliberal institutions such as the World Trade Organisation, the World Bank, and the Organisation for Economic Cooperation and Development. An example of this form of internationalisation is approaches to attract foreign students for income generation (Jiang, 2008).

Rationales for internationalisation also influence the motivations and forms of internationalisation. Major rationales of internationalisation have been presented in four groups: social/cultural, political, academic and economic. These rationales seldom exist in a mutually exclusive manner. Instead, they may overlap due to changes of priorities and interpretations of internationalisation over time. During the cold war, political rationale was predominant. After the cold war, there was a shift from the political to social/culture and academic. Increasingly in the last two decade, Prompted by globalised knowledge economy, there has been a shift from social/culture and academic to an economic rationale such that the internationalisation of higher education is increasingly becoming market and profit oriented (de Wit, 1999).

Strategies and initiative to internationalise Singapore Higher Education

Singapore, which is often referred to as 'the little red dot' of Asia, is renowned as a nation with the fastest development in Southeast Asia. Driven by the forces of globalisation and an ambition to establish and promote the city-state as a premier education hub, the government has invested much to constantly reform the education system, including the internationalisation of Singapore education.

When analysing education policy change and transformation in education governance in Singapore, the impact of the East Asian financial crisis in 1997 particularly on how the massive economic downturn has led to changes in the way policies are formulated, and strategies adopted to cope with the challenges posed by globalisation. Being a small city-state and an open economy, Singapore has never isolated itself from the changes resulting from globalisation challenges (Mok, 2008).

In June 1997, the previous Prime Minister Goh Chok Tong announced Thinking Schools, Learning Nation (TSLN). It represents a shared vision for a total learning environment including students, teachers, parents, workers, companies, community organisations and government. The concept of “thinking schools” involves education institutions developing future citizens capable of engaging in critical and creative thinking and making informed decisions to sustain Singapore’s success in future. The concept of “learning nation” emphasises that education is a continuum starting from the early childhood years and continuing throughout one’s life. This education reform requires a mindset change among Singaporeans to bring about a spirit of innovation, learning by doing and self-improvement in order to achieve the ambition of national excellence (Goh, 1997). This concept was launched as a blueprint of Singapore education system reform in order to prepare Singapore to face competition with global advanced economies such as the USA, the UK and Japan.

In 1999, a report entitled Singapore 21: Together, We Make the Difference was published by the government. The report stresses on how the city-state might deal with the challenges posed by the new knowledge economy driven by the force of globalisation and proliferation of information technology. Education is seen to be crucial in preparing citizens to cope with the impact of globalisation (Goh, 1999). Education has to be relevant to the needs of society by providing capacity to understand complexities and potential impact of globalisation and at the same time inculcating national values, cultures and heritage (Goh, 2000).

In the higher education sector, the TSLN vision is manifested in greater autonomy in terms of financial and personnel matters, and accountability granted to allow the universities to find their competitive edge while continuing to fulfil their role to train and prepare manpower for Singapore’s economy (Chan & Ng, 2008). This reform was a result of the University Governance and Funding (UGF) review in the year of 2000. A steering committee was set up to undertake a comparative study of university governance and funding systems of the USA, the UK, Canada and Hong Kong. As a result, the committee concluded that top universities in those four countries were granted with a substantial autonomy. Flexible and market-sensitive remuneration systems and appraisal was seen as essential to boost quality and effectiveness of university administrators and academics. In June 2000, the committee released a report entitled “Fostering Autonomy and Accountability in Universities” which proposed autonomy in terms of financial and personnel matters to be granted to the two existing public-funded universities then, National University of Singapore (NUS) and Nanyang Technological University (NTU). The aim was to ensure that the public funds are used in efficient and effective way while ensuring compliance with the achievement of the desired outcomes (MOE, 2000). Since December 2000, the recommendations proposed by the committee have been progressively implemented. In 2005 the government introduced the University Corporatisation Act which changed the publicly funded universities into corporate entities (Lee & Gopinathan, 2007). Through corporatisation, the government hopes that the formerly public-funded universities could become more entrepreneurial, more competitive, and efficient. However it has to be noted that corporatisation does not make the universities become entirely independent of the state. Though greater autonomy has been granted, they would not become entirely autonomous. This was made clear in the UAGF Review Report:

Even as we seek to devolve greater autonomy to NUS, NTU and SMU, we remain mindful that our universities are vital national institutions and they have a public obligation to fulfil. They contribute to Singapore's progress and development through providing quality education, and knowledge creation. Hence, we need to ensure that our universities' missions remain firmly aligned with our national strategic objectives. At the same time, our Steering Committee proposes that the Minister for Education appoint the university Council members. In addition, the Steering Committee recommends that an enhanced accountability framework for universities to be introduced, comprising the existing Quality Assurance Framework for Universities (QAFU), and the proposed Policy and Performance Agreements between MOE and each university (MOE, 2005).

In order to develop Singapore as a regional hub of higher education, the government attempts to diversify the landscape of higher education by providing a wider choice of university education beyond the state-funded through reputable private universities (Tharman, 2005). Singapore is one of the largest market for transnational education in the world (Garret, 2005), particularly after Singapore commits to the World Trade Organization's (WTO) General Agreement on Trade in Services (GATS) (Lee & Gopinathan, 2005). The GATS is a multilateral agreement through which WTO members commit to voluntary liberalisation of trade in services, including education. The two major types of transnational education in Singapore are through foreign university branch campuses and external distance education programmes (Ziguras, 2003). External programmes are offered by foreign awarding higher education institutions in collaboration with local service provider. The statistics show that the number of such programmes has been steadily growing from the mid-1980s when the first programme was launched. There was a sharp increase of distance education programmes from 13,990 in 1997 to 25,400 in 1999 (Singapore Department of Statistics, 2001). By 2004, 36% of all higher education students were enrolled in transnational education programmes (Gribble & McBurnie, 2007). Ziguras (2003) suggests that if the rate of growth continues, there might be more students enrolled in foreign universities rather than in local universities.

These external distance education programmes are offered by major overseas universities mainly British institutions followed by institutions from Australia and a small number of institutions from the USA and other European countries. Amongst others, the UK universities are UK Open University, University of London, University of Hull, University of Birmingham, University of Manchester, University of Nottingham, University of Glasgow, University of Bedfordshire, University of Loughborough, University of Bradford, University of Sunderland, University of West of England, University of Wales, University of Wolverhampton, and University of Warwick. Some of the institutions from Australia are RMIT University, Monash University, Deakin University, University of South Australia, Murdoch University, Griffith University, Curtin University, University of Adelaide, University of Wollongong, University of Western Australia, University of Newcastle, Swinburne University of Technology, Edith Cowan University, Southern Cross University, and University of Sydney. While some of the institutions from the USA and other European countries are George Washington University (USA), Oklahoma City University (USA), Northeastern University (USA), University at Buffalo, The

State University of New York (USA), Grenoble Graduate School of Business (France) and International Hotel Management Institute (Switzerland). These universities offer various programmes both at undergraduate and postgraduate levels in collaboration with local service providers. Some of the big local private education institutions are Singapore Institute of Management (SIM), Management Development Institute of Singapore (MDIS), PSB Academy, TMC Academy, and Kaplan Singapore.

In mid 1990s, Prime Minister Goh Chok Tong announced the vision of making Singapore the 'Boston of the East' (Goh, 1996). The Singapore's education hub ambition was then further reflected in the speech by Teo Chee Hean, Minister for Education and Second Minister for Defense at the Alumni International Singapore Lecture on 7 January 2000:

Our vision, in shorthand notation, is to become the Boston of the East. Boston is not just MIT or Harvard. The greater Boston area boasts of over 200 universities, colleges, research institutes and thousands of companies. It is a focal point of creative energy; a hive of intellectual, research, commercial and social activity. We want to create an oasis of talent in Singapore: a knowledge hub, an "ideas-exchange", a confluence of people and idea streams, an incubator for inspiration (Teo, 2000)

In the attempt to realise the vision of making Singapore the 'Boston of the East', in 1998 the government launched the World Class University (WCU) programme to attract world-class universities such as the Massachusetts Institute of Technology (MIT), Johns Hopkins University and Georgia Institute of Technology, to establish a significance presence in Singapore (. It has received good responses from some 'brand name' universities as only within 10 years since the launch more than a dozen world class universities came to Singapore to establish campuses, centres, research laboratories, joint ventures and joint degrees. To name a few of developments this programme, elite Western business schools such as INSEAD and Chicago Graduate School of Business has established their campuses in Singapore, Stanford University has established joint graduate programmes with NTU in the field of engineering and environmental sciences, Cornell University has established joint graduate programmes with NTU in the area of hospitality management, MIT has joint graduate programmes with NUS and NTU in the area of engineering and computer sciences, and Duke University has established joint research and teaching collaborations with NUS. Two of the more significant developments of the programme would be in the collaboration between the government with the University of Pennsylvania Wharton School to establish the third public funded university; the Singapore Management University (SMU)' in 2000, and with MIT to establish the newest public funded university; the Singapore University of Technology and Design (SUTD) which will only matriculate its first intake of students in April 2012.

Five years after launching the WCU programme, EDB launched another internationalisation initiative 'Global Schoolhouse' mainly to attract fee-paying international students from all over the world. A myriad of educational programmes from pre-schools to graduate schools is provided (Yeo, 2003). The government hopes to change the position of education industry from an expenditure item into a major revenue-generating item in the economy. The Ministry of Trade

and Industry states that by capturing a later share in the global educational market, the government hopes to increase revenue from the education sector to about 5% of the economy in the next decade (Ministry of Trade and Industry, 2002).

Implications of the strategies on Singapore higher education landscape

Corporatisation and marketization strategies adopted by the government coupled with the growth of transnational higher education have changed the governance approach from the traditional state monopoly to state supervision model. This is manifested in the transformation of governance style from being centralised and dominated by state, into the policy style of diversification, deregulation and mobilisation. As a result the number of private local and foreign institutions has grown tremendously in the recent decade and the higher education market is no longer being only dominated by public institutions. This increasing number of transnational education has played a very importance role in meeting the education needs of local and overseas students in Singapore. It is especially true when the capacity of public-funded universities alone would not be enough to cater for the demands for higher education and to mount for all higher education programmes.

The corporatisation, privatisation and marketization of Singapore higher education imply potential governance contributions from private or non-state actors that might compensate for the decreasing capacities of nation state for providing education services. However, the proliferations of non-state actors and their role in higher education market, and the diversification of education services may not necessarily undermine the role of the government. On the contrary, the adoption of pro-competition strategies may have indirectly strengthened government role in steering public higher education sector efficiently (Mok, 2008).

The major initiative of WCU programme has also played a strategic role in helping Singapore gain the status as a premier education hub. The foreign education providers that are able to penetrate the market are usually top-notch universities in the world and have been specifically invited by the government to set up their overseas campus in Singapore or collaborating with local public universities (Lee & Gopinathan, 2007). Hence, the number of institutions entering the market has been strategically controlled. The government has been generous in providing financial help for these world class institutions set up their operations in Singapore. However, the government has also come up with a set of expectations which these universities are expected to live up to. This shows that the introduction of WCU programme is a strategic move to achieve the world-status as a premier hub of higher education in the region (Chan & Ng, 2008).

The implementation of the WCU programme has not always been successful. There were some setbacks in the process, such as the sudden withdrawal of the University of New South Wales (UNSW) in 2007 and the closure of the Division of Biomedical Sciences of Johns Hopkins University in 2006 (Chan & Ng, 2008; UNSW, 2007; Lee & Gopinathan, 2007). Despite these setbacks, the government through its Ministry of Education and various higher education agencies continue the development of transnational education in the attempt to internationalise Singapore's higher education to bring diversity in the higher education arena. This would give

local students and international students more choices and reasons to pursue higher education in Singapore and not elsewhere.

Issues and challenges in internationalisation of Singapore higher education

Singapore's attempt at internationalising higher education does surface several key issues and challenges. These issues and challenges are not specifically related to any of the above mentioned strategies and initiatives.

1. Commodification and commercialisation of education programmes

The conception and benefits of internationalisation of higher education have been narrowly defined by global neoliberalism representatives, such as WTO, the World Bank, the Organisation for Economic Cooperation and Development (OECD), as exclusively economic oriented (Jiang, 2008). Profit is the main target and motivation to increase trade in university education. This has led to the commodification and commercialisation of education. Education has become a commodity instead of a valued service. The knowledge economy has further justified the importance of knowledge to increase individual and national competitiveness in the global market place. Hence, higher education degree is often seen as a passport to have a successful career. This has resulted in an increasing number of people pursuing higher education overseas in order to secure a well-paid job in future. This trend has been prompted a major shift of the rationale to internationalise higher education to a much narrower economic imperative and hence undermining the other three rationales of internationalisation – political, cultural and academic rationales. Moreover, regarding higher education as a commodity could be problematic as it is a vital part of our culture and society and hence it cannot be treated as a simple commodity (Jiang, 2008; Altbach, 2002).

2. Increase in foreign 'degree mills' and low quality education

Balancing quality and quantity would be the main challenge faced by most of the countries in their attempts to internationalise their higher education sector (Lee and Gopinathan, 2008). Without proper quality assurance and regulatory framework, the growing number of private education institutions in Singapore could be problematic. Some of the problems could be manifested in the increase of foreign 'degree mills' and low quality education. The recent scandal of the issuance of fake RMIT degree by Brookes Business School is a testament of this (MOE, 2009a).

To address the issue, MOE has set established a new regulatory regime and set up a Council for Private Education (CPE) to oversee the implementation of the new regulatory regime for the private education sector (MOE, 2009b). CPE aims to raise standard of private education sector to become 'a trusted and well-regarded private education sector' through "raising standards in the private education sector through effective regulation, industry development and consumer education" as specified in its vision and mission statements (CPE, 2009).

3. Competition with foreign students to enter local universities

The global schoolhouse initiative mainly attempts to attract international students to study in Singapore. It aims to attract 150,000 international students to study in the city-state by the year 2015. In 2008, there were some 86,000 international students studying in Singapore. The growth is predicted to be similarly strong in the coming years. Many of them chose Singapore as it provides a comfortable and conducive environment to study, and the chance to get a Western education at a leading institution.

Singapore's motivation to attract international students is not solely for income generation or economic development. It is also driven by considerations of recruitment of skilled immigration or the quest for foreign talents. The latter is supposed to be a response to a low birth rate. This motivation, however, has received much critique and is often politicised, from the Singapore citizens' standpoint. The government faces criticisms towards the recruitment of foreign talents.

At national level, Singaporean generally understands the importance and significance of attracting foreign talents to come to Singapore to study and to hopefully to settle down in Singapore. However, at the individual level, Singaporean cannot help but to feel threatened by the growing competition between them and these foreign talents. Despite all government efforts to ensure that its citizens will always come first, they still face criticisms and negative perceptions that these foreign talents would create unnecessary competition between local and foreign students to enter public universities and employment market. Singaporean perceived the influx of foreign talents would deprive them of getting affordable quality education and good paying jobs.

Concluding remarks

The paper has reviewed and analyse major higher education reforms and initiatives in Singapore particularly in relation to the growth and development of internationalisation of Singapore's higher education. Noticeably the government is moderating its control over the governance of public-funded universities and injecting external market forces through into the higher education sector through intensification of transnational education. However, despite the government's promotion of greater diversity and autonomy in the tertiary education landscape, the government maintains centralised control through systems of accountability to, and funding from, the state. Hence, it has also been noted that these corporatisation, privatisation, deregulation, and mobilisation of the higher education market shall not be understood as an attempt to undermine the capacity and role of the government. Instead, these indirect policy tools may have enhanced the state capacity in steering the management of higher education sector more effectively (Mok, 2008).

The choice of market forces and the rise of transnational education in Singapore context have been highly political. The adoption of WCU programme, Global Schoolhouse initiative, corporatisation and marketization policies are strategically geared towards the ambition of pursuing a status as a premier education hub in the region. These policy tools and strategies have

been strategically adopted by taking into consideration political culture, nature of the state, and the unique socio-economic and socio-historical context (Stiglitz, 2005).

The government has certainly done a lot but there is much room for improvement. The government needs to address issues and challenges especially on the issue of quality of education. Through the newly established Council for Private Education (CPE), the government regulates Singapore private education sector. However, the effectiveness of CPE in trying to raise the standards and maintain the quality of education offered by the private education institutions is still uncertain. It will also be interesting to observe how the government addresses the issue of competition between its citizen and foreigners in term of access to quality education and employment market. On one hand, there is a need for the government to attract these foreign talents to support Singapore's manpower needs due to the slow population growth. On the other hand, there is a need to manage citizen's growing resentment towards the foreign talents due to competition to enter public-funded universities and employment market. This is an area that is worth studying.

Singapore is facing a growing competition from its neighbouring countries like Hong Kong and Malaysia which are also aiming to become a premier education hub in the region. Though the three countries have similar objectives, the strategies however, varies to suit the different political, social and cultural context. Recently, the Malaysian government has just announced the development of an education hub at Iskandar, Johor, Malaysia which is located just across the causeway from Singapore. This development could have a degree of impact on the development of transnational education in Singapore. This could also be another area for future study.

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Title: Localization and specific resources for instructors

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Localization and specific resources for instructors
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Abstract

This paper is exclusively concerned with the learning of English as an international language and this concern is materialized in two objectives. First, the paper will make the case that localization is the key to both internationalization and globalization. Proper localization brings forth a rich environment of learning opportunities in otherwise input- and practice-deprived foreign language scenarios. Moreover, proper localization makes use of cognitive and social assets that, while not directly linguistic, can provide decisive momentum to the learning process. The best example of this is local role models. Second, the paper will make available specific information and resources to aid instructors in the teaching of English as an international language regardless of the L1 of their students.

Introduction

Very briefly, internationalization and globalization are not new events in human history. The interaction of individuals from diverse cultures has taken place beyond historical records. Some historians place long-distance commerce to have taken place as far back as 150,000 years ago (Watson, 2005), that is, at the very onset of our species as modern human beings (Human Evolution, n.d.). The exchange of goods and ideas, the awareness of and interaction with “others”, can be considered to be an elementary building block of what it means to be human. Industrial and technological developments have only served to enliven the possibility, quality, and pace of interaction between individuals as well as between cultures. However, while nowadays a large segment of humanity can reach each other (as well as a seemingly infinite amount of information) by means of no more than a few movements of a finger, it is easy to forget that, for example, the internet has not been in wide use for more than fifteen years. Therefore, it is relevant to be neither exuberant nor mortified by the opportunities and challenges presented by internationalization and globalization. An error of flippancy in these matters can be dearly expensive.

The case for caution cannot be made more explicit than when considering the matter of an international language. Regrettably (although understandably), language is often a dear symbol of cultural identity. Bar phobias, foreign languages are acknowledged, and perhaps accepted, as long as they remain foreign. When, by necessity or chance, a foreign language appears in the landscape of any culture, it is not beyond comprehension to consider it a form of infringement. Diplomacy and caution are essential for, while from a linguistic perspective all languages are of equal value, the very *idea* of a new language is inevitably given a cultural rank or status, be this positive, negative, or, most likely, a very complex combination of many factors. Ultimately, apprehension is to be expected regardless of potential.

Localization can neutralize and ameliorate the assimilation of a foreign language and lead to its acceptance as an additional language at the service of a culture. At a minimum, an additional

language carries gifts, so to speak, with which a culture can innovate its capacity for self-expression. There is nothing inherently “wrong” with the 6,000 or so languages still spoken on the planet and there are no biological imperatives preventing any adult from becoming fluent in any of them regardless of previous linguistic experience. The abstract posits that localization is the *key* to both internationalization and globalization and this necessarily concise introduction has aimed to elaborate the rationale for such a statement.

Internationalization and globalization

There is no shortage of definitions for either term. For example, globalization can be understood as “the compression of the world and the intensification of consciousness of the world as a whole” (Robertson, 1992). This definition is not at odds with those of other authors (Pennycook, 2003; Scholte, 2006). Unsurprisingly, this conceptualization of globalization is timeless. The psychological demolition of the frontiers that confine social spaces is, ultimately, a realization made (or not made) by an individual regardless of the particular assets and opportunities at his or her disposal. This acknowledgement of a global community has been brought about throughout history again and again by the opportunities offered by contemplation as well as maritime travel, the building of roads, the laying of the locomotive tracks, the telegraph and telephone, commercial air travel, developments in telecommunication, or, in a hypothetical future, teletransportation (as it is said in popular culture: *you ain't seen nothing yet*).

Moreover, a guarded downplay of globalization is only natural when one realizes that globalization does not have any *real* psychological effect on most people. Having dinner at a Lebanese restaurant, no matter how often, does not imply any manner of familiarity with Lebanese culture, history, or politics. Furthermore, most large city dwellers, whether in Madrid or Dhaka, confine their movements as well as their psychological stretch to small selected areas in no way representative of their cities as a whole. The same applies to regions as well as cultures and nations. Individuals tend to have fragmentary and strikingly limited knowledge of the social spaces they inhabit. Therefore, when speaking of globalization, it is wise to consider the construct of “imagined community” (Anderson, 1991) by which we are forced to acknowledge that social spaces are, in themselves, as feeble as the boundaries that limit them and, quite possibly, define them.

Truly, there are individuals that are enlightened, or come to be so, in this regard; individuals that are able to balance the sketchy notions of cultural self with those of global self. However, there is no evidence from which to conclude that the relative occurrence of these individuals is greater now than in any other time in history. Rather, it is safe to hypothesize that globalization is, and has always been, part of an inherent set of resources available to us as a species.

Similarly, internationalization could be defined as something grand and surprisingly novel. It is evident that, in a narrow sense, there must be “nations” in order to exist international relations. However, the construct of “nation” is an abstraction that can find its realization in a tribe as well as in a republic. In Huang (n.d.), we find a two-fold definition of internationalization credited to Abe (2004), namely, that of *bottom-up* internationalization and *top-down* internationalization. The former describes the individual as freeing himself or herself from the shackles of national identity, that is, the individual that yields equal acceptance of others regardless of their origin.

The latter refers to the “institutional promotion of liberalization by leaders” of governments, businesses, organizations, and so on. As adequate as this definition might be, it simply brings forth long existing human tendencies.

In sum, it is relevant as well as useful to consider the perspective that internationalization and globalization are fundamentally inherent characteristics of human beings. Throughout our scarred history and despite the many ills and monstrosities we have inflicted upon each other, there has also always been an innate drive to relate, to collaborate, to share, to assimilate. In fact, one could safely argue that the perseverance, against all odds, of this innate drive has proven its worth many times over.

English as an international language

There is nothing special about English that is not special about any other language. From a linguistic point of view, the English language is equipotential, that is, it does not have characteristics that make it superior or inferior to other languages. No language does. Therefore, there is no linguistic rationale that suggests English is best or worst suited to be the language used for international communication. In fact, English is but one of the many languages that has been and is used as a lingua franca. It could not be any other way. As Janse and Tol (2005) note, it is estimated that only 500 years ago there were twice the number of languages that there are today. It is easy to conceive a world, several thousands of years ago, when language diversity was pervasive. Humans have had the need for *linguae francae* innumerable times as well as the capacity to learn other languages with relative ease. In fact, even today, it is estimated (although no real study could be carried out) that up to 60% to 70% of the world population is bilingual or multilingual (for a good introduction to the topic, see Romaine, 1995). It is therefore useful to consider that humans have a natural predisposition towards multilingualism.

From the point of view of language learning (and informally), English is a language of average complexity. Its phonology is relatively difficult. Its morphology is relatively simple. Its syntax is of relatively average difficulty. Moreover, English uses an alphabet common to several other languages, even if somewhat ill-suited to its own phonetic characteristics (thus, minor spelling problems). This common and rather simple alphabet makes English more amenable to reading (a crucial activity in language learning) than if it used, for example, ideograms. There is, of course, nothing wrong with ideograms but they prove to be a learning challenge even to those fluent in the respective languages. Last but not least, English is the end result of the accretion of other languages, as is most likely to be the case for all languages. Although classified as a West Germanic language, English is originally one of many Anglo-Saxon dialects that, in the 8th and 9th centuries, assimilated (or was assimilated by) a North Germanic dialect and, starting in the 11th century, a Romance language known as Old Norman. The end result of these linguistic promiscuities is that the English language possesses what is referred to as a “dual” vocabulary. This is an important asset for those learners whose L1 (or Lx) is of Germanic or Latin origins.

In some quarters, much ado is made about English and its speakers enjoying some sort of privileged status out of which its current use as the language of international communication has resulted. This is absolute nonsense and, importantly, detrimental to language learning. The most evident example of this absurdity is the magical knowledge gifted upon native speakers by virtue

of their very nativeness. Possibly arising out of a misunderstanding of Chomsky's "ideal speaker", there are those that consider themselves Shakespeares among non-natives even when illiterate among their own. The hard and useful truth is that the degree of fluency any speaker achieves in any language, be that one's mother's tongue or not, is the direct result of the amount of study and practice of such a language. English native speakers are not all alike in their knowledge of the English language just as, for example, Japanese native speakers are not all alike in their knowledge of the Japanese language. It is indeed preposterous that there remain educated people that believe any human being can have "perfect" knowledge of a language. Nonetheless, the proof is in the pudding. It is embarrassing to observe nativists claim that their "intuition" is unfailing when they are unable to come to an agreement amongst themselves regarding what is "correct" or "incorrect". Of far more relevance than this unpleasant legerdemain is the necessity to finally get across the notion that English, like any other language, can be mastered if sufficient effort is invested in the endeavor.

Localization

Hopefully, the approximately thousand and a half words preceding this section have served to rub the shine off the "big words" internationalization and globalization as well as to expose the false idolatry of language natives, in general, and of English natives, in particular. Again, from a language learning perspective, there is nothing to be gained (yet much to lose) from the undeserved glamour. Learning a language properly is a sufficient challenge as it is, be this the language one speaks since infancy or since the day before yesterday. It is important to internalize that language learning (as well as internationalization and globalization) are most useful when understood as inherent traits of our species.

As mentioned, it is posited that localization is the key to the successful integration of a new language into a culture. Otherwise, one is pretending to make an omelet without breaking an egg shell. This is possible, of course, but it is cumbersome and uneconomical in the long run. Since Japanese have managed to do so, Japan is a good example of this paradox.

Literally arising from the ashes of World War II, Japan soon became a very powerful economic force in the international scene. This was not accomplished by the closing of Japan to the outside world. The opposite is true. Japan threw itself outwards and it did not do so by expecting the "world" to speak Japanese. Rather, a collection of individuals stepped up to the task of learning other languages, mainly English, the language spoken in the most profitable markets. This, these individuals accomplished with flying colors and the rewards for their efforts are in plain view. However, this collection of individuals never was a *community* of English speakers and it remains so to this day.

Plainly stated, there is no Japanese variety of English because there is no community of Japanese that speak English to each other. English remains a foreign language because the language learning efforts were *individual* and remain so to this day. No English-speaking Japanese has benefitted from the existence of a community of English-speaking Japanese. Rather, each English-speaking Japanese has been forced to find his or her own way towards fluency. This situation is clearly uneconomical and counterproductive. It cannot be sufficiently emphasized. The situation is uneconomical because, as mentioned, individuals are forced to inch their way

towards fluency with no more than their own efforts. The situation is counterproductive because once this generation of individuals retires so will their hard acquired fluency.

In particular regard to Japan and the role of English as an international language, localization would find its realization in a Japanese community of English speakers. Such a community would provide Japan with the same benefits other countries (with their own English varieties) have, namely, ease of assimilation into the culture, bidirectional flow of linguistic assets together with the idiosyncratic creativity associated with this process, contextualization and acceptance of English as an additional language with which to convey societal prospects, concerns, and so on.

Shiroza (2010) argues that the evidence indicates that Japanese have been responsible for English language materials design and development as well as course curricula for decades. Moreover, “Japanese teachers of English have been primarily responsible for teaching and providing a role model for their students”. Interestingly, Matsuda (2003) explains that current English language learning practices in Japan rely on an idealized variety of Inner Circle English which, she elaborates, “neglects the real linguistic needs of the learners, eclipses their education about the history and politics of English, and fails to empower them with ownership of English”. The contradiction between these two observations is, precisely, the situation of ELT in Japan.

Students arrive at university lacking functional fluency and confidence in their English language skills despite eight years of study. Secondary school teachers cannot be blamed for this because they are burdened with institutional and curricular demands that target exam preparation. While at college or university, students are generally taught by English native speakers in so-called communication courses and by Japanese natives in so-called grammar courses. The rationale appears to be that the English native will be more effective when the English language is in actual use while the Japanese native will be more effective when the English language is the object of study and the Japanese language is needed for explanation. Aside from the age-old demonstrated utter failure of this approach, this rationale explains a great deal by means of what it seeks to hide, namely, the unjustified lack of confidence that Japanese English-speaking teachers generally have in their own English skills. It cannot be otherwise since the teachers themselves are former students of the same educational system.

There seems to exist, in Japan, a deliberate effort of self-sabotage. For anyone with sufficient experience in the Japanese educational system, recent governmental proposed initiatives (i.e. teaching of English at elementary schools or the idea of sending Japanese English teachers to “native” countries for a year or two) are watermarked with failure as have been many other initiatives in the past. Similarly, the apparently perennial need to reinvent the English teaching curricula at universities is again proof that what is in place is considered not to work and that what is sought after will not be given a chance to work. There is a palpable need to step outside this cycle of self-sabotage. For those unfamiliar with the Japanese situation, it will come as a surprise to know that there is a widespread belief in Japan that “Japanese cannot learn English” (seemingly, the other 6,000 living languages are OK). It is nothing but a myth, of course, yet it is at the service of a cultural self-defense mechanism (both peculiar and subtle) that will not be elaborated on here as it is beyond the scope of this paper. Nonetheless, this myth is behind the designed-to-fail strategies of English language teaching and learning in Japan.

It should be noted that Japanese students do learn what they are taught. The educational system is successful in this regard. The problem is that the end result sought after is not fluency in English. Rather, students acquire a great deal of passive knowledge of English and this knowledge is rarely activated at any stage of instruction (Waring, 2006). Thus, when expected to engage in real-time activities, students lack the internalization and mental agility with which to perform effectively. This situation alone opens the door wide for self-doubt and lack of confidence. Unfortunately, there is more. If we consider that the cultural notions surrounding the English language are particularly critical of accented speech, be that native or non-native (Derwing, 2003; Derwing and Munro, 2005; Fraser, 2002; Gass and Varonis, 1984; Kachru and Nelson, 2006; Lippi-Green, 1997; Matsuura, 2007; Matsuura, Chiba, and Fujieda, 1999; Setter and Jenkins, 2005), English-speaking Japanese tend to prefer to remain silent, thus excluding themselves from the very activities that would help increase their fluency.

Role models

Bowing to authority is another characteristic of our species. Properly handled, it is a powerful tool in knowledge and skill acquisition, in general, and language learning, in particular. The acknowledgement of authority is perhaps best manifested in its effect on attention, a crucial aspect of learning. In the same manner that a court or a hospital implies a concrete oligarchy, the classroom is a physical location that conveys authority. The teacher is traditionally granted this authority freely and it is for the teacher to use it or lose it. If human beings are gullible, our youngsters are only more so. A role model has no better place to set his or her roots than in a classroom.

English-speaking Japanese teachers need to step up and speak English in their classes. It is as simple as that. Students need to see Japanese adults, Japanese in positions of authority, speaking English to each other and to non-Japanese with fluency and ease. It is not sufficient to “explain” the language although it would be wonderful it were so “simple”. The reality is that language learning implies the acquisition of a skill and, in no manner, the exclusive acquisition of passive knowledge. If the nativeness of speakers of any language is of any use, it is to demonstrate that a language can be spoken without any linguistic or metalinguistic knowledge of it.

It would be naïve to propose that the efforts of Japanese teachers of English will alone be sufficient to bring about a community of speakers of English. Rather, the proposition is that their efforts will contribute to the eventual realization of a Japanese variety of English. It is clear that more than just the educational institutions need to be enrolled in the effort. However, the classroom and its inherent authority is an excellent place to promote the use of English as a natural form of self-expression that, in no manner, challenges the Japanese culture and identity. As Takada (2000) eloquently explains: “If Japanese EFL teachers strive to expand their expertise and teach with zeal as ever, more students will develop the English proficiency required in the international community as foreign language speakers. If their English proficiency helps them succeed socially and professionally, and if their success is widely publicized, they will serve as role models for other Japanese EFL learners. If these successful EFL learners increase in number, the role Japanese EFL teachers play will be positively evaluated.”

It is important to note that the fluency of Japanese English teachers is not in question. In fact, their knowledge, abilities, and efforts are recognized and applauded. However, the English language is not sufficiently used while teaching thus conveying to students the impression that, unlike the Japanese language, English lacks purposefulness and communicative value. The following section presents specific activities that promote the active use of English in the classroom.

Specific instructional resources

The following subsections outline four resources that should be possible to implement by any teacher anywhere. At the same time, the resources discussed are but a few of the many available to the experienced language teacher. The discussion that follows should not be considered comprehensive or exhaustive.

Japanese English-speaking teachers

The most important resource is the English-speaking Japanese teacher. These teachers are in a privileged position to provide students with the role model of a confident and skilled Japanese-English bilingual, thus demonstrating the legitimacy of Japanese speakers of English while at the same time increasing the amount of input students receive. At the onset, a bilingual approach could be best suited. Switching back and forth between languages is a useful skill on its own. In general, however, the use of English whenever possible is preferable. A natural introduction to English language use can take place by the teacher accepting, for example, a student formulating a question in Japanese while the teacher systematically responds in English. The opportunities for English use must be first sought out and created by the teacher thereby providing an example for students. Gentle encouragement of English use among Japanese, and within the parameters of the implicit authority of the classroom, can create an irreplaceable and safe environment for students to err and succeed, that is, for students to explore their own manner of self-expression in English without concern for dire consequences.

The most frequent words in English

The most frequent words in English provide the framework upon which fluent speech and writing is constructed. Lexical distributions in the 100-million running words British National Corpus (90% written, 10% spoken) show that nearly 50% of all language used is confined to 100 words, 75% to 2,000 words, and 85% to 5,000 words (Leech *et al.*, 2001). Moreover, and possibly counter-intuitive, the most frequent words in the English language are one of the features shared across English varieties. Analyses of the ICE corpus (60% spoken, 40% written) representing seven international varieties of English (8.5 million running words) indicate that: “Only 100 words, together with their repetitions, account for over half of all the words used by speakers. The 5,000 most frequent words, together with their repetitions, account for an average 95% of all words used by speakers regardless of variety” (Gilner, 2010). Gilner extracted a list of little over 1,000 words that are the most frequent in all seven varieties and account for 80% of all running words regardless of English variety. That is, 8 out of every 10 words spoken or written in any of these seven varieties of English is in Gilner’s word list. This list, called ICE-CORE, can be freely downloaded from:

<http://www.sequencepublishing.com/academic.html>

The broad agreement between the data presented by Leech *et al.* and Gilner is not anecdotal. A substantial amount of research shows that, indeed, the most frequent words in the English language account for most of the words used by fluent speakers (Adolphs and Schmitt, 2003; Ayres, 1915; Faucett *et al.*, 1936; Horn, 1926; Gilner and Morales, 2008a; Lorge, 1949; Nation and Hwang, 1995; Nation and Waring, 1997; Palmer, 1931). The implications for language instruction are clear. “Learners could [be taught and therefore] use less frequent words, use them well, and communicate effectively with them, but they would be doing so with words different from those used, anticipated, and preferred by fluent speakers” (Gilner and Morales, 2008b).

Several word lists of the most frequent words in the English language exist. It is not important which one is used as their content is alike. The ICE-CORE, the General Service List (GSL), Paul Nation’s list of word families (available from his website), or the JACET 8,000 are equally useful. What is important is that teachers become acquainted with the most frequent words and use them deliberately when addressing students, be that in examples, explanations, or responses.

Reading aloud

The ability to read aloud well, in any language, is widely appreciated. Teachers who can provide their students with a model of how to read aloud well equip them with a useful and generalizable skill to draw on later in life.

Indeed, teachers should read aloud to their students. By doing so, not only will they be promoting better understanding of a given text, but they will also help students understand that the ability to read aloud well goes far beyond pronunciation. It relies on enunciation, poise, confidence, and the power to engage the listener. Once a model has been provided, the activity can be expanded to include repeated reading, shadowing, coral reading, and speed reading.

The potential benefits of using this technique include reinforcing sound-spelling associations, providing a means of oral proofreading, and encouraging autonomous learning as a task students engage in on their own (Gabrielatos, 2002). Selected scenes from popular movies or television shows are potentially engaging and entertaining material from which to base reading aloud as well as drama reenactment activities. Wrembel (2001) observes that the “emotional involvement and context provided by the dramatic situation foster communicative competence and lead to increased empathy and self-esteem”. It should be pointed out that any text regardless of origin can be used as reading aloud material provided that it is adequate for the level of competence of the students. Ultimately, and as Gilner and Morales (2010) observe, these activities serve to increase expressiveness and fluency.

Extensive reading

Extensive reading involves doing as much accessible meaning-focused reading as possible. That is to say, students read a lot of material that is well within their current proficiency level, focusing on the content of the reading.

The book flood studies provided empirical evidence that young English foreign language learners who engaged in extensive reading outperformed those in matched control groups who received form-focused instruction on various measures of proficiency (Elley, 1991; Elley and Mangubhai, 1983). Furukawa (2006) reports that extensive reading helped junior high school students in Japan increase their reading levels to match those of students two years ahead of them on the ACE test, a nationwide exam developed by the English Language Proficiency Assessment Association. Day (n.d.) provides “an overview of representative studies conducted in both ESL and EFL environments with diverse populations, from young children to adults.” Taken together, findings suggest that extensive reading helps students improve, not only reading speed and comprehension, but also expressive fluency in both written and spoken language.

While extensive reading is usually a silent and individual activity, graded readers can also provide the basis for reading aloud activities. Working with comprehensible materials is a means of reinforcing previous-learned, partially-known features of language. It provides for the strengthening of cognitive connections and associations with each encounter and fortifies the cognitive database of linguistic samples that drives language production (Ellis, 1996, 2002; Tyler, 2010). This results in a larger sight vocabulary, deeper knowledge of word senses as well understanding of how words combine with other words (i.e. collocational and colligational knowledge).

Summary

It is useful to demystify the English language. It is but one of many languages and it is at the service of its speakers, whoever they might be. As Honna (2010) points out “when Japanese speak English with Koreans, there is no room for American or British culture. What happens in this situation is that Japanese behave like Japanese and speak English in Japanese ways, and so do Koreans, Chinese, Singaporeans, Filipinos, Thais, Indians and many others. This is the basis of English becoming a multicultural language in Asia and around the world.”

The need for the localization of English in Japan should be evident. In order to move towards this localization, ELT in Japan requires a new purpose; in Honna’s words (2010) “internal” internationalization. That is, Japanese people using English in Japan to help connect Japan to the global community. Honna suggests that English be considered a Japanese language for international communication and states the need “to explore effective pedagogy for self-expressive and output-oriented activities”.

One element underpinning the lack of English localization in Japan is the absence of local role models. This paper has argued that, without these local models, the potential emergence of a community of English-speaking Japanese will be severely hindered. At this point in time when English is the language of international communication, any culture, society, or nation that does not have a community of English speakers, that has not undergone a process of localization, is at a disadvantage because it is dependent on the isolated and expensive efforts of individuals.

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**Malaysian Undergraduates' Beliefs, Views and Motivation
for Learning Japanese as a Third Language**

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Abstract

Learning a foreign language is not a unique phenomenon in today's globalised world. A survey conducted by Japan Foundation shows that approximately 2.98 million students are studying Japanese language in over 133 countries around the world, indicating that Japanese language is one of the most popular foreign languages. Southeast Asia ranks number two behind East Asia in the list of most number of students learning Japanese language, with Malaysia ranking at number 12. This study attempted to discover the beliefs, views and motivation of Malaysian undergraduates taking Japanese as a foreign language. The participants of the study were 150 undergraduates enrolled in various degree programmes at a Malaysian university. The study employed a survey design using questionnaire which consisted of four sections. The first section asked about the participants' demographic information. The second section focused on the participants' beliefs about the Japanese language. The third section concentrated on the participants' views about their personal abilities in the language. The fourth section enquired about the participants' reasons for taking the Japanese language course. Each item in the second, third and fourth section was followed by a 4-point Likert scale with options labeled with strongly agree, agree, disagree and strongly disagree. The findings indicate that most of the students believe that listening and speaking skills are more difficult to acquire compared to reading and writing skills. While the majority of the students feel that they are good in reading, listening and writing, more than half of the population is not very confident with their ability to speak in Japanese language. As for reasons for choosing to learn Japanese language, although a mix of integrative and instrumental reasons were mentioned, integrative motives seem to rank higher in the students' list. The paper also discusses the implications of these findings on the teaching and learning of Japanese as a third language at tertiary level.

Keywords: Japanese language, foreign language, students' belief, views and motivation

Introduction

Japanese Language Education in Malaysia

Watanabe (2008) divides Japanese language education in Malaysia into four major phases. The first phase is from 1941-1945 during the Japanese army occupation in Tanah Melayu. During this phase, Japanese language was taught as the main language. The second phase refers to the time from the Japanese army departure from Tanah Melayu due to their defeat in the Second World War until 1960s. During this time frame, the expansion of Japanese language halted for a while. The third phase started in mid 60s until 1981. During the third phase, Japanese language was then taught in local universities with University Malaya being the first to offer the language in 1966. The fourth phase started in 1982 after the former Prime Minister of Malaysia Tun Dr Mahathir Mohamad launched the 'Look East' policy and it continues until the present time.

In Malaysia, the Japanese language programmes offered can be divided into 3 major categories. The first category is the degree programmes in Japanese studies; for example the Bachelor of Languages and Linguistics specializing in Japanese offered by University Malaya. The second is the preparatory programmes which aim to equip students with Japanese language skills in order to enable them to pursue their studies in Japan. The Special Japanese Language Preparatory Programme offered by University Malaya (The Japan Foundation, 2010) and INTEC Universiti Teknologi Mara (UiTM) (International Education Centre, 2010) are examples of such programmes. The third is the Japanese proficiency courses offered by tertiary institutions to equip students with the necessary language skills for social, academic and work related purposes such as the courses offered at Universiti Kebangsaan Malaysia, Universiti Putra Malaysia, Multimedia University and others (The Japan Foundation, 2010). Japanese proficiency classes are also conducted in Malaysian schools. It started in 1984 in six residential secondary schools where the language was taught as a second foreign language and it was then expanded to daily schools in 2005 (The Japan Foundation, 2010).

A survey by the Japan Foundation (2008) indicate that there are about 142 academic and non-academic institutions in Malaysia offering Japanese language to 22,920 students and this figure places Malaysia at the 12th position on the list of countries with the most number of students learning the Japanese language. In addition, Malaysia also ranks number 10 in the list of Japanese language learners at school level.

According to the Malaysian National Higher Education Strategic Plan Beyond 2020 (Ministry of Higher Education, 2007), "Proficiency in the third language is vital for developing human capital that drives the k-economy as well as gears the country towards competitive innovation in the international arena," (p.62). Malaysian universities are also encouraged "to provide learning opportunities for students to be proficient in a third language such as Mandarin, Tamil, Japanese, French or Spanish," (p.66). In relation to Japanese language, the number of Japanese language learners is expected to increase rapidly with the Malaysian government's effort (Utusan Online, 2009).

Although currently Malaysia ranks number 12 in the list of most number of students learning Japanese language in East Asia, empirical studies on the students learning the language is rather scarce. There are also calls for a need to conduct more research in this area particularly concerning Malaysian students learning foreign language at institutions of higher learning (e.g.

Ainol & Isarji, 2009; Isarji, Ainol & Sahari, 2007). This study is an exploratory study which attempts to discover the beliefs, views and motivation of students who are learning Japanese language as a foreign language (JFL) at tertiary institutions in Malaysia.

Students' beliefs and views about language and language learning

Beliefs and views are considered as a central construct in every discipline that deals with human behaviour and learning (Ajzen, 1988; Bernat & Gvozdenko, 2005; Fishbein & Ajzen, 1975;). According to Breen (2001), in classroom context, the beliefs, views and other metacognitive knowledge that learners bring with them have significant effect on learning and performance. Bernat & Gvozdenko (2005) further elaborates this with an example in the second or foreign language context. According to them, second or foreign language students may hold strong beliefs and views about the nature of the language that they are studying, its difficulty, the process of acquisition, the success of certain language strategies, expectations about achievements. Identification of these aspects and reflections on their potential impact on language learning and teaching in general, as well as in more specific areas such as the learners' expectations and needs, can inform future syllabus design and teacher practice in the course. Pedagogy has the capacity to provide the opportunities and conditions within which these learners' contributions are found to have a positive effect upon learning and may be more fully engaged (Arnold, 1999; Breen, 2001).

Many studies have investigated learner beliefs and views in different contexts (Chawhan & Oliver, 2000; Cotterall, 1995; Horwitz, 1988; Kim-Yoon, 2000; Yang, 1992). Kim-Yoon (2000) for example, identified the beliefs of 664 EFL learners in Korea, while Yang (1992) explored the beliefs of over 500 students in Taiwan. The findings of these studies suggested that learner beliefs and views about language learning are context-specific. These studies support the fundamental arguments raised by previous researchers that the understanding of learner beliefs and views can enhance the language learning process. They concluded that language teachers' consciousness of learners' beliefs and views "may contribute to a more conducive learning environment and to more effective learning" (Chawhan & Oliver, 2000, p. 25).

Students' motivation for language learning

Motivation in education is generally understood as 'a trigger of students' thought of engaging in a particular subject, and maintains the intensity of acquiring the knowledge' (Matsumoto & Obana, 2001, p.49). Motivation is considered as one of the most important requirements for learning. Hilgard et al. (1979) state that motivation gives direction to learning of the subject. Logan (1969) says that motivation influences what and how learners learn. Just like in any learning situation, motivation is also an important factor in learning a foreign language. According to Matsumoto and Obana (2001) when learners start learning, they may already have some motives and these motives may have strong implications on their expectations and performance. Thus, just like in the case of beliefs and views, an understanding of learners' motives can be very helpful in planning teaching and learning activities that would have more meaningful impact on students' learning.

Gardner and his associates (1959, 1972, 1975, 1976) have conducted extensive studies on motivation in relation to language learning. They have suggested with two distinct motivation categories; integrative and instrumental oriented motivations. The former means that the learner

wishes to identify him/herself as part of the community in which the target language is spoken. The latter occurs when the learner finds the utilitarian value in learning a language, such as a future career perspective. Integratively motivated individuals experience enjoyment in the pursuit of their interests and in the absence of external rewards or controls (Deci & Ryan, 1985; Pintrich, 2000). Gardner and his associates conclude that it is integrative motivation which promotes second/foreign language acquisition. However, this proposition has been criticised and considered not to be applicable universally to language learning. Many studies have pointed out the lack of evidence for integrative motivation particularly for foreign language learning contexts (Dörnyei, 1990; Lukmani, 1972; Skehan, 1991; Strong, 1984; Wenden, 1987).

Closer to home, Ainol and Isarji (2009) investigated Malaysian undergraduates' motivation to learn a foreign language. The findings reported they were motivated for both integrative and instrumental purposes. In relation to motivation, the paper intends to examine whether instrumental, integrative or both types of motivation drive the desire to learn Japanese as a Foreign language (JFL) among Malaysian undergraduates.

The Study

Knowledge of students' beliefs, views and motivation in foreign language learning contexts have been pointed out as crucial for teachers, curriculum designers and policymakers (e.g. Ainol et al., 2007; Chawhan & Oliver, 2000; Isarji et al., 2007; Matsumoto & Obana, 2001;). Despite this, to the best of our knowledge, no study has yet explored the context of Malaysian students. Thus, the present study aims to investigate these aspects in relation to JFL learning context in Malaysia.

Given the importance of these metacognitive factors in language learning, three pertinent questions emerged:

- 1) What are the Malaysian undergraduates' beliefs about the Japanese language?
- 2) What are the Malaysian undergraduates' views about their personal ability in the Japanese language?
- 3) What motivates the Malaysian undergraduates to choose to learn the Japanese language as a foreign language?

To fill the gap in this area of research, the objectives of this study are twofold: 1) to determine the JFL learners beliefs, views and motivation in studying JFL and 2) to discuss the possible implications of these on teaching and learning of JFL. The results of this present study are beneficial to JFL teachers, helping to boost better understanding of the beliefs, views and motivation of Malaysian undergraduates. An insight from the analysis of the learners' beliefs, views and motivation will be used to determine a range of teaching learning strategies to be used in JFL classes to improve both Japanese teaching methodologies and learning outcomes.

Context of the study

Japanese language learning at UNIMAS

Japanese language learning in Universiti Malaysia Sarawak (UNIMAS) is offered as one of elective subjects by the Centre for Language Studies, and it is open to all undergraduate students.

During the study, two levels of Japanese language courses were offered. The first level is for students who do not have any basics in the Japanese language and the second level is offered to students who have basics in the language and it is also open to undergraduates who have passed the Japanese Level 1 course. The courses are taught by native Japanese and non-native instructors with suitable qualifications in teaching Japanese.

Both Japanese Level 1 and Level 2 courses focus on developing four language skills that are listening, speaking, writing and reading for communicative purposes. The courses aim to develop students' social communication skills in the Japanese language by providing them with opportunities to use the language for various spoken purposes in a wide range of everyday situations. The course also helps to develop students' understanding of the Japanese culture. At the end of the Level 1 course, the students are expected to be able to read and write simple texts in Hiragana and Katakana, two of the three types of Japanese characters. They should be able to carry out simple everyday conversations and have certain knowledge of Japanese culture. Meanwhile, after completing the Level 2 course, students are expected to be able to comprehend and write short texts, and communicate needs and ideas in everyday situations.

Methodology

Participants

A total of 150 undergraduate students at UNIMAS participated in this study. They were of different ethnic groups and faculties as shown in Table 1 and Table 2. Only students who were enrolled in the Japanese Level 1 course were included in the study because students continuing to Japanese Level 2 course may have different beliefs, views and motives as suggested by Matsumoto and Obana (2001).

Table 1 : Ethnicity of Participants

Ethnicity	No. of Participants	%
Chinese	76	51
Malay	39	26
Iban	14	9
Bidayuh	7	5
Indian	5	3
Melanau	3	2
Bisaya	2	1
Bajau	1	1
Dusun	1	1
Irranum	1	1
Rungus	1	1

Table 2 : Participants' faculty

Faculty	No. of Participants	%
Resource Science and Technology	44	30
Economics and Business	38	26
Engineering	20	13
Cognitive Science and Human Development	19	13
Social Science	14	9
Applied and Creative Arts	8	5
Computer Science and Information Technology	6	4

Data collection instrument

The study employed a survey design using questionnaire. The questionnaire consisted of four sections. The first section asked about the participants' demographic information. The second section focused on the participants' beliefs about the Japanese language. The third section concentrated on the participants' views about their personal ability in the Japanese language. The fourth section enquired about the participants' reasons for taking the Japanese language course. Each item in the second, third and fourth section was followed by a 4-point Likert scale with options labeled strongly agree, agree, disagree and strongly disagree.

The questionnaire was distributed to the students at the end of their second last class of the course. The data were analyzed in terms of percentages of responses to the given choices.

Findings and discussion

Undergraduates' beliefs about the Japanese language

Table 3 shows the results for the undergraduates' beliefs about the difficulty in acquiring Japanese language skills. As shown in Table 3, the level of agreement distribution revealed a much higher moderate beliefs (between 22% to 48% for agree and between 39% to 68% for disagree) compared to extreme beliefs (between 3% to 13% for strongly agree and between 3% to 10% for strongly disagree) about the difficulty level in acquiring the different Japanese language skills.

Table 4 shows the overall results for bilateral distribution (agreement and disagreement). A close examination of the bilateral distribution shows rather high agreement for difficulty in acquiring listening (58%) and speaking (57%) skills, moderate agreement for writing (40%) and low agreement for reading (25%). Figure 1 shows the graphical representation of the results in Table 4.

Table 3 : Response patterns of participants on beliefs about the Japanese Language

Item	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
The most difficult skill to acquire in Japanese language is listening skill	13	45	39	3
The most difficult skill to acquire in Japanese language is speaking skill	9	48	39	4
The most difficult skill to acquire in Japanese language is reading skill	3	22	68	7
The most difficult skill to acquire in Japanese language is writing skill	8	32	50	10

Table 4 : Distribution patterns of agreement and disagreement

Item	Agreement (%)	Disagreement (%)
The most difficult skill to acquire in Japanese language is listening skill	58	42
The most difficult skill to acquire in Japanese language is speaking skill	57	43
The most difficult skill to acquire in Japanese language is reading skill	25	75
The most difficult skill to acquire in Japanese language is writing skill	40	60

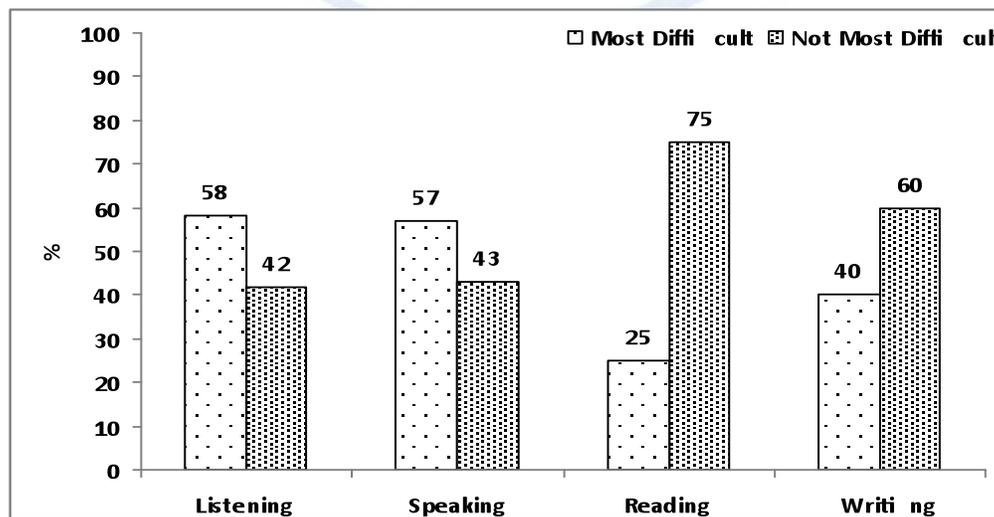


Figure 1: Graphical representation of the bilateral distribution

Overall the findings on students' beliefs about the difficulty in acquiring Japanese language skills suggest that among the four skills, listening is believed to be the most difficult skill, closely followed by speaking, then writing and lastly reading, as shown in Figure 2.

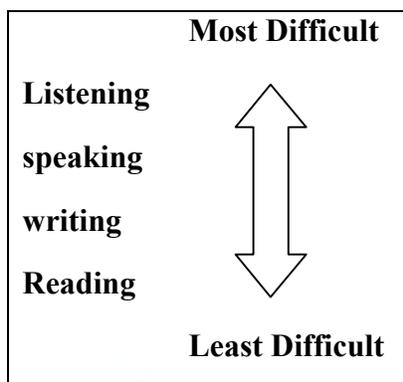


Figure 2 : Difficulty level according to language skill

Undergraduates' views about their personal ability in Japanese Language

Table 5 shows the response patterns of the undergraduate on their personal ability in the different Japanese language skills. As shown in Table 5, the level of agreement distribution revealed a very high moderate view (between 43% to 74% for agree and between 23% to 56% for disagree) compared to extreme views (between 0 to 7% for strongly agree and between 1% to 3% for strongly disagree) about their ability in the Japanese language skills. The results also seem to indicate a rather high agreement level compared to the disagreement level.

Table 6 shows the overall results for bilateral distribution (agreement and disagreement). A close examination of the bilateral distribution shows a rather high agreement for having good ability in reading (76%), followed by listening (62%) and writing (60%). On the other hand, the level of agreement for having good speaking ability is rather low (43%). Figure 3 is the graphical representation of the results in Table 6.

Table 5 : Response patterns of participants about their personal ability in Japanese Language

Item	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
My listening ability in Japanese language is good	1	61	37	1
My speaking ability in Japanese language is good	0	43	56	1
My reading ability in Japanese language is good	2	74	23	1
My writing ability in Japanese language is good	7	53	37	3

Table 6 : Distribution patterns of agreement and disagreement

Item	Agreement (%)	Disagreement (%)
My listening ability in Japanese language is good	62	38
My speaking ability in Japanese language is good	43	57
My reading ability in Japanese language is good	76	24
My writing ability in Japanese language is good	60	40

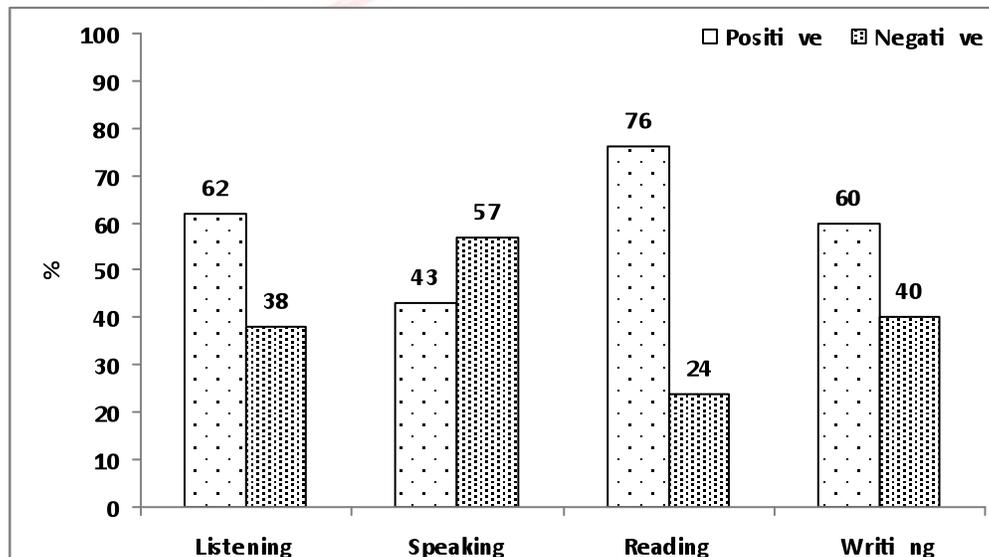
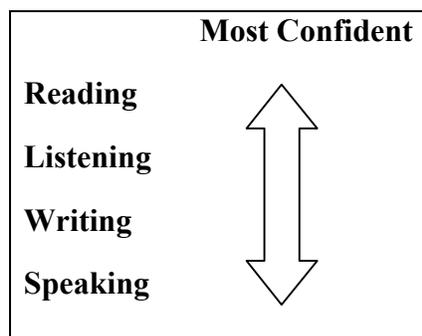


Figure 3 : Graphical representation of the results in Table 6

The Overall findings on students’ views about their personal ability in Japanese language suggest that among the four skills, students are more positive of their reading ability, followed by listening, reading and lastly speaking ability in Japanese, as shown in Figure 4.



Least Confident

**Figure 4 : Confidence level according to language skill
Reason for learning Japanese language**

Table 7 shows the list of reasons given by the undergraduates for deciding to learn the Japanese language. The ranking of each reason is listed according to its percentage. As shown in Table 7, a total of 13 reasons were mentioned by the students for learning the language.

Table 7 : Students motivation for learning JFL

Reason	%	Ranking	Type
Learn extra language	95	1	Integrative
Interest in Japanese language	94	2	Integrative
Increase job opportunity	89	3	Instrumental
Learn Japanese culture	88	4	Integrative
Liking towards Japanese products	79	5	Integrative
Communicate with Japanese	78	6	Integrative
Visit Japan for tour	73	7	Instrumental
Want good grades	58	8	Instrumental
Study in Japan	39	9	Instrumental
Friends' influence	36	10	Instrumental
Japanese language is challenging	31	11	Integrative
Similarity with mother tongue	19	12	Instrumental
Family encouragement	17	13	Instrumental

A huge majority of the students (95%) mentioned that they are taking Japanese language because they want to learn an extra language and have interest in the language (94%). Within the 80% range are for better employment opportunity (89%) and interest in the Japanese culture (88%). In the 70% range are for those who have a liking toward Japanese products (79%) and a desire to visit Japan (73%). About 58% of the students mentioned wanting to obtain good grades as their reason. Surprisingly, desire to study in Japan was only mentioned by 39% of the participants and this reason is within the same range as friends' influence (36%) and the challenge that Japanese language pose in relation to learning (31%). The Mandarin language written scripts are viewed as similar to the Japanese scripts to some extent. However, this reason was only mentioned by 19% of the students although 51% of the participants were of Chinese ethnicity. This could be because, although there are similarities between the two languages' written scripts, only students who went to Chinese medium schools would be able to transfer this knowledge. Family encouragement ranks at the bottom of the list with only 17% mentioning it as their reason for learning the language.

Overall, the results show that Malaysian students are motivated to learn Japanese for integrative and instrumental reasons. This finding is similar to the Ainol and Isarji (2009) findings that the Malaysian undergraduates tend to learn a foreign language due to a mix of both integrative and instrumental reasons. However, the present study also shows that integrative motivations seem to rank higher, indicating a stronger inclination towards integratively motivated reasons. This finding seem to support Gardners and associates' suggestion that integrative motivation plays a more important role and disagrees with Dörnyei's (1990) suggestion that instrumental motivation is more obvious than integrative motivation for foreign language learners.

Conclusion

This paper attempted to discover the Malaysian undergraduates' beliefs about learning JFL, views on their personal ability in the language as well as reasons for learning the language.

First, it was found that the undergraduates believe that listening and speaking skills are more difficult to acquire compared to writing and reading, with reading being viewed as easier to acquire compared to writing. Secondly, the study also found that the students are most confident with their reading ability, followed by listening, writing and lastly speaking.

The consistency in the findings on reading skills indicates that students generally find this skill easier to acquire and are more confident with their reading ability. In this course, only Hiragana and Katakana, two of the three types of Japanese characters, were introduced. Both characters are syllables made up of fifty sounds-symbols. This finding is probably due to the fact that reading skill requires the ability to recognize the character and it is a form of receptive skill.

Similarly, there is also consistency in the views on speaking skill whereby students believe that it is difficult to acquire and at the same time they are least confident with their speaking ability. These findings clearly indicate that students need more help in building a positive view about speaking skills and it can be achieved by providing them more pronunciation practices and opportunities to speak the language in and outside the class. An introduction to phonetic alphabets would also help the learners in improving their pronunciation. Class room activities like spontaneous role-play, as well as take home tasks like oral presentations would help in improving the students' speaking ability and develop a more positive view about speaking in Japanese. These strategies in turn also would help improve students' confidence level in listening ability.

Nevertheless, although students seem to be quite confident with their listening ability, they are of the view that it is the most difficult skill to acquire. The students might be confident with their listening ability in the classroom due to the fact that the instructors speak slower than in a normal situation and use simple words and sentences. However, the language spoken by the native speakers such as in animes, dramas, video games or others are much more faster in speed and they use various types of syntax and words. Their exposure to spoken Japanese outside class might have influenced their belief about the difficulty in listening in Japanese. In order to address this discrepancy, there is a need for the instructors to use more authentic listening tasks like audio visual materials in the classroom. Also, there instructors should speak in a more natural way as the course progresses.

As for writing, although students believe that writing skills is not that difficult to acquire, they are not so confident with their writing ability. This could be because of the same reason mentioned for reading skills, that is the fact that only Hiragana and Katakana, are covered in the course. Also, writing skill is a productive skill which requires the ability to copy or reproduce and write from memory, making it more difficult. Thus, more practice in writing the Japanese characters and writing exercises would help improve the students' writing ability and at the same time boost their confidence in writing.

As for motivation in learning JFL, the results show a mixture of both integrative and instrumental factors. However, integrative motivation like interest in learning an additional language, interest in Japanese language and culture seem to rank higher in the list compared to instrumental motivation. In order to address the learners' desires, there is a great need to have a combination of integrative and instrumental oriented learning activities but with slightly more activities which are integrative in nature. For example, inclusion of texts related to the history of Japanese language, food, clothing, and festivals for integrative motivated students. Work related situations and tasks like formal conversations and writing short emails would certainly meet the needs of instrumentally motivated students. These pedagogical adjustments would help increase students' interest, get them to be more involved and may improve their performance in learning of JFL.

Although the study does not claim to be an exhaustive one, the results generated do provide an awareness of what JFLs bring to the classroom. The study also has discussed how the identification and understanding of these aspects about learners can be utilized to provide more meaningful learning tasks and activities.

Since metacognitive matters may be context specific and influenced by other variables (for example: age, first language and field of study), further studies could investigate whether students from different background have different beliefs, views and motivational factors. In addition to this, further investigation could also look into the match between the students' beliefs and views with the students' actual performances according to the four language skills.

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THE EFFECTIVENESS OF USING SIMULTANEOUS PROMPTING WITH VIDEO
MODELING IN TEACHING "RETURNING SOMEONE'S GREETING" SKILLS TO
CHILDREN WITH AUTISM

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BACKGROUND

Video modeling (VM) and simultaneous prompting (SP) procedures have been successfully used in teaching several skills to students with developmental disabilities (Maione & Mirenda, 2006; Reagon, Higbee, & Endicott, 2006; Akmanoglu & Tekin-Iftar, in press; Akmanoglu & Batu, 2004; Kurt & Tekin-Iftar, 2008; Reichow & Wolery, 2009).

There are many studies showing the effectiveness of using VM and SP separately in the literature. However, there is only one study demonstrating the comparison of the effectiveness and efficiency of using SP with and without VM in teaching the chain skill to children with autism (Genc & Kurt, 2010).

There is no such a published study investigating SP with VM in specifically teaching “return someone’s greeting” skill to children with autism.

Therefore, in the present study, the effectiveness of using SP with VM procedure in teaching “return someone’s greeting” skill to the children with autism was investigated.

Purpose

To investigate the effectiveness of using SP with VM in teaching "return someone’s greeting" skills to children with autism.

Research Questions

Is using SP with VM procedure effective in;

1. teaching "return someone's greeting" skills to children with autism?
2. maintaining the acquired skills 1, 2, and 4 weeks after the instruction?
3. generalizing across different persons and settings?

METHOD

Participants

Subjects: Two males with autism (Berkay & Harun) whose ages ranged from 4 to 10 years.

Models: 8 adults (range: 23-42 years) and whose genders are male and female.

Other participants: 13 people (range: 21-42 years) were included in the study in order to greet the subjects.

Prerequisite skills

- Paying the attention to an image in television or computer for two minutes.
- Imitating the verbal skills
- Resuming the skill for five minutes

Settings

- The subjects have watched the prepared video clips in a class at Autistic Children Training Center.
- After watching the clips, SP instruction sessions were conducted in all environments (i.e., rooms of daily living, corridors and kitchen) of Autistic Children Training Center.

Settings for Generalization

Generalization sessions were conducted in the settings (e.g., gymnasium, cafeteria and playground) that were different from the instruction settings.

Materials

- Video clips
- Laptop computer
- Other participants
- Handycam
- Data collection forms

GENERAL PROCEDURES

- Full probe sessions, daily probe sessions, instruction sessions, maintenance and generalization probe sessions were conducted in the study.
- One-to-one instructional arrangement was used during all sessions.
- 3 s response interval and 10 s intertrial interval were used in all sessions.

Experimental Design: Multiple probe design across behaviors and replicated across two participants.

Dependent Variable: Returning the greeting by using “Good Morning-Hello- Good Bye” when someone says greeting words.

Independent Variable: Simultaneous prompting with video modeling.

Probe Sessions

Full Probe

- Full probe sessions were conducted before, and after the criteria were met by the participants during the training sessions.
- During all the full probe sessions, Total nine trials were conducted. three times for the target behaviors.
- After the participant met the criteria at the first target behavior, the second full probe sessions were conducted.
- Similarly, after meeting the criteria at the second target behavior, the last full probe sessions were fulfilled.

Daily Probe Sessions

- Daily probe sessions were conducted before each instructional session.
- 3 trials were conducted during a daily probe session.
- The only difference between full probe sessions and daily probe sessions was that: during full probe sessions all target behaviors were tested for each participant, on the other hand, during daily probe session only one target behavior was tested.
- While correct responses resulted in verbal and social praise, incorrect responses were ignored.

Training Sessions

- The training was provided until the 100% accuracy response was obtained at least three consecutive daily probe sessions.
- Each instructional session was consist of three trials.
- Four instructional sessions were conducted per a week.
- Untill meeting the criteria, correct responses resulted in verbal and edible reinforcement continuously.
- Incorrect responses resulted in error correction.
- As soon as the criterion was met reinforcement for the correct responses was provided at the end of the session.

Training sessions were conducted as follows:

- Once the students watched the clips SP was provided.
- While the trainer and subject were in the settings where SP instructional session would be conducted, another person presented the target stimulus to subject. (e.g., Good morning).
- After the target stimulus was presented, the trainer presented the verbal clue to the subject.
- Subject's response was waited for 3 sec.
- Correct responses (e.g., "good morning.") were resulted with verbal praise (e.g., "good boy", "bravo", etc.)

RESULTS

Inter-Observer Reliability:

- Berkay; 99,2 % (range:92-100)
- Harun; 100 %

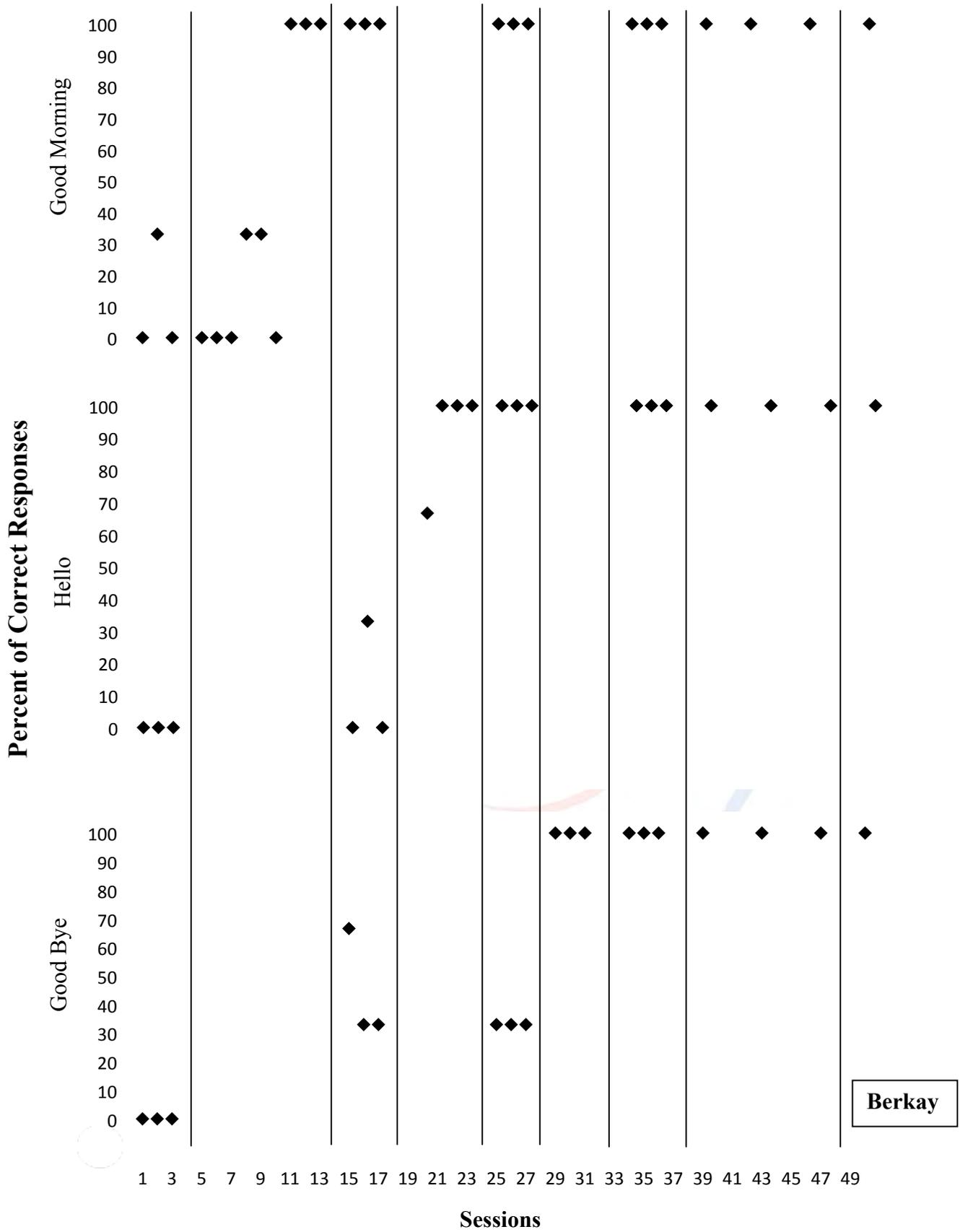
Independent Variable Reliability:

- Berkay; 99,2 % (range:92-100)
- Harun; 100%

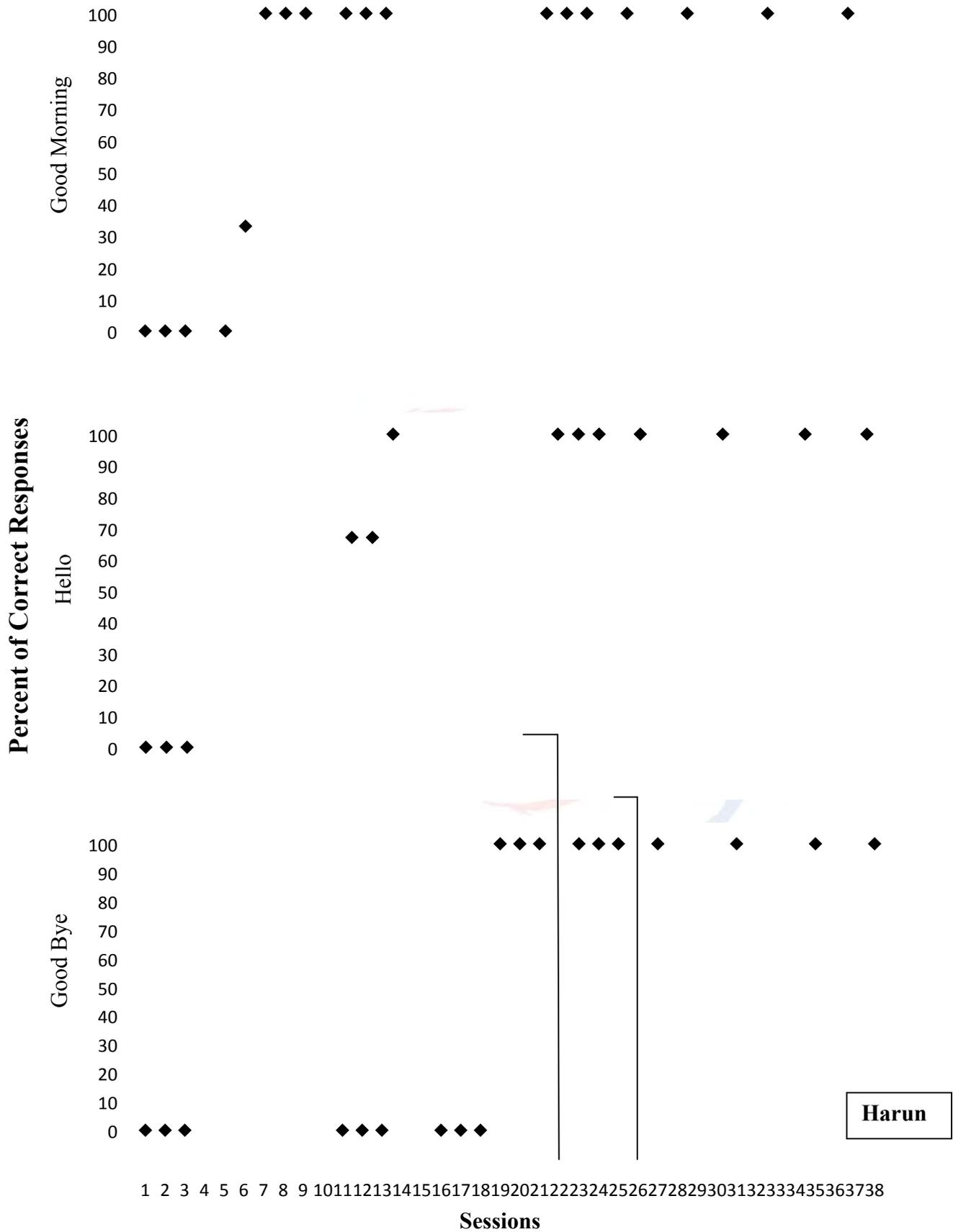
Effectiveness Results

The introduction of SP with VM in the instructional sessions resulted in criterion level responding on the target behaviors for each student (see Figures 1 and 2).

Full P. Daily P. Full P Daily P. Full P. Daily Full P Maintenance Gen.
P.



Full P. Daily P. Full P. Daily P. Full P. Maintenance Gen.



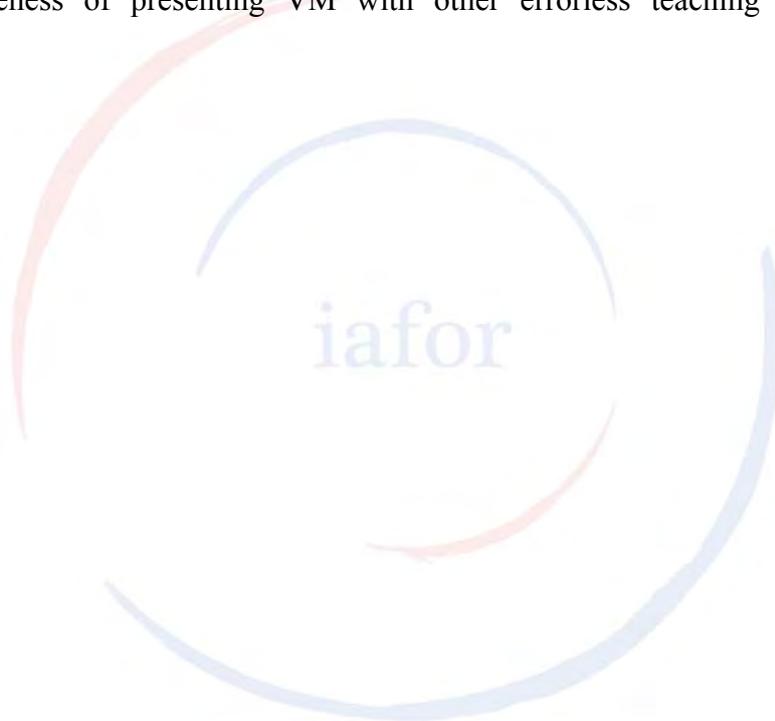
CONCLUSIONS

SP with VM procedure is effective;

- in teaching “return someone’s greeting” skills to children with autism.
- for maintaining of the acquired skills 1, 2, and 4 weeks after the instruction.
- for generalizing the acquired skills across different persons and settings.

RECOMMENDATIONS

- Same study can be replicated with students with different characteristics.
- The effectiveness of using SP with VM can be examined with different participants and skills at different settings.
- The effectiveness of presenting VM with other errorless teaching methods can be examined



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Building a public educational system for key competencies in the knowledge based society : Lesson from an international comparison

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Competency-based reform in the knowledge based society invites a reconsideration of our conventional understanding of the role that current educational systems play in the educational development. The current study, adopting a framework by focusing on the notion of alternative policy instrument, explores any differences in the characteristics of educational systems of 40 countries participated in 2003 PISA assessments. We found significant differences in policy instruments, which suggest a large potential for developing policy strategies in many countries.

1. Introduction

Considerable scholarship has been devoted to describing new conception of competency and developing organization of competency-based reform as a worldwide movement for educational improvement during the past decade. Competency-based reform initiatives promote an ambitious agenda in the sense that they aim to change the nature of knowledge with the ultimate goal of improving student learning. This new wave of reform invites a reconsideration of our conventional understanding of the role that current educational systems play in the development of a broad-based reform movement. This world-wide reform may require a means for linking policy at distant levels of the educational system with local capacities generally lacking in earlier reforms. In particular, some countries which indicate high level competencies in the international comparison have improved not only student achievement but also local

capacities by adopting effective policy strategies (Hargreaves et al., 2007).

However, existing empirical treatments have generally been limited in scope, introducing specific programs within a particular country. As a consequence, our understanding of competency based reform is limited in making comparisons across policy strategies and thus identifying successful policy strategies affecting individual competencies and schooling.

Thus, this study develops a new empirical strategy for investigating cross-national differences among educational systems developing individual competencies in the competency based reform contexts. First, we examine the level of competency in forty nations and identify patterns of competency in these countries. Next, this study investigates the educational system each country emphasizes to develop competency and classifies the educational system in each country in terms of types of countries.

2. Relation between math achievement and math self-concept across countries

Competency has been mainly discussed in terms of cognitive aspect of human abilities. However, increasing concern about social cohesion and developing democratic citizenship require human being not only to update basic knowledge and skills but also

to develop psychological aspects such as self-concept or self-efficacy. Given these circumstances, this study explores the relation between math achievement and math self-concept using the PISA 2003 mathematics data of the eighth-graders in 40 countries. The PISA math achievement is plausible values of each student's achievement in mathematics. The PISA math self-concept scale consists of 5 items assessing what Eccles and Wigfield(1995) identified as the ability component of subject-specific self-concept beliefs (Sample item: "I am just not good at mathematics").

The relation between math achievement and math self-concept is presented in Figure 1. The horizontal axis crosses the vertical axis at the point of 0 which is the mean score of math self-concept participation rate in private tutoring, and the vertical axis crosses the horizontal axis at the point of 500 score point which is the original theoretical math average score among countries.

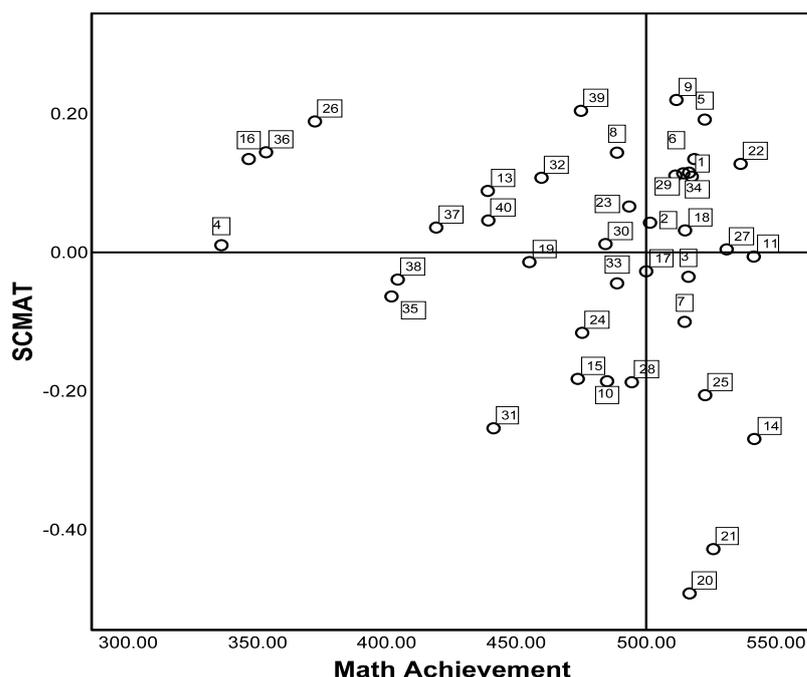


Figure 1. Mean Math Achievement and Math Self-concept, PISA 40 countries, 2003

*1: Australia, 2: Austria, 3:Belgium, 4:Brazil, 5:Canada, 6: Switzerland, 7: Czech Republic, 8: Germany, 9: Denmark, 10: Spain, 11: Finland, 12: United Kingdom, 13: Greece, 14: Hong Kong, 15: Hungary, 16: Indonesia, 17: Ireland, 18: Island, 19: Italy, 20: Japan, 21: Korea, 22: Liechtenstein, 23: Luxembourg, 24: Latvia, 25: Macao, 26: Mexico, 27: Netherlands, 28: Norway, 29: New Zealand, 30: Poland, 31: Portugal, 32: Russian Federation, 33: Slovakia, 34: Sweden, 35: Thailand, 36: Tunisia, 37: Turkey, 38: Uruguay, 39: United States, 40: Yugoslavia

Based on their location in this scatter plot, we classified the countries into four different types. Type 1 countries which are placed in the upper right corner can be described as those with high math score and high level of self concept. These countries include 11 countries (Denmark, Belgium, Canada, Liechtenstein, Australia, Austria, Island, Netherlands, Finland, Switzerland, and New Zealand). Type 2 countries which are placed in the lower right corner can be described as those with high math scores and low level of self-concept. These countries include 5 countries (Czech Republic, Macao,

Hong Kong, Korea, and Japan). Type 3 countries with low math score and low level of self-concept are in the lower left corner. These countries include 10 countries (Portugal, Spain, Hungary, Norway, Latvia, Slovakia, Ireland, Italy, Uruguay, and Thailand). Type 4 countries with low math score and high level of self-concept are in the upper left corner of Figure 1. Type 4 countries include Mexico, Tunisia, Indonesia, Brazil, United States, Germany, Russian, Greece, Turkey, Luxemburg, Poland, and Germany.

3. International comparisons of educational systems

Next, this study explores any differences in the characteristics of educational systems among these four different types of countries, assuming that educational systems affect student achievement. For this, the study develops a framework that centers on the notion of alternative policy instruments that translate substantive policy goals into concrete actions, drawn from McDonnell and Elmore's ideas (1987).

McDonnell and Elmore (1987) identify four generic classes of policy instruments, explaining policy instruments as policy strategies using resources (e.g., money, rules, and authority) to influence the actions of individuals and institutions.

The first instrument is 'mandates' which are rules governing the action of individuals and agencies, and are intended to produce compliance. The conceptions of

mandates draw on theories of regulations, which address the conditions under which the targets of regulations can be expected to comply given various levels of enforcements, sanctions, and costs and benefits of compliance (See, e.g., Bardach & Kagan, 1982).

The second instrument is ‘inducements’ which transfer money to individuals or agencies in return for certain actions. Our discussion of inducements draws on theories of public finance that deal with intergovernmental transfers. These theories address the conditions under which government agencies can be induced to perform certain actions by conditional grants of funds from other governmental agencies (See, e.g., Gramlich, 1977).

The third instrument is ‘capacity-building’ that is the investment in material, human capital, or social capital for the future returns. But these returns are often uncertain, intangible, immeasurable, and distant. The main difference between capacity-building on the one hand, and mandates and inducements, on the other hand, lies in the proximity and tangibility of their effects. Capacity building has distant and ambiguous effects, mandates and inducements have proximate and tangible effects. The fourth instrument is ‘system-changing’ which means transfer official authority among individuals and agencies in order to alter the system by which public goods and services are delivered. System-changing entails transfers of authority, rather than money, with the aim of

altering the institutional structures by which policies are implemented.

Based on the conceptions of policy instruments, the current study selected indicators measuring these policy instruments across countries, using PISA 2003 data. As showed in the Table 1, this study compiles data on various public expenditure and socio-economic indicators.

Table 1. Policy instrument indicators

Policy instrument		Indicators	Description
Mandate		Assessment teachers effectiveness(ASS)	Whether or not assessments of students are used for making judgments about teachers' effectiveness
		Teacher evaluation(TEV)	Whether or not tests or assessments of student achievement have been used to monitor the practice of math teachers
Inducements		Funding government(FGV)	Percentage of total funding from Government(includes departments, local, regional, state and national) rather than student fees
Capacity - building	Human capital	Math teacher-student ratio(TSR)	Math teacher-student ratio
		Proportion of math teachers with a ISCED 5A level in math(PTQ)	Percentage of teachers with an <ISCED5A>qualification in <pedagogy>
	Social capacity	Teacher morale(TMR)	The level of teacher morale and enthusiasm
		Math teacher consensus(TCS)	The level of math teacher consensus in terms of student learning
	Material capacity	Quality of educational resources(ERQ)	The level of instructional materials, budget for supplies, school buildings and grounds
System-changing		School autonomy(SAT)	The degree that Teacher groups exert a direct influence on decision making about staffing, budgeting, instructional content and assessment practices
		School choice (SEL)	Admission to school choice
Family background		Index of Socio-Economic and Cultural Status(SEC)	

In order to explore any differences in the educational systems among these four different types of countries, we selected several countries representing each type and

examined the level of policy instruments in those countries. Table 2 reports the extent to which 10 policy instrument indicators have been adopted across the 40 countries as of 2003. Each indicator is grouped according to the four major drivers of policy instruments. For the purpose of comparison, the level of four variables (ASS, TEV, FGV, and PTQ) are calculated here by tallying raw scores (coded 0, 1) across the nations and three other variables (TMR, TCS, and ERQ) are produced by index with a range of -1 to 1.

Table 2. Policy instrument scores for the selected countries

Type	Country	Mandate		Inducement		Capacity building				System changing		Fam. Bkg.
		ASS	TEV	FGV	TSR (N)	PTQ	TMR	TCS	ERQ	SAT	SEL	
Type 1	Denmark	.05	.13	.92	35	.62	.33	.11	.02	3.34	.50	.18
	Canada	.16	.21	.87	117	.68	.24	.02	-.01	3.04	.99	.36
	Finland	.14	.16	.99	69	.51	.28	.30	.01	3.88	.33	.20
Type 2	Korea	.57	.72	.55	155	.99	-.44	-.01	.51	3.95	1.60	-.20
	Hong Kong	.21	.80	.89	95	.44	-.40	.12	.29	3.98	2.10	-.76
	Japan	.11	.55	.76	120	.87	-.36	.56	.11	3.93	2.51	-.18
Type 3	Portugal	.33	.31	.85	90	.58	-.41	-.33	-.05	2.56	.24	-.83
	Hungary	.85	.63	.90	86	.96	.10	.35	.04	3.66	2.07	-.17
	Thailand	.65	.91	.85	184	.72	-.14	-.15	-.95	3.90	1.67	-.14
Type 4	Mexico	.51	.90	.35	165	.65	.08	-.71	-.39	3.18	1.28	-1.27
	Indonesia	.49	.89	.29	180	.57	.67	-.69	-.60	3.91	1.75	-1.32

	Tunisia	.71	.80	.73	146	.75	.04	-.51	-.41	.70	1.39	-1.33
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Table 2 shows that there exists considerable variability in the level of policy instruments across countries. In the aspect of mandate, some countries adopted mandate strategy more frequently, some other countries showed lower use of mandate strategies. For example, type 1 countries indicate lower proposition than other countries. In particular, schools included in type 1 are less likely to emphasize teacher evaluation. In terms of inducement, most of the countries except type 4 show high level of government financial support. In particular, type 1 countries tend to invest more financial resources for improving public education. On the contrary, it is indicated that Korea is one of the lowest countries in terms of government's financial support.

Significant differences across countries in using capacity building strategies are also found. Type 1 countries (Finland, Canada, and Denmark) show the best values for overall social capacity. Type 1 countries post highest scores amongst 40 countries. Differences are considerable as type 1 countries on average post 40% higher scores than type 2 countries. In the aspects of capacity building, the data show that most of the countries made efforts to develop human capacity (60-70%) while only type 1 countries indicate high level of social capacity within a school. In terms of system changing strategies, we can see that schools in most of the countries indicate high level of school

autonomy. Interestingly, schools in type 1 countries are less likely to offer school selectivity than other countries.

4. Discussion

We found meaningful differences in the policy instrument indicators across countries. Unsurprisingly, type 1 countries that indicate high level of math scores and high level of self-concept report the best family's socio-economic background indicators and public resources. The indicators also point out that type 1 countries show relatively high level of social capacity when compared with other country types while these countries do not consider system changing or mandates strategies importantly. On the other hand, the findings of this study show that in type 2 countries, which indicate high level of math scores and low level of self-concept, governments' financial investment and school level social capital are low while these countries emphasize mandate and system-changing strategies as important policy strategies for educational development.

What can we learn from the findings of this study? First of all, the findings of this study show that the vast majority of variation in policy instruments can be found at the social capacity levels of the educational system. Successful social capacity building at

the school level is a place where people care for each other as individuals, and commit to the moral purpose the organizations is pursuing, as well as pursuing technical tasks of analysis and improvement together (Hargreaves, 2003; Giles and Hargreaves, 2006).

Many earlier studies show that schools that operate as strong learning communities have more successful outcomes in performance results (Rosenholtz, 1989; Newmann and Wehlage, 1995) and they deal with change more effectively (Fullan, 2003; Hargreaves, 2007a). Accordingly, high level of social capacity in the type 1 countries may exert the strongest influence on high level of student competencies.

Second, mandates, in other words, rules which create uniformity of individual and local behavior may not be enough for leading meaningful educational changes. The type 1 countries place no emphasis on nor do they give any particular place to individual testing or measurement driven accountability. According to the current OECD reports (Hargreaves, et al., 2007), Finland, despite their outstanding math scores, has no regular test for mathematics achievement, they do not consume large parts of the curriculum with the separate teaching of these skills and subjects. Rather, at the heart of the human relationships that comprise these countries' educational system and society are a strong and positive culture of trust, cooperation and responsibility (Hargreaves et al., 2007). Improvement of schools that employ these highly capable and trusted professionals is

achieved by processes of self-evaluation within learning organizations that are allocated national and local government resources so they can solve problems for themselves.

Educational policies for competencies, in this sense, is leadership for learning, leadership by learning and leadership as learning – not leadership for external accountability and testing.

However, all of these results have to be seen as indicative and need to be interpreted with great care for the limitation of international data. Particularly, one has to be aware that it is not easy to accurately identify policy instrument indicators influencing student achievement. Further study has to provide a proxy for measuring policy instruments.

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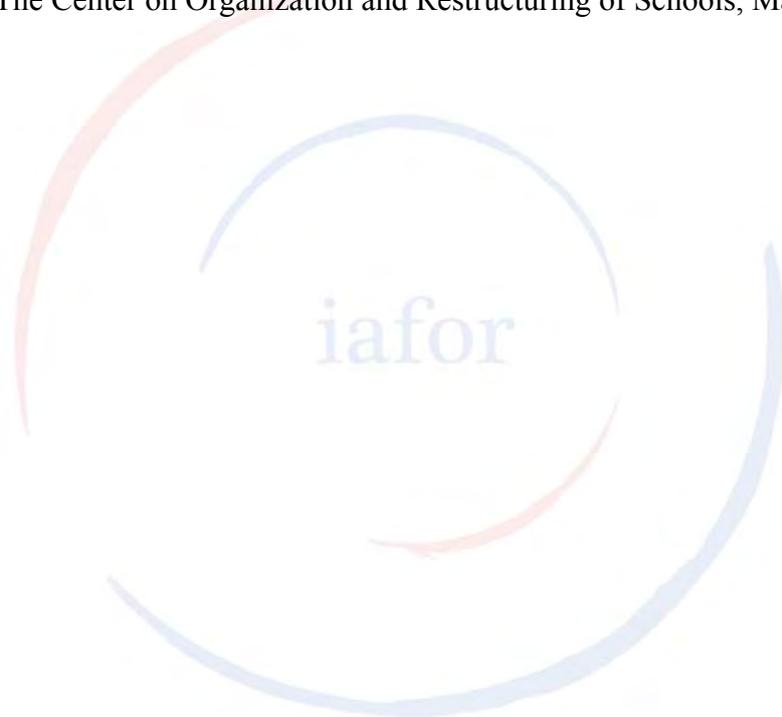
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Cover Page

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Title: Constructing and Presenting in Topic Maps of Digital Contents - For Example in Digital Archived of Atayal Culture

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The Topic of the submission: Arts, Drama and Design Community, Culture, Globalization and Internationalization

Constructing and Presenting in Topic Maps of Digital Contents - For Example in Digital Archived of Atayal Culture

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Abstract

Taiwan is the origin place for Austronesian languages in the world. In advance, Taiwanese aboriginal culture, artifacts and arts are all vital cultural assets. It cannot be ignored that with the increasing advances to our way of living and ever-changing living environment, traditional aboriginal arts, crafts, and sacred customs face the danger of being overlooked and phased out.

Digital archives are fundamental projects that every country is currently eagerly promoting. Through the use of digital archives, cultural artifacts can be better preserved and promoted, which allows the 'refined culture' to be made more accessible to the general public and provide additional value for application in various industries. In this research, we used the Content Management System (CMS) architecture with open source coding to build a digital archive museum, in which we defined the artifacts by their appropriate Metadata and used "Topic Maps" concept to connect all the contents to form a comprehensive knowledge database. Moreover, going beyond one-way information provision and achieving two-way information communication with users, a range of 'Web 2.0' elements including RSS feeds, tag clouds, communities, Wiki and many other social networking technologies are employed in the knowledge management platform to provide the additional features of user interaction such as knowledge sharing and the promotion of joint creation.

This research illustrates the practical implementation of digital archives using the example of aboriginal artifacts of the Atayal aborigines in the Tai-an Township area of Miaoli County. The digital collection includes the everyday essential tools used by the Atayal aborigines, their traditional arts and crafts, and specialty art. The primary objective for our research is for integration with education, where school teachers and students can share and effectively apply the resources from the research findings.

Keywords: Digital Archives, Content Management Systems, Metadata, Topic Maps, Web 2.0, Atayal Culture

1. Introduction

1.1 Research Background and Motivation

After thousands of years of development and evolution, many of the elaborate aboriginal customs, traditions and social structure have now been lost. This is because disorganized and non-precise methods such as spoken language and folklore, rather than formal written text, have been used to record and pass down the customs and culture. Craftsmanship and skills, which the aborigines take pride in have also become increasingly difficult to transmit to following generations, due to changing lifestyles.[1]

For the reasons above, the issue of how to utilize information technology to help preserve, glorify and revitalize the culture our aboriginal ancestors have passed down to us is one that deserves great attention. Digital archives are the fundamental project that countries all over the world are proactively promoting. Back in 1990, America's Digital Library Initiative was launched, prompting the development of databanks for various topics. Data that was digitally archived included texts, images, maps, audio files, video files, pictorial illustrations and multimedia files [2]. Through digital archiving, historical images, pictures and scriptures can now be preserved using advanced technologies and core skills with unique advantages. Furthermore, they can be used by various industries to provide added value.

The majority of digital archive websites currently archive data by simply inputting the original documents or pictures. This method creates issues, such as system discrepancy, and varying completeness and scalability of the archive systems. Such flaws make it more challenging for learners to retrieve and utilize data.

These issues with existing digital archive websites motivated the present study into the use of Topic Maps to create topic-based index systems. This research will provide useful ways for archive systems to fulfill the variety of user demands on index systems and to meet users' need to search for data by topic.

This research project proposes the use of website construction techniques such as Integrated Content Management System and Data Interpretation to build the website for 'Digital Archive Museum of Atayal Culture' in honor of the Atayal aborigines in the Tai-an Township area of Miaoli County in Taiwan. In addition, realizing that the content of digital archives are typically dictated by external professionals or by website managers, the study proposes using Web 2.0 concepts and technologies that

will allow every member of the project to be the idea and content generator. In this way, the Atayal aborigines can share their knowledge directly on the website and the information shared is then used to build a comprehensive knowledge bank for everyone.

1.2 Research Structure

This paper is divided into five chapters. Chapter 1 is the background introduction for our research. Chapter 2 reviews relevant literatures and the ideas they have provided in this research, such as Content Management System (CMS), Data Interpretation, Topic Map and Web 2.0 concepts. Chapter 3 details the actual process of designing the website and the methods adopted, including system introduction, data formats, Topic Map tools, selection of tools for the actual implementation, analysis of educational materials, and the topic, association, and occurrence (TAO) model. Chapter 4 discusses the progress and achievements of the implementation, using specific examples of system navigation and the use of educational materials in the knowledge bank to illustrate the experiment results. Finally, Chapter 5 is conclusion.

2.Literatures Review

2.1 Content Management System

Bob Boiko (2002) [3] proposed a schematic model for Content Management Systems (CMS), and the core components illustrates in Figure 1.

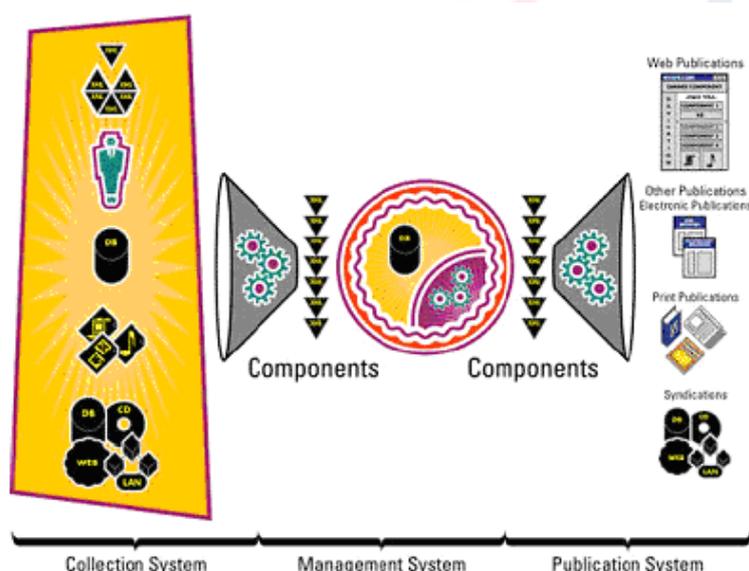


Figure 1. A systematic Overview of a Content Management System (Source: Boiko, 2002)

The figure illustrates the components of a Content Management System [4]:

- (1) Collection System: this system is responsible for collecting, acquiring, categorizing, editing, aggregating and converting information. Besides, Metadata can be used here to provide definitions and aid the search function.
- (2) Management System: this system is responsible for detailing and storing information such as the components, content and publications. The system is also able to carry out a variety of tasks including recording versions of the content, indicating the status of workflows, setting permission levels and updating information.
- (3) Publication System: this system is responsible for pulling content from the repository and publishing it using the available publication templates, before sending the end product to various publication media.

CMS has many benefits. For example, it improves website scalability, is easy to install, is easy to manage and is relatively low in cost. CMS can be used to produce knowledge management platforms suitable for all subject areas with appropriate use of plug-ins and aids[5].

2.2 Data Interpretation

2.2.1 Definition of Data Interpretation

‘Metadata’ is defined as “data about data” in the world of information technology and it refers to descriptive information about data [6].

2.2.2 Dublin Core

The Dublin Core project originated from a joint conference held in March 1995 by the Online Computer Library Center and National Center for Supercomputing Applications (NCSA), which was attended by 52 academics and professionals from the fields of Library, Computing and Internet[7]. The purpose of the Dublin Core was to develop a simple and flexible format to describe a whole range of electronic documents on the Internet, which would be easy to understand and easy to use even by non-professionals [8].

2.2.3 Categories for the Description of Works of Art (CDWA)

CDWA was developed based on the needs of artwork researchers, exhibitors and educators. The purpose of this framework is to provide a structure for museums and the archiving world to use to describe and access information about works of art and to set guidelines for the description of art and images, so that common standards within the information system can be achieved.[9] In addition, the CDWA framework also facilitates the exchange and sharing of information, thus allowing archives to share their archived content. [10]

2.3 Web 2.0

The basic and fundamental concept of Web 2.0 is ‘interaction and sharing’ using the Internet as the platform. Web 2.0 advocates ‘two-way interaction’ rather than ‘one-way communication’, ‘sharing between users’ rather than ‘monopoly on information’, and ‘collective intelligence’ over ‘unique intelligence’ [11].

The core applications of Web 2.0 include blogs, wikis, RSS feeds, tag clouds, social networking Services, instant messaging platforms and podcasts [12]. Through these Web 2.0 applications, the power of each individual user can be combined to create richer content, which can be disseminated more quickly.

2.4 Topic Map

2.4.1 The Topic Map Concept

In Topic Maps, a ‘Topic’ is the basic knowledge unit in knowledge management. The ability to connect the relevance of different topics and to organize highly heterogeneous information sources makes Topic Maps effective mechanisms to organize and manage large amount of information.[13] Topic Maps are represented by the topic, association and occurrence (TAO) model with three core elements: Topic, Association and Occurrence[14]. The TAO model is illustrated and explained here[15]:

(1) Topic

In Topic Maps, the basic knowledge unit is called a ‘topic’. Topics may take on tangible forms such as people, things, objects, or they may be intangible concepts like happiness, anger, sadness or joy.

(2) Association

An association represents the semantic relationships between different topics.

(3) Occurrence

An ‘occurrence’ of a particular topic provides further information on that topic. A single topic may have many occurrences which all link to addressable information resources.

3. Research Methodology

3.1 System Design and Construction

The architecture of the system platform in this research is depicted in Figure 2. Details of each component and their functions will be further explained in later sections.

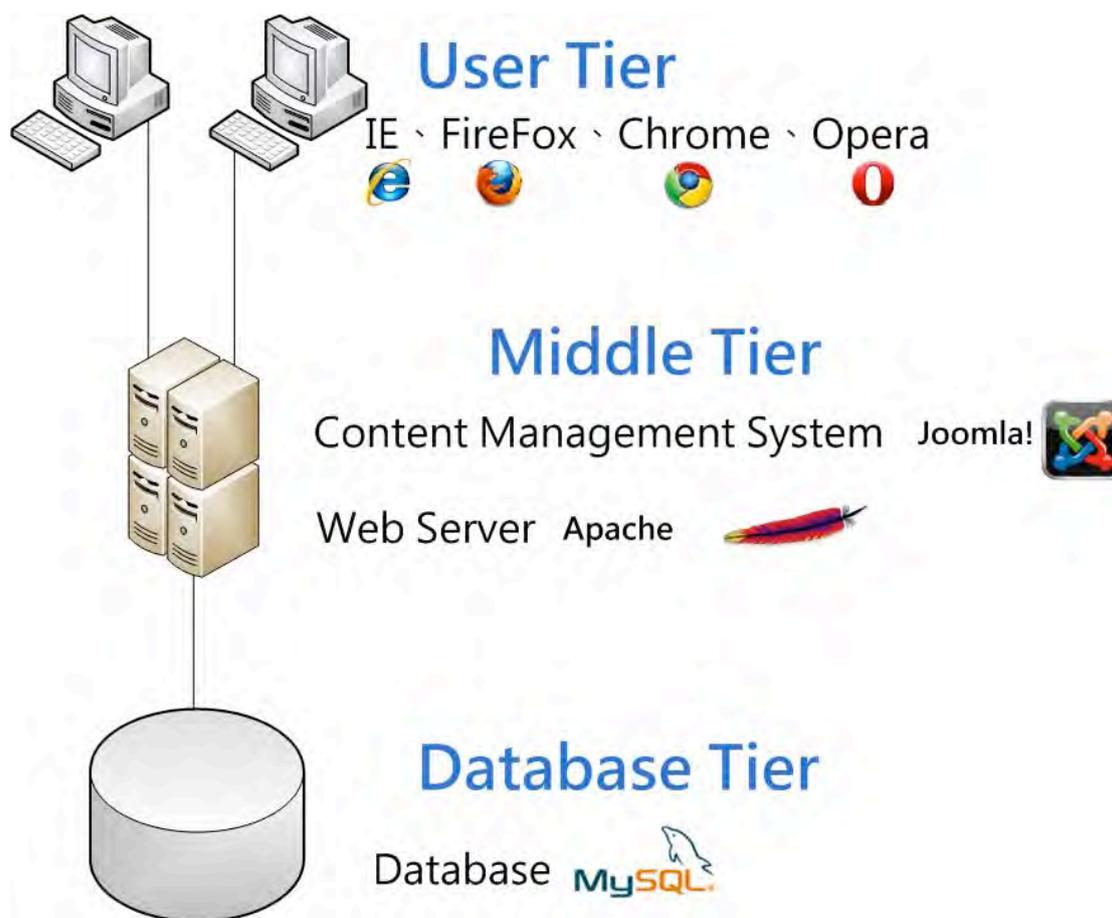


Figure 2. Illustration of the System Architecture

(1) Database Tier

MySQL is a Relational Database Management System freeware. This system was selected to manage the digital archives platform in this research due to its speed, functionality and relatively low cost.

(2) Middle Tier

The installation package Appserv was used for the website. Appserv package includes Apache, PHP, phpMyAdmin, and provides all the necessary software applications for the server environment with one installation.

(3) User Tier

The digital archives platform designed and built in this research can be accessed through browsers commonly available, including Internet Explorer 7.0, Firefox 3.0, Google Chrome, and Opera 9.

(4) System Functions

The digital archives system in this research encompasses Web 2.0 elements. These elements not only allow more interactivity between the platform and its users, but also provide users a friendlier environment for operation and allow various browsing options. Details of these functions are illustrated below:

(1) Blogs

Users can share their knowledge and personal thoughts on their blogs for other users to view.

(2) Digital Albums

Digital Albums serve as convenient storage space on the Internet. Users can digitalize their precious images and upload them onto the website.

(3) RSS Subscriptions

RSS allows users to subscribe to information on specific topics they are interested in. The information is provided in XML-based format. Users can also read the latest titles and abstracts using an RSS Reader application.

(4) Discussion Forum

In a discussion forum, users can interact with each other by starting new discussion topics, posting their views and providing suggestions. This expands the knowledge base, helps improve existing content, and meets user preference, so they are more inclined to use the system.

(5) Tag Clouds

Tag Clouds filter topics and rank them by their importance and popularity. The font size of a tag increases as the topic popularity or importance increases. Users are taken to the main content of the topic simply by clicking on the tag. In essence, tag clouds are visual descriptions of key search terms.

(6) Social Networking Service

Social Networking Services allows users to share information they find interesting through links or emails on the social website they belong to, such as Facebook and Twitter.

3.2 The Analysis and Design of Topic Maps

3.2.1 Defining the TAO Model

It is necessary to define the TAO model that represents Topic Maps before discussing the knowledge systems constructed by Topic Maps. In this section, more detailed information regarding the three elements, topic, association and occurrence, is provided:

(1) Topic

The rich knowledge system in the digital archives system, dedicated to information about the Atayal indigenous area, is organized into categories including written descriptions of Atayal culture and history, as well as audiovisual resources showing Atayal traditional artifacts. The categories of Topic Maps used in this research are listed and explained in Table One.

Table 1. Table of Categories used in Topic Maps (compiled by this research)

Main Categories	Category Contents
Everyday Living	This includes traditional ways of living, Atayal people's diets, and tools necessary in Atayal people's everyday lives, such as weaving machines, fishing crates and wicker trays.
Ritual and Ceremony	In this category, various rituals and ceremonies are described, and their purposes and importance are explained. Some of the ceremonies illustrated include the Harvest Ceremony and Planting Ceremony.
Social Structure	This section contains information about the social structure of the Atayal tribe, such as the kinship structure and the members included. The section gives further details about the ways these social entities operate during production and hunting, such as in kin groups and hunting groups.
Religion and Belief	The traditional Atayal belief system, moral principles and taboos, such as that of Gaga, are explained in this section.
Facial Tattoo	This section includes information about the meaning and purpose of facial tattoos, the folklores behind them, the taboos involved and the tools used for the tattoos, such as pricking needles and beaters.
Weaving and Embroidery Art	Here, the famed Atayal weaving and embroidery works are displayed, the process is demonstrated, and the materials and tools are shown and explained.
Plant Weaving Craft	In this section, the weaving techniques Atayal people must possess to produce tools for their everyday lives are demonstrated by describing the process and the final products.
Folk Song and Dance	This section contains information about typical Atayal folk songs, their unique instruments and traditional dances, such as the Crop Harvesting Dance and the Drinking Song.

(2) Association

Having listed the categories of traditional Atayal artifacts by topic, the next step was to identify all possible associations between topics in order to connect them together. Figure 3 is a practical example of how the association component has been designed.

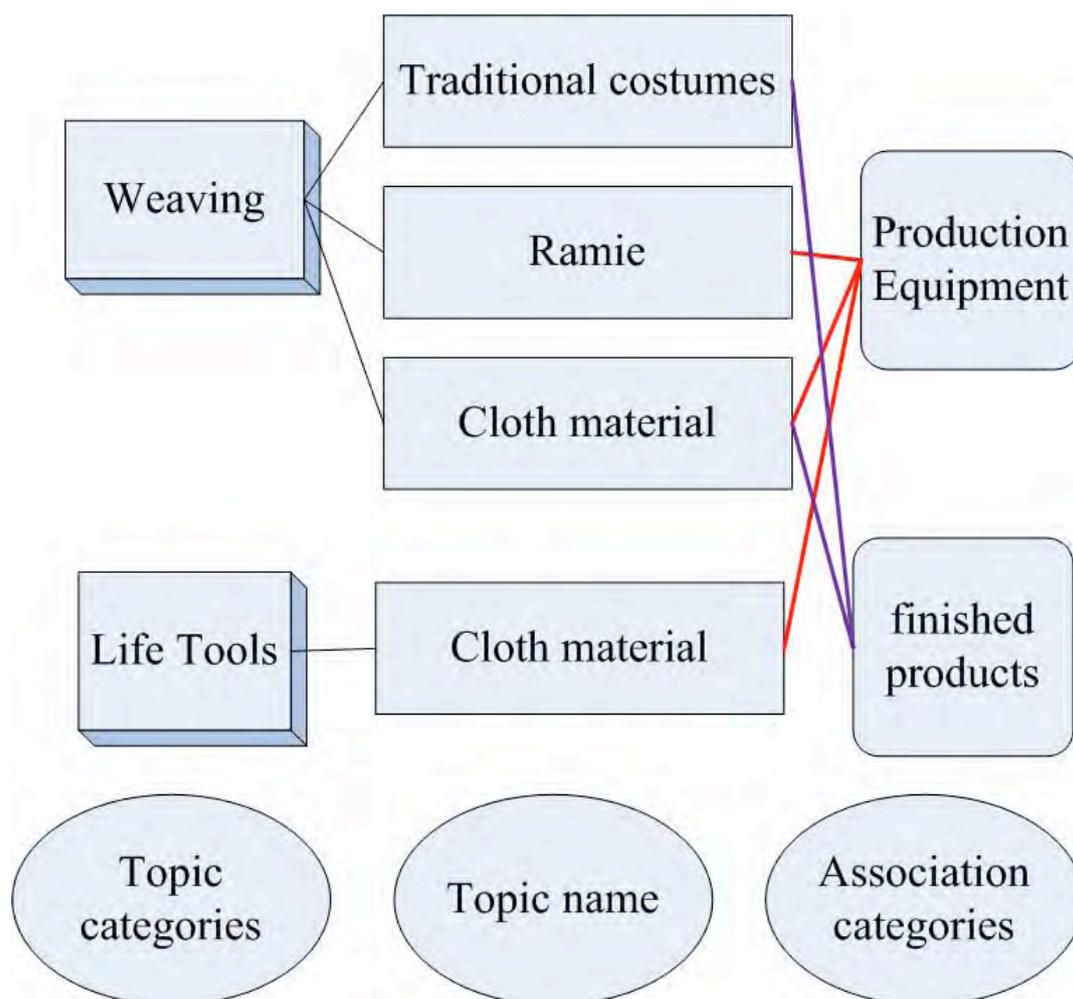


Figure 3. A Practical Example of the Association Component

(3) Occurrence

Occurrences provide further information on the topics included in the Atayal digital archives system. In this research, occurrences add text-based descriptions, such as overviews and details of each of the Atayal craft techniques. In addition, electronic resources including audiovisual materials and the website navigation guide are provided.

3.2.2 The Topic Map Tool

After taking into account convenience and the ease of obtaining the applications, this research uses mainly freeware or open source. TM4L (Topics Maps 4 E-learning) was chosen to help build the Topic Maps in this research because its application environment provides both an editing tool (TM4L Editor) and a viewing tool (TM4L Viewer). TM4L Editor uses a graphical interface to provide forms for users to input information, which is a straightforward, easy to maintain application, which users are more likely to accept.

4. Practical Implementation of the System and Implementation Results

4.1 Display of the Digital Archives System

(1) The Content Management System Page

In this research, a knowledge platform for the digital archives system was constructed based on topics regarding the Atayal culture in the Tai-an Township area of Miaoli County. Figure 4 is a screenshot of the system homepage.



Figure 4. Snapshot for the System Homepage

(2) Functions for Users

Users of the archives system can be categorized into three levels: 'visitor', 'member' and 'system administrator'. The screens that users will see and the functions they will be able to use vary according to their user level. Figure 5 is a screenshot displaying functions for registered members; and Figure 6 is a screenshot of the system page for system administrators.



Figure 5 Functions for Members



Figure 6 Snapshot for the System Administration

(4) Content Management Module

Joomla! Provides a comprehensive module for content management, which allows the content to take the form of audiovisual or image files, as well as text. This feature is illustrated in Figures 7 and 8.

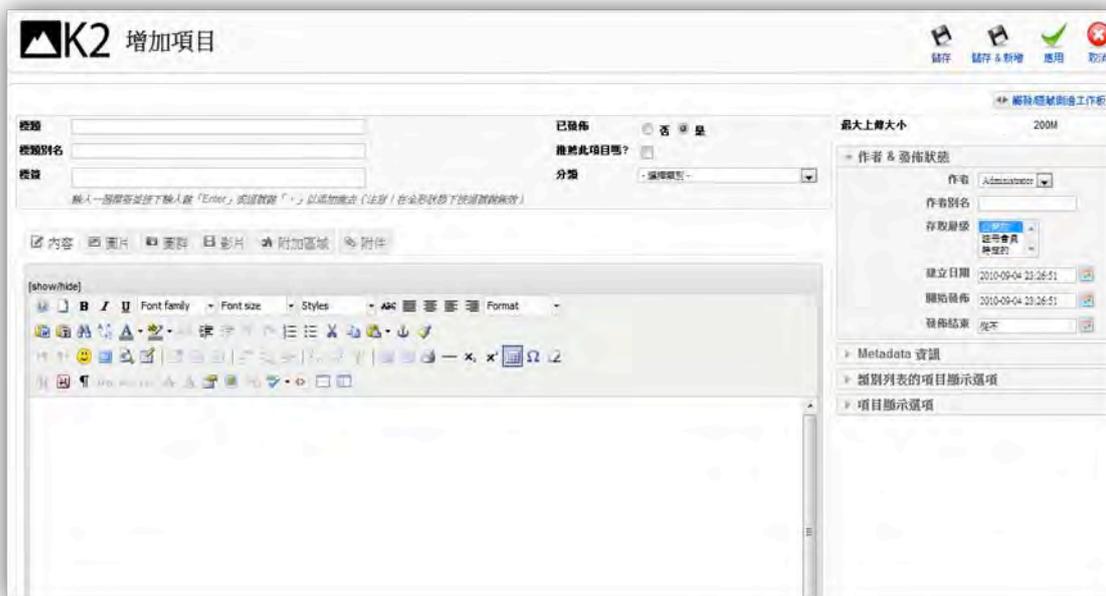


Figure 7. Snapshot for the Content Publishing Page



Figure 8. Publishing Audiovisual Files

(5) Discussion Forum Module

In the discussion forum, visitors can view all the articles and content contained in every discussion topic. They can also post their personal opinions and views on topics they are interested in after logging in, as illustrated in Figure 9.



Figure 9. Snapshot for the Discussion Forum Page

(5) Digital Album Module

The albums are modules used for displaying Atayal cultural collections. All users, regardless of their user level, can upload Atayal culture related images onto the album module, which is shown in Figure 10.

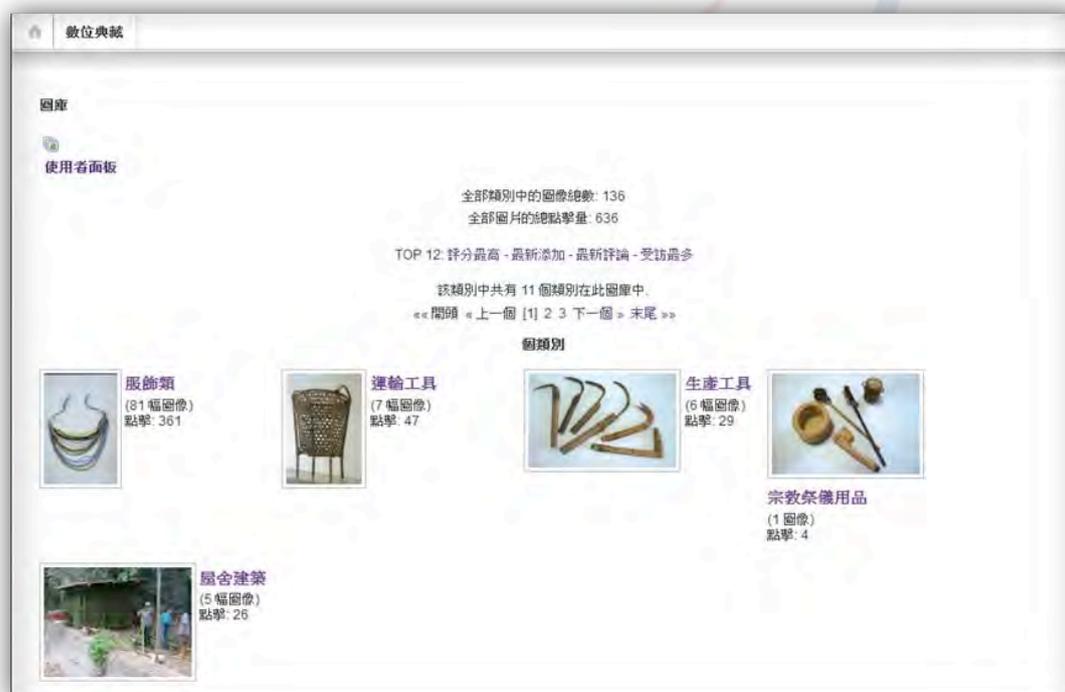


Figure 10. Snapshot for the Digital Album Module Page

(6) Tag Clouds

The tag clouds on the page being viewed shows the most popular topics and keywords on the website (see Figure 11). By clicking on the tag cloud, users are taken directly to the content page of the particular topic they have chosen. This feature greatly reduces time spent on filtering the information.



Figure 11. Snapshot for a Page with a Tag Cloud

(7) RSS Subscription

Users can subscribe to any digital content in the system they are particularly interested in. Once they subscribe they are provided with updates on the subscribed content. This feature is illustrated in Figure 12.



Figure 12. Snapshot for the RSS Subscription Page

(8) Social Networking Service

In order to increase interactivity between the users and to entice more people to share the beauty of Atayal culture, the digital archives system in this research has included a Social Networking Service function. By using this function, users can share the content of the website on the social networking sites they belong to (as shown in Figure 13).

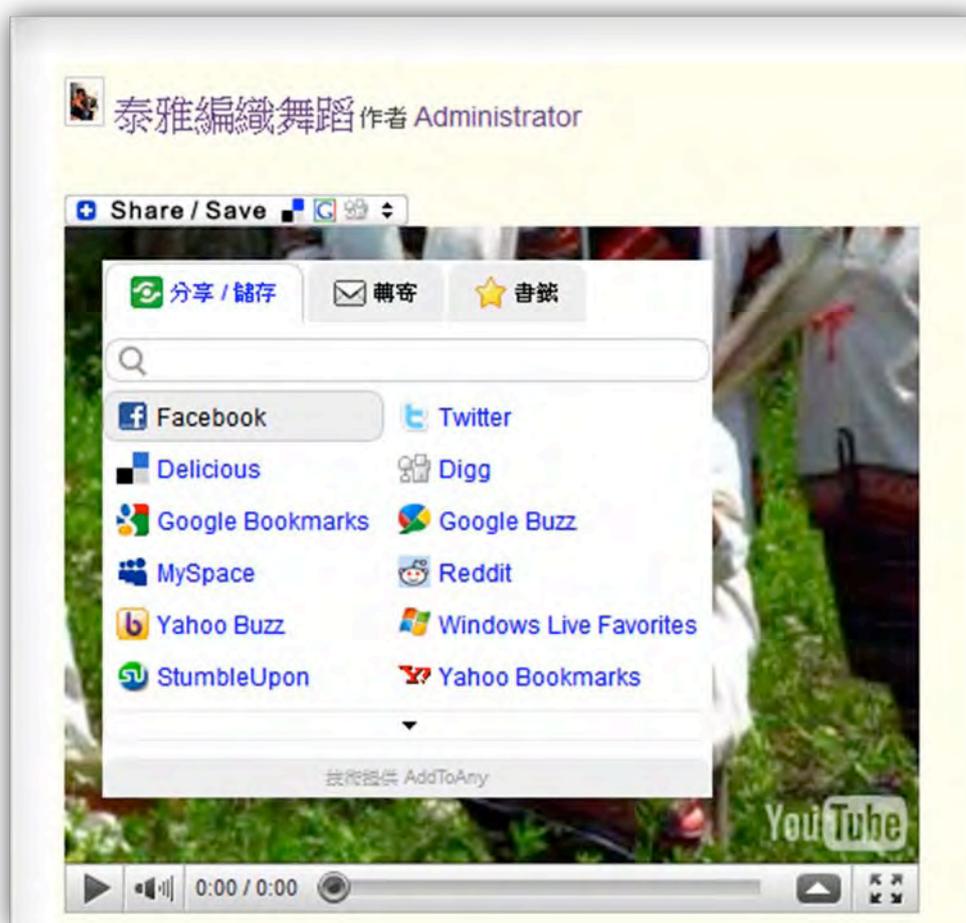


Figure 13. Snapshot for the Social Networking Service Function

4.2 Metadata Fields

Based on the metadata fields adopted by the Digital Archive Project of National Taiwan Museum, this research proposes an improved collection of metadata fields, which also includes the fields used by the Dublin Core and CDWA. The proposed fields are more suitable for the digital archives in this study because they are basic and widely used, being part of the Dublin Core. At the same time, the newly proposed fields are sophisticated enough for digital archives of artwork, which is the purpose of the CDWA framework. The format of the metadata fields are displayed in Table 2.

Table 2. Metadata Fields (compiled by this research)

Column Title		Content
Object Number	Catalog Number	
Category	Title of Category	
Topic Title	Chinese Title	
	Aboriginal Title	
	English Title	
Quantity	Unit	
	Quantity	
Current Location	Repository Name	
Related Group	Related Ethnic Group	
	Related Subgroup	
	Related Community	
Acquisition Method	Acquisition Method	
	Accession Time	
Owner	Object Owner	
Copyright	Object Authorization	
Material	Type of Main Materials	
	Type of Other Materials	

Size/Measurement	Length (mm)	
	Width (mm)	
	Height (mm)	
	Thickness (mm)	
	Weight (g)	
Descriptive Notes	Text descriptions of the work	
Appearance Description	Color	
	Shape	
	Feature Description	

4.3 Editing with TM4L

TM4L Editor has a graphical interface and its operation environment can be changed to Chinese. These features are very useful for creating Topic Maps. TM4L Editor has four main usage dimensions and the operation interface is shown in Figure 14.

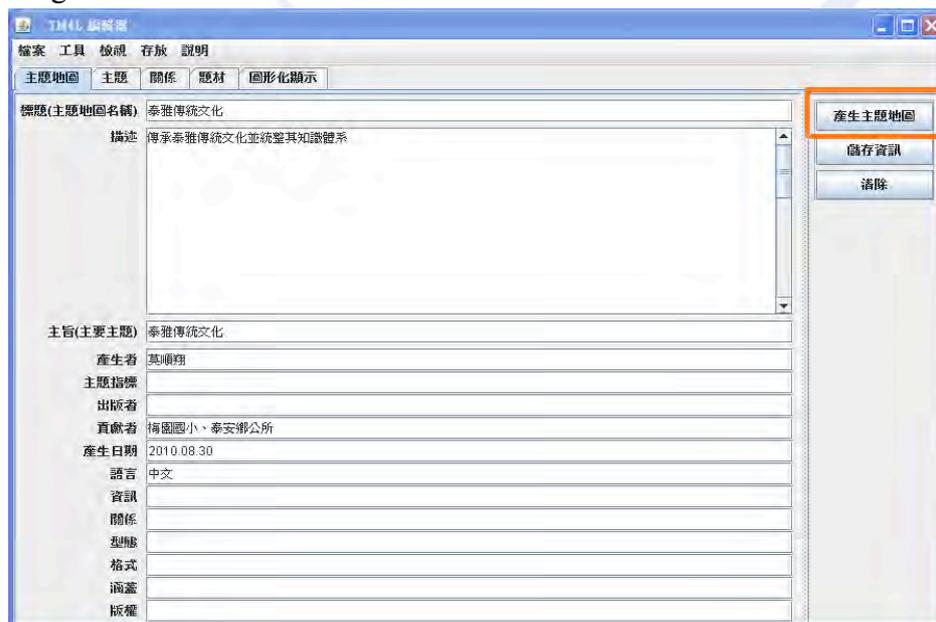


Figure 14. Operation Interface of TM4L Editor

4.4 Viewing Options in TM4L Viewer

TM4L Viewer provides three viewing options to view Topic Maps. These include Graph View, Text View and Tree View, as illustrated in Figure 15.

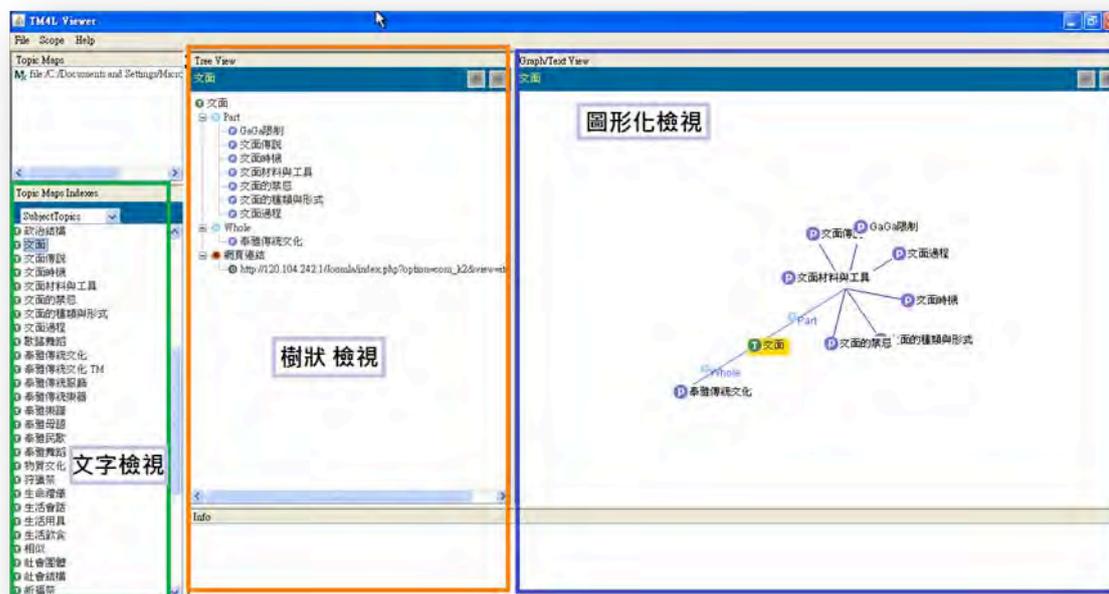


Figure 15, Viewing Options in TM4L Viewer

5. Conclusion

This research designed a website called “The Digital Archives of Atayal”. In order to simplify the difficult and complex of construction, our system architecture use the content management system, and we integrate metadata format of Dublin Core and CDWA to construct the properties and classification of objects. Besides, we use the approach of Topic Maps to establish a local curriculum in the teacher support materials, and collocate knowledge sharing of Web 2.0 features for attracting teachers and students or interact with interested parties.

We hope to transmit the beauty of Atayal through the way of digital archives, so that following generations be able to accept their own culture, but also let other people to respect and understand.

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Diversification of International Student Mobility in the Context of Internationalisation of Higher Education in Asia

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Abstracts

This study aims to clarify the diversification of international student mobility caused by the transnational linkage programs for human resource development in Asia. The international student mobility has been generally recognized as the pattern of South countries to North countries flow or North to North flow; however, nowadays, the new flow from North to South and among South countries have appeared. Focusing on the mobility in Asia, the new flow among Asian countries besides the flow from Asia to Western English-speaking countries has been observed. As this background, the internationalisation of higher education has accelerated the introduction of international linkage programs in English, which has attracted more international students from not only Asian countries but from the Middle East and African countries. More interestingly some of those students hope to transit via Asia to the Western English-speaking: USA, Canada, UK, Australia and so on. In other words, some Asian countries are now becoming a "transit point" of international student mobility. This shows that a new multilateral relation between a sending country and host country via a transit country has replaced one as the new international student circulation. This new trend of international students' mobility includes the problems of quality assurance and cultural friction, which influence on the national and social integration of the related countries. Internationalisation is needed to develop higher education for manpower policy; however, there is also a dilemma occurred between internationalisation and the internal and multicultural affairs through international student mobility.

Introduction

The internationalisation of higher education in Asia has been accelerated in the context of human resource development for knowledge based society in each country. In particular, international student exchange came to be a very important strategic way for internationalisation. Nowadays, Asian countries have developed various methods of international student exchange to achieve this end. China, South Korea, Japan and some ASEAN countries, i.e. Singapore, Malaysia and Thailand are particularly active in the field of internationalisation of education and they have experienced the "brain circulation" type of human capital mobility. Instead of the old fear related to the brain drain phenomenon, there is now a strong trend in these countries to focus on the means to attract back the human capital from abroad or to raise expectations that the human capital will become an active link between its home country and the outside world. This new trend is also a major factor contributing to the initiatives to deepen cooperation with other countries.

The rapid increase in transnational cooperation and the ensuing linkage programs is also tightly connected to the diversification and privatization of higher education. It can also be observed that the association with higher education institutions from abroad has had a huge impact on the expansion and revival of the already in-place higher education and that the policy response to higher

education demand has provided an even greater impulse for the internationalisation of higher education itself.

1. The transfiguration of transnational higher education in Asia

The inter-university joint programs analyzed in this study can be classified, from the perspective of today's higher education curriculum methodology, as transnational programs. According to McBrunie and Ziguras (2007: 6), the concrete image of transnational programs is, for instance, student A, who was born in Latin America, is now working in New Zealand while planning to obtain a degree through a correspondence course offered by a Singaporean educational institution in Australia and when asked where he wants to go and what he wants to do after graduation, he answers that he would like to develop his career in a European company in America. In other words, this example illustrates that it is transnational education, developed to transcend domestic frontiers, that enables 'internationally mobile people', children of globalization and embodied in student A, to pile up education, work and career by surpassing borders.

Across the globe, higher education has originally been institutionalized as a method of training the human capital for the country's own advancement and gained significance especially from the point of view of nurturing leaders through educating an elite minority. This role has not changed even today, higher education being considered still one of the pillars of national strategy. However, tertiary education has gained a new dimension today as opposed to the period when it was evolving exclusively inside the traditional state's framework, especially since the progress of globalization in the nineties through the emergence of items, people, information and capital flowing across borders. Transnational programs have come into being as one of the faces of the new higher education, through the transfiguration of the old higher education system as a result of the emergence of the concept of human capital training as a part of the international education market.

The features of higher education reforms in Asia and Oceania, representing the background of such transnational programs are classified into four areas by Umakoshi Toru (2004: 7-11, 249-250): 1) the shift from the old perspective on human capital as related to the domestic labor market to the high level training of human capital in the context of international competition, 2) the building of a higher education system responding to the needs of an increasingly diverse population, 3) the molting of universities from the old system focusing on the educational function to a new one having research at the center, 4) the independence from subordination to American and European universities and the horizontal interconnectivity of regional universities. In addition, the study introduces many issues concerned with such problems as the restraint on public financial expenditure, the market theories accompanying economic globalization and the decrease in the quality of educational services. Nevertheless, it also states that countries from Asia and Oceania are struggling to guarantee high quality standards and research evaluation in the field of higher education, and that each university is taking up the challenge to reform its education system through the promotion of internationalisation and multinationalism. Another vital point raised in the above mentioned study is that the introduction of market theories, together with the alleviation of the country's internal regulations and the expansion of the range of choices, based on the new wave of economic administration liberalization have, on the other hand, accelerated competition and lead, through these university reforms, to an inexplicable phenomenon in Asia and Oceania, best comprised in the theory that "Asian universities are shaking off their 'subordinate or peripheral' status in relation to the 'central' status of American and European universities". Umakoshi (2004) equally points out the gradual transformation of this

region's higher education activities, which are now based on a new, regional framework and not on subordination to American and European institutions.

Prompting the development of transnational programs are, besides the above described transformation of tertiary education in Asia, the debate on international mobility, namely from brain drain to brain circulation and the related policies regarding foreign students. Kawaguchi Mitsuo

(2007) proposes that originally, the expression "from brain drain to brain circulation" designated the trend shift in international mobility that took place in the late nineties and that ever since, the concept of "brain circulation" has come to signify the transmutation of the international mobility trend from the notion of "brain drain", containing the worries of losing human capital abroad to the idea that "after going abroad, the human capital moves back to its original place and brings back with it the high level professional skills earned there or frequently comes back and forth between these two or more destinations". In fact, Asia is home to many countries that have experienced the "brain circulation" type of human capital mobility, among them China, Singapore and Malaysia, countries that are particularly active in the field of internationalisation of education. Instead of the old fear related to the brain drain phenomenon, namely that sending students to study abroad will contribute to the loss of human capital, there is now a strong trend in these countries to focus on the means to attract back the human capital from abroad or to raise expectations that this human capital will become an active link between its home country and the outside world. This new trend is also a major factor contributing to the initiatives to deepen cooperation with other countries, from the perspective of the internationalisation of higher education.

In addition to this conceptual transformation in the case of human capital training, there are also more concrete issues on higher education standing as background factors for the introduction of transnational programs. Among them, each country's own growth in terms of higher education demand and the hereby derived necessity to expand the higher education supply. In Asia, the increase in demand for higher education has been fueled by the region's economic development and planning the expansion of higher education to the purpose of human capital training has become an important task for each country. On the other hand, especially since the nineties, many of the region's country governments had no other options but to restrain public financial expenditure, as an effect of economic globalization and the increasingly fierce inter-state competition. The result was, on the one hand, the maintenance through public subsidies of higher education provided for the minority elite and on the other, the approval for setting up and accrediting privately funded higher educational institutions, even in those countries where provision for higher education by the private sector did not previously exist. Privately financed higher education institutions, the burden of which does not fall on public finances, were a highly attractive alternative for these governments, especially in the context of limitations on public financial expenditure and they greatly contributed to the advancement of diversification, privatization and corporatization in the field of higher education. At the same time, there was also acceleration in the movement towards reforming the administration of old-style public universities, as well as giving them more autonomy and juridical power.

The rapid increase in transnational cooperation and the ensuing programs is also tightly connected to the above mentioned diversification and privatization of higher education. It can also be observed that the association with higher education institutions from abroad has had a huge impact on the expansion and revival of the already in-place higher education and that the policy response to higher education demand has provided an even greater impulse for the internationalisation of higher education itself.

2. Significance of Transnational Linkage Program

It is the linkage programs that accelerate the international student mobility, which are generically called transnational programs. These programs actually take many different shapes, i.e. the credit compatibility system, twinning programs, double degree programs, branch campuses and 3+0 programs which mean the study program without going abroad.

It has been observed that transnational linkage programs have gained the limelight thanks to the higher education transfiguration process occurring in Asia today and have a tremendous impact in the context of diversification, privatization and corporatization of higher education. While it becomes apparent that transnational linkage programs are intended not only to encourage efficiency and competition in the international education market, but also as models to grope for a new methodology in higher education. In other words, although international transnational linkage programs are propelled by the movement and the required political and economic strategies for reforming each country's higher education system, in terms of practical implementation, these schemes are conducted based on the education and research system of a multitude of higher education institutions and by including not only those programs concerned with granting degrees, but also specifically solving various global and regional issues. There are also expectations that these initiatives will nurture multi-dimensional perspectives and ideas, as compared to the previously promoted bilateral exchanges, which lead to the establishment of common foundations for the Asian community.

2-1. Types of Transnational Linkage Program in Asia

The transnational linkage programs actually take many different shapes. There are conventional programs like the credit compatibility systems, twinning programs, double degree programs, branch campuses, and furthermore, programs that enable students to pursue, after obtaining a diploma in their home country, a higher degree in an associate institution abroad.

The first type of programs is the workshop-style programs aimed at promoting international understanding. "Developing Japanese who can use English in the workplace –Promoting Student Mobility" organized at Ritsumeikan Asia Pacific University is a program that tries to develop mutual international understanding through different angles, not only inside the limits of university classrooms, but also on campus and in spaces outside the university, including overseas. The latter case comprises a wide range of practical programs such as field studies, internships, volunteer activities and foreign student exchanges.

On the other hand, the "Global Leadership Program for 4 Jesuit Universities in East Asia" at Sophia University is a workshop-style program that values the subjective activities of the students. It specifically targets undergraduate students and aims to make them reflect on global issues and endow them with the various values and ideas representing the characteristics of the future global human capital. Most of these types of practical programs are usually targeting undergraduate students and their contents are also chosen from a wide variety of courses, from social studies and humanities to natural sciences. However, although the contents of these programs are also expected to cover a wide range of subjects, due to the participation of many universities, in most of the cases, the most important criteria in building up these programs is for these institutions to share the same mission in terms of program implementation.

Moreover, the program "Establishment of a Global College through an International Alliance" at Waseda University is providing the space for debates on global issues in English. The salient feature

of this initiative is that in this case, space refers not to the university's facilities but to the fact that all the involved universities are contributing with courses and by mutually enabling the studying abroad program, are also making it possible for all the participating universities to use common software.

In opposition with the previously described practical programs aimed at promoting international understanding that are targeting undergraduate students, the specialized programs for training high-level professionals and for specific disciplines aiming for international cooperation are generally offered to graduate students. In addition, the cooperating university is searching to reinforce cooperation with those related institutions which are particularly proficient in the concerned field of education. Another issue concerning on the other hand the practical administration is the manner in which the contents of the program are adjusted and administered, taking into consideration the number of collaborations as well. Some examples are the "S3 Asia MBA" program between the respective graduate schools of business administration in Korea University (Korea), Singapore National University (Singapore) and Fudan University (China) and the "Cultivation of Researchers Who Will Guide Information Society Governance" program between Keio University (Japan), Yonsei University (Korea) and Fudan University (China). These schemes also offer double degrees and regard as inevitably important the mutual coordination of professors, programs and students, including such system adjustment issues as the differences in terms of academic calendars or mutual accreditation.

In terms of training for high level professionals, the "Asia Media Society Course ITASITA" offered by the University of Tokyo is a program designed for the final stage of the master course, which aims to train high standard researchers in Asian or media studies. Using English as a language instrument, researchers are given the opportunity to practice critical analysis and develop research skills necessary in the fields of political science, economics, media studies and other essential social sciences.

In the case of programs specialized in teaching specific disciplines, two examples are considered. The "Infectious Diseases Research Project" from the Institute of Tropical Medicine in Nagasaki University and the "Nagoya University Summer Program", whose theme is automotive industry at Nagoya University and relies on an industry-university partnership. The salient feature of these specialized programs is that they focus on specific disciplines which unless offered by these universities, would have been difficult to access. Besides, when designing the programs, it is easy to indicate the vision behind it, as it relates to a highly specific content.

When analyzing the group of programs instituted to strengthen the link between international joint programs and international cooperation in developing countries, it is important to observe that in this case it is necessary to build up a cooperation framework not only among the participating universities, but by equally involving international cooperation organizations. For instance, programs likes the "Nagoya University Center for Asian Legal Exchange –Legal Maintenance and Assistance Program" or the educational internship program organized by the Nagoya University Research Center for International Education Cooperation in Agriculture in cooperation with agricultural universities in developing countries were established through partnerships with Asian Association of Agricultural Colleges and Universities (AAACU) and its affiliated institutions, as well as Japan International Cooperation Agency (JICA). Another example is the "TAIST Tokyo Tech" initiative, an engineering human capital training program based on an alliance between Tokyo Institute of Technology and Thailand Advanced Institute of Science and Technology, which supports the development of high level human capital research training in the field of science and engineering across Asia. Furthermore, the "Osaka University International Centre for Biotechnology–UNESCO Postgraduate Inter-University Course in Biotechnology", which includes the UNESCO International Post-Graduate University Course in Microbiology that has been implemented for more than thirty years now, since

1973, is a program that has as its core objective the concept of “equal partnership”, unlike the previous examples which started as assistance programs for developing countries.

On the other hand, in the case of regionally focused joint programs, the respective higher education institutions are seeking to design programs whose contents are based on the problems and issues specifically related to the region concerned. The inter-university exchanges at Amoi University (China) are mainly activities with institutions from South-East Asia, based on links with the ethnic group of overseas Chinese, especially those residing in South-East Asia. Another different type of program is illustrated by the “Chiang Mai University Postgraduate International Program –Research Center for Social Sciences and Sustainable Development (RCSD)”, where the focus falls on the establishment of a sub-regional framework based on geographical circumstances, namely the Mekong region, by targeting foreign students from such countries as Vietnam, Laos, Cambodia and Myanmar or China.

Kansai Gaidai University organizes the “ASEAN+3 University Consortium Framework”, an education exchange program with the ASEAN countries, a region renowned for its strong commitment towards the creation of an Asian Erasmus framework and plans to initiate a consortium axed on a double degree scheme. The contents of the program are not specialized in a particular region, but rather incorporate the vast range of contents offered by the respective Asian Studies Programs from each of the involved institutions.

Another program focused on the ASEAN region is the “ASEAN in Today’s World” at Kyushu University. Here, the internationalisation of education is pursued by inscribing it in the international framework of the ASEAN+3 region and strives to deepen exchanges by allowing students from Japan, China, Korea and the ASEAN countries to meet in an ASEAN city and share their academic interests.

Similarly, the objective of the “University of Malaya Asia-Europe Institute Graduate Programs” is the creation of a large-scale type of exchange among a multitude of countries, not only through attracting foreign students, but also by employing faculty members from a variety of countries outside Malaysia and based on the fact that ASEAN is now more than ever before considering, through cooperation with the ASEAN University Network, to accelerate cooperation with the European states.

In addition, there is a certain movement towards the exploring of new academic disciplines through the use of inter-university cooperation as a form of education. The “Asian Erasmus Pilot Program” organized by Kyoto University through the “Global COE for the Reconstruction of the Intimate and Public Sphere in 21st Century Asia” wants to train the human capital of the next generation and open the path towards new academic disciplines analyzing and explaining the sudden social changes from recent years, such as ageing society and demographic depletion, that can be observed across Asia. The main characteristic of this project is that the mutual exchange between the next generation of researchers and professors takes place under the aegis of an ample collaboration between Asian and European partners. The University of Tokyo also inaugurated the “East Asia Liberal Arts Initiative (EALAI)” which also envisages a common framework for liberal arts education. Its feature is that, especially for the programs organized by institutions under the Chinese cultural sphere of influence, while still holding English as a medium, communication in the local languages is in principle the norm.

2-2. Background of the introduction of transnational linkage programs

Taking into consideration all the above mentioned cases, the first thing to be noticed is that an impressive range of international linkage programs is starting to develop in Asia today. University of

Malaya (Malaysia), Singapore National University (Singapore), Amoi University and Peking University (China), Korea University and Yonsei University (Korea), Chiang Mai University (Thailand), all offer programs and structures that present various differences in terms of timeframe, target audience and disciplines provided. Nevertheless, at the same time, they all aim to strengthen the training of international human capital and establish a cross-border education system more flexible in terms of conferring degrees and accreditation.

Taking the case of Japan, it is difficult to deny the feeling that international alliances here have but just begun, especially when compared to other Asian countries. However, some of the programs existing today would have been impossible to imagine in the context of slightly earlier higher education programs. This is the case of programs that, while entering a Japanese graduate school, allow you to earn another graduate degree from an overseas partner university at the same time, by submitting a double graduate thesis, or of those programs which allow you to earn a degree by establishing your home base in the university you matriculated in but choose another graduate program from among those offered by other partner graduate schools and get your diploma based on the studies you pursued there, or, moreover, of those programs that reinforce exchanges with institutions from abroad, even those situated in extremely remote areas. It is due to these initiatives that Japan is today gaining interest in the development of transnational higher education and is even in the process of acquiring a prominent place in the mainstream of higher education programs in Asia.

There are several factors that can be considered responsible for the momentum that this type of cross border programs is now enjoying. Firstly, there is the internationalisation strategy of the higher education institution that is actually implementing the programs. The present study has mainly targeted cases of good practice among international joint programs and their analysis had as a starting point the programs themselves. However, all the higher education institutions that were examined hereby, regardless of whether they are Japanese or overseas universities, have as a common feature an ardent enthusiasm for the process of internationalisation. Therefore it is possible to state that it is precisely because they hold such a great interest in the matter concerned that they have developed a wide range of programs.

Secondly, the respective country governments have also supported the higher education strategies of these educational institutions as strategic priority issues. There are both economic and political reasons for this. The economic reason is that higher education was seen as a method to secure a more proficient human capital from the perspective of planning the training of human capital for the development of the involved countries. In contrast to the previous focus on how to train and utilize the domestic human capital, in today's globalized world, defined by the emergence of trans-border labor migration, state governments are prompted to strive for securing human capital by broadening their horizons beyond the mobilization of their internal human capital. From this point of view, higher education strategies are influenced nowadays not only by the country's internal affairs, but equally so by the international trends.

This is in turn related to the political reasons behind higher education strategies. These strategies are becoming increasingly alluring ways to boost their country's presence in the global arena for governments and inter cultural exchange activities such as receiving and sending foreign students abroad are considered particularly conspicuous movements towards elevating the country's status as a prime player in the region's educational and cultural exchanges.

The above mentioned tertiary education strategies of higher education institutions and the politico-economic factors propelling governments to support these strategies as priority issues

through relevant policies are now emerging in a clearer, numerical form. The result is the “university ranking system”, taken by all means in the best of senses, based on the scholarly debates on internationalisation of higher education, prevalent among Asian countries’ professionals involved in the field, an issue that has equally fanned, competition-wise, the awareness of higher education institutions and governments. Today, Asian universities are becoming extremely sensitive of the university rankings of Times and Shanghai Public University. For instance, many institutions state out clearly their objective to enter top 200 or to challenge the top 100 universities.

The significance of these rankings, either positive or not, is that they represent a standardized indicator influencing the students’ choice of country and university and that the competition they fuel is furthermore revitalizing higher education itself. Their importance is obvious from the objectives and catchwords used today by many Asian universities, for example, “Towards a global knowledge enterprise: A leading global university centered in Asia, influencing the future” (Singapore National University), “East Asia’s education and research hub” (Yonsei University) or “Rebirth of a world class university: The role of leadership” (University of Malaya), and also, in the case of Japanese universities, “The world’s top engineering college” (Tokyo Institute of Technology), “Becoming Global University Waseda: A plan to transform the university into a globally-recognized institution of higher learning” (Waseda University). Among them there are many institutions that, like The University of Malaya, are focusing on the elevation of their ranking in the international higher education charts by setting up clear goals in terms of the targeted ranking position and the year to achieve it. Transpiring from these examples is a certain ideology that “university rankings” are reviving the academic life of universities, while being deeply interconnected with each higher education institutions, and the concerned state governments’ aim to attract excellent human capital through the implementation of such higher education strategies.

Thirdly and from this perspective, the last factor that deserves to be mentioned above all is the existence of international students as learners interested in this type of programs that include university rankings and want to study them as part of their curriculum. Besides concern with the strategies employed by each higher education institution and the respective governments, the most stringent point in the case of regional education exchange networks is whether there are students that would actually engage in such programs. The main pillar sustaining the internationalisation of higher education today is the idea that the recruitment into these programs of superiorly endowed, excellent students, both from inside and from abroad, leads to the intensification of research and educational activities. Even though “international” programs are created, unless there are learners willing to actually include them into their curricula, education itself cannot take place. In other words, international linkage programs and international student mobility has been working in a mutual relationship.

3. Diversification of International Student Mobility in Asia

The increase in overseas student mobility in the Asian region has become a de facto phenomenon especially since the middle of the nineties. Focusing on the timeframe between 1980 and present day and mainly analyzing the data provided by UNESCO, Hans de Witt (2008: 14-45) observes that besides the global flow of international students has generally been from south to north or from north to north, it is also pointed out that the cases of south-south student mobility have also started to bloom and considers them the distinct confirmation of the “brain circulation” current. This change in circumstances has triggered in Asia to the de facto participation of learners in international

linkage programs and the international mobility it implied, after a long era of sending vast numbers of students to study elsewhere, especially in the English speaking countries of the west, in other words a period of higher education policies promoting a dependency system with other countries and regions.

The prediction that from now on the number of international students from Asia will continue to increase is referred to in Banks, Olsen and Pearce (2007: 24). This study forecasts the variation in numbers of foreign students from 2005 to 2025 and predicts that by 2025 the number of total foreign students in the world will become 3.72 million, as compared to 2.173 million in 2005. The regional data shows that the increase will be from 242, 000 to 523,000 in Africa, from 96,000 to 231,000 in the Middle East, from 952, 000 to 1755,000 in Asia, from 206,000 to 346, 000 in the Americas, from 671. 000 to 845, 000 in Europe and from 7, 000 to 20, 000 in Oceania. In the case of Asia, the more detailed estimates show that the number of foreign students will increase from 551,000 to 922,000 in East Asia, from 143,000 to 245,000 in South-East Asia, from 178,000 to 428,000 in South Asia and from 80,000 to 160,000 in the Central Asian region. These data shows that even considered in the global context, the incidence of student mobility cases for Asia is very high.

Sugimura (2008a, 2008b:10-25) observes that new student mobility in Asia. Nowadays, Asian countries have developed their strategy in international student policy mentioned above, and as a result, although numerically expanding since the eighties in terms of studying abroad in the English speaking world, a simultaneous increase and diversification in student mobility routes inside the Asian region caused the birth of new routes. The first thing we notice is that the number of international students going from Asia to Western countries -- for example the number of Asian students going to the United States and Australia -- has been on the rise. These countries have attracted international students from all over the world and remain very popular among Asian students. Additionally, they act as counterparts in transnational programs with Asian countries, resulting in greater opportunities for Asian students to obtain foreign degrees. Secondly, it can be said that new flows exist from China to Japan, Japan to China, Korea to Japan, Korea to China, and China to Malaysia. In particular the flow of students from China to Australia has increased tremendously, which indicates that student flows from East Asian countries (China, Korea and Japan) are more considerable than before. Third, some ASEAN countries, such as Malaysia, Singapore and Thailand, have become hubs or bases of international exchange. Nowadays, international students move not only to Western countries, but increasingly within the Asia region, as well.

Besides the above points, taking a consideration into the case of Malaysia and so on, international students from places such as Africa or Middle East countries comes to be another important target of Asian countries. From these trends, it can be pointed out that international student mobility in Asia has changed its model from a linear one to multilayered one. Namely, Asian countries came to be host countries of international students, and Asia will be one of the regional hubs of international student mobility. More interestingly, these linkage programs have also encouraged the functions of new frameworks for regional education exchange. There is a possibility of making the Asian region as a relay point of international students' mobility in the world. Originally, international students come to Asian institutions in order to study their programs for getting degrees, however, nowadays, there are also students who regard studying in Asian institutions as one of the *transit points* before aiming Universities in the western English-speaking countries through transnational linkage programs (Sugimura, 2010 : 37-50).

4. Issues caused by Transitions in International Student Mobility

As mentioned in the previous section, current international student exchange through transnational linkage programs is both a politically and economically efficient strategy, developed through multilateral relationships. This structure will grow in prominence under the pressures of globalization, which seeks efficiency and standardization. However, it should be noted that there are some issues that remain to be addressed with regard to international student exchanges. The first is the problem of quality assurance in transnational programs. While transnational programs can be very helpful in political and economic strategies, some of them are managed as a form of for profit educational business.

This issue includes the problem of certification. The World Trade Organization (WTO) recognized the importance of an information network for transnational higher education programs in 2002. UNESCO also confirmed the necessity of establishing a world-wide network of organizations for quality assurance in higher education in 2003. As Altbach (2004: 23) noted, massification and expansion of higher education in Asian countries are inevitable and irresistible, and Asian countries are currently coping with the implications of continuing expansion. However, this pressure makes it difficult to focus on improving quality, upgrading research, enhancing the working conditions and so on. For this reason, it is necessary to put forth the necessary effort to assure standards of transnational higher education programs.

The second issue that needs to be addressed in light of present international student exchange trends, is that sometimes these exchanges affect the internal administration of the countries involved. International student exchanges inevitably involve cultural contact and human flows, which sometimes lead to other social problems. The recent restoration of English as a medium of instruction in Malaysia, for example, is the source of some political friction on the language policy within the country. Another effect of increased student mobility is cultural acculturation which is caused by the friction between people who move in the host country and people of the host country. Diversification of international student mobility brings the many kinds of cultures' exchange and it comes to be an opportunity of producing a new culture as well as an opportunity of cultural conflict, i.e. the African students studying in Malaysia who are not willing to commune with Malaysian students.

Taking these matters into consideration, it should be noted that there is a relationship between transnational higher education and matters of national concern, that is worthy of attention. transnational education is indeed organized in various ways and international student mobility is developed across and beyond national borders, but there are political and economic strategies that underpin those movements. In other words, transnational higher education is different from traditional nation-based higher education; however it is still strongly influenced by each country's interest in national development. In connection with this point, Morshidi (2008) pointed out that "the present [*sic*] Malaysia's higher education policy is clearly an attempt to be current and fashionable to face the new challenges in higher education but operationalising these through the familiar state-centric framework".

Conclusion : Possibility of Brain Circulation for Human Resource Development through Transnational Linkage Programs

Through the expansion of transnational linkage programs, the international student mobility has been diversified and the programs are now being developed by transcending the traditional country

frameworks are an innovative academic field created by both the participating students and the supporting academic and administrative staff that did not exist inside the old styled university education. It is also relevant to state that, from the point of view of the current increase in academic fields looking for an interdisciplinary approach, they are a vital form of education for the future training of an Asian human capital endowed with a global perspective. This statement is also in accordance with the trend calling for the creation of an Asian Erasmus Program and the relevant programs developed while taking into consideration Asia's regional context and tolerating diversity, and it can be looked at as embodying the new role that higher education can have in the establishment of a regional community by investing the multifunctional function of transnational networks with the field of higher education. This trend might be able to create a new framework by students' exchange for human resource development with the principle of "harmonization" which has been emphasized by ASEAN and SEAMEO.

However, the diverse international student mobility has also caused some socio-cultural frictions. And the quality assurance system of education will come to be the more important system which links each institution, regional organizations in Asia. It will take a role to make an adjustment between the participant countries' strategy and a regional community's principle. are now being developed by transcending the traditional country frameworks are an innovative academic field created by both the participating students and the supporting academic and administrative staff that did not exist inside the old styled university education. It is also relevant to state that, from the point of view of the current increase in academic fields looking for an interdisciplinary approach, they are a vital form of education for the future training of an Asian human capital endowed with a global perspective. This statement is also in accordance with the trend calling for the creation of an Asian Erasmus Program and the relevant programs developed while taking into consideration Asia's regional context and tolerating diversity, and it can be looked at as embodying the new role that higher education can have in the establishment of a regional community by investing the multifunctional function of transnational networks with the field of higher education.

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Learning to be alive: The education of migrant worker children on the Thai-Burma border

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Introduction

Thailand has taken great economic strides under globalisation. From the mid-1980s to the mid-1990s, its economic growth was among the fastest in the world. Despite a dip after the Asian economic crisis of 1997, and a series of political crises in recent years, the economy continues to progress. This process is assisted in some ways by repression, conflict and poverty in neighbouring Burma/Myanmar. Much of the cheap labour required in Thailand's factories, households and agricultural enterprises is supplied by migrant Burmese¹ workers, both legal or illegal.² Economic growth has enabled and encouraged Thai children and young adults to obtain higher levels of formal education.³ But the schooling of Burmese child migrants in Thailand depends to a great extent on charities. Often the facilities provided are not accessible or beneficial enough to make it worth the while of the children to attend, or their carers to send them there. Instead, many of these children are occupied in intensive labour: indeed, they are often subject to what are defined, under the terms of International Labour Organization (ILO) Convention No. 182 (ILO 1999), as the worst forms of child labour (WFCL).

Thailand has signed treaties in international law avowing that children must receive primary education and be protected from heavy and hazardous labour.⁴ It has done much to incorporate these principles into Thai law.⁵ But at present many of the child migrants get little benefit because of the weakness of implementing the law and regulations. Indeed, the expense to employers and government of making this kind of

¹ The term 'Burmese' is used in this paper to signify people with family origins in the territory of Burma/Myanmar, who have not obtained citizenship of a different state. It does not necessarily mean they come from the Bamar ethnic group.

² In 2006-7, there were about half a million Myanmarese registered as migrant workers by the Thai Ministry of Labour, and it may be estimated that there are two or three times that number who are unregistered (Tsuneishi 2008 pp. 6, 37; IOM and others 2008 p. 70), although some have put the number as high as six million (Bryant Yuan Fu Yang 2009 Section II).

³ Gross secondary school enrolment of Thai children has risen from less than one third to more than 80 per cent in this period (UNICEF 1992 p. 79; 2010 p. 25). Secondary school graduates seem reluctant to accept hard manual jobs.

⁴ In particular, ILO Convention No. 138 deprecates substantial labour being given to children under the age of 15 (ILO 1999). Section 32 of the United Nations' Convention on the Rights of the Child specifies that a child under 18 years of age shall be 'protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development' (United Nations 1989).

⁵ Labour Protection Act B.E. 2541 (Thailand 1998) and Ministerial Regulation BE 2547 (2004).

provision for welfare and human rights is probably a major reason why so many migrant workers remain unregistered and unofficial.

For activists and policymakers in the field of education this poses a complex set of problems. The problem is clearly a lot to do with politics, and so any action of educationalists will be promoting – or at least colluding with – one political approach or another. The present paper demonstrates this by exploring the particular case of migrant children in the agricultural areas of Mae Sot and Phob Phra Districts, on the western border of Thailand. It is largely based on a survey and qualitative study conducted by the present author together with Sopida Werakultawan and Sarintip Mansap in late 2005 and early 2006. This was set out in a lengthy report for the ILO (Nongyao Nawarat and others 2008). The present paper summarises and focuses the key findings more concisely, bringing updated information and further analysis into play.

The paper begins by introducing the geographical setting, and its importance in the globalizing economy of Thailand, showing how this is premised largely on the availability of cheap migrant labour. It goes on to explain who the migrant child workers are, and to describe the general conditions under which they work and live. Then it turns particularly to the question of their education, examining both their attitudes to schooling, and the kind of facilities to which they have access. Given that the main reason for non-participation in schooling is a need to earn money, the question is then raised as to whether this problem can be solved through an approach based on the implementation of international laws and norms. Serious drawbacks are found in such an approach. The paper ends by attempting to indicate some alternatives.

The setting: Mae Sot and Phob Phra

The city of Mae Sot stands on the Thai side of a border crossing for Burma/Myanmar. It is the designated point of entry for the East-West Economic Corridor: a project based on a fast road link from the Indian Ocean to the South China Sea supported by the Asian Development Bank, with the aim of boosting economic linkages between Burma/Myanmar, Thailand, Laos, and Vietnam (ADB 2005). The Thai Government recognising the special economic potential of the Mae Sot area in 1993 designated it as the most favoured of three Special Investment Promotion Zones into which new enterprises were attracted with tax breaks and other privileges. (Arnold 2005 p. 291). The Cabinet decided to invest further in the area in 2004, by providing funds for extensive improvements of infrastructure (Tsuneishi 2008 pp. 25-26).

Agriculture is high among the sectoral priorities for the region. Thai government policy has been to promote large-scale agricultural production in the districts of Mae Sot and Phob Phra, as well as downstream activities such as canning and food processing. These two districts contain over one thousand square kilometres of cultivated land, largely in the form of big plantations of cash crops along the major roads. The main cash crops are corn, soya, mung beans, vegetables, fruit and flowers (Nongyao Nawarat and others 2008 p. 24). Agribusiness takes advantage of large flat areas of rich soil, easy availability of water for irrigation, and – crucially – a supply of cheap manual labour.

According to governmental agencies, in 2005 there were 55,600 registered alien workers in the two provinces, including 3,500 under the age of 19. But the number of

unregistered foreign workers was much higher. The Mae Tao Clinic (a charitable health project assisting migrants) estimated that there were 75-100,000 migrant workers in the area, of which 15-20 per cent (10-20,000 individuals) were children (Mae Tao Clinic 2006). The number of migrants is of the same order of magnitude as the Thai national population in Mae Sot district (Pyne 2007 p. 133). A further indication of this is given by the fact that in 2005 there were 980 live births to migrants at Mae Sot Hospital, representing 43 per cent of all live births there. In the same year, 1,440 births were delivered by the Mae Tao Clinic.

The childrens' background

The nearly 600 migrant child agricultural workers that we interviewed in late 2005 and early 2006 were identified through a snowball technique, in which subjects and other informants provided information which directly or indirectly helped us find additional subjects and further informants. This technique involved biases that mean our group was probably not *exactly* representative of all migrant child agricultural workers in the area. It was inevitably hard to contact people who were loners in one way or another. But from the qualitative picture that we built up through interviews and other research, we believe our group to have been *moderately* representative (Nongyao Nawarat and others 2008 pp. 11-16). In any case, these children and their families can be seen as marking an important and coherent social group.

The profile of the typical migrant child agricultural worker in this area that we built up was as follows. The child was equally likely to be male or female. Mostly they came from Bilin township in Mon State and Pa-an township in Karen State. But their ethnicity was likely to be from the national majority Bamar ethnic group, although members of minority peoples such as Karen and Mon were also present. This may partly reflect a tendency of Bamar people to be more responsive to wage labour opportunities in the modern capitalist sector, rather than sticking to more traditional ways of life. Most of the children had grown up in households headed by wage-labourers, although a substantial minority came from peasant households, and a few from families whose main livelihood was derived from another activity, such as small-scale trading.

Most of the children were living in Thailand in a nuclear family unit with both their parents. But some were with only a single parent, or in the care of a more distant relative. We found very few agricultural child workers who had no carer at all. And few of the children had come to Thailand more than once from Burma/Myanmar; indeed, many had been born in Thailand and never lived in Burma/Myanmar. Thus, for these agricultural workers, it seems that being a migrant is not a seasonal activity, but a long-term condition of life.

Conditions of life and work

Almost all the migrant child agricultural workers lived in communities of migrant workers. These range in size from about ten to about one thousand people. There are two main types: settlements on land provided by the farming enterprise for its workers, and settlements of freelance workers. The first type can be subdivided between settlements sited close to the regular place of work, and settlements which are not

particularly near to any one place of work. The latter were for workers who could be switched between activities in different locations by the agribusiness or gang-master who employed them.

Migrant workers were used most intensively in rose farms, fruit orchards, and plantations of vegetables such as potatoes and white cabbage. The jobs which were most commonly given to the children were ones which exploited their physical characteristics as children, such as tasks close to the ground like planting seedlings, and applying fertilizer in such a way that it nourished the roots of each plant without touching the exposed part. They were paid the same as an adult would be who did these jobs, and were expected to be as productive as an adult would be. Like the adults, they normally had to work more than eight hours a day, seven days a week, without any paid holidays, and for less than half the statutory minimum wage. The labour conditions were exploitative of the adults, but for the children they also violated their needs and rights for rest and leisure, schooling and protection from hazards.

A particular threat to the children's health comes in the use of chemical fertilizers, and pesticides. Paraquat is commonly used, a pesticide widely considered potentially dangerous to human health. Authorisation to use it has been withdrawn in the European Union in 2007 (European Court of First Instance 2007). Other chemicals are used in combinations whose safety has not been well tested. The children who have to work with these chemicals are hardly ever given protective equipment, and many of them experience symptoms such as headache, fever and coughing, besides the back-ache and muscle-ache that come from long hours of physically-demanding labour. The majority have to work long hours without a break in intense heat. Significant minorities regularly have to lift objects heavier than 25 kilogrammes, or work at night, or climb high above the ground. Few of the children had been helped by their employer to get medical treatment, or been given paid remission of work when they were ill.

The demand and supply of schooling

Only a minority – perhaps as little as one fifth – of the Burmese migrant children in Mae Sot and Phob Phra Districts regularly attend school (Nongyao Nawarat and others 2008 p. 22). Of the working children surveyed, many (between 20 and 25 per cent) had never experienced any schooling. Only about 25 per cent had stayed in school beyond the four years of junior primary (pp. 54-56).

The main schooling option for the migrant worker children in Tak Province takes the form of about 50 semi-official schools in a network co-ordinated by a non-governmental organisation called BMWEC or the Burmese Migrant Workers Education Committee (Nongyao Nawarat and others 2008 pp. 22, 79; Pyne 2007 p. 132; BMWEC 2010). Within this, there is variety in terms of quality and approaches, but most are very hard-pressed for resources. Some of these schools are administered fairly directly by BMWEC, and some are run by other NGOs or religious organisations, with various sources of charitable support. At a general level, BMWEC liaises with the Thai Ministry of Education in order to reach a mutually acceptable way of working for these institutions. (The Ministry insists that they should be called 'learning centres' rather than 'schools' as they do not conform to all the same rules applying to mainstream schools in Thailand.)

Most of the learning centres have been working mainly in Burmese language using a curriculum based on the one in Burma/Myanmar, though often modified to reflect more democratic values and a more pluralistic vision of Burma/Myanmar than the one that is projected by the state education system internally (Pyne 2007 pp. 162-174; Lee Sang Kook 2008 p. 200). They may thus give the students the possibility of transferring for further education in Burma/Myanmar in the short- or long-term future, depending on their economic and political situation. Many want a similar possibility in relation to the Thai system, but it is difficult to be compatible with both systems at the same time.

The Thai government has agreed in principle (by cabinet decision in July 2005) that all migrant children should be included in schooling (IOM and others 2008 p. 94). The Thai authorities have indicated that, so long as legal migrant children can reach an adequate standard in Thai language, they can join state schools, and they are also willing to embark on a programme of integrating the learning centres into the Thai school system (Pyne 2007 pp. 156,158, 166-7). But in practice, the problem of transnational compatibility is a sticking-point. Few individual migrant pupils have so far joined Thai schools (IOM and others 2008 p. 94). And the staff of the learning centres have understandable concerns about their integration into the Thai system (Pyne 2007). They are fearful that the process will lead to loss of ability to make the teaching appropriate to the particular needs of Burmese students (p. 166-167). There is also a problem of their own qualifications and employability as teachers (p. 158-159).

But in any case, fewer than 20 per cent of the migrant child workers in our survey cited a lack of available schools as a major reason for leaving formal education (Nongyao Nawarat and others 2008 pp. 54-55). Rather, the motive for most of them for entering into full-time work at an early age was economic: contributing money to their family, and earning money for themselves.

The education policy dilemma

The educational situation of child workers is clearly very unsatisfactory from a humane point of view. At first sight, it might seem clear what the rights and wrongs of it are. But on close examination it presents a hard problem of education policy. To explore this, the paper now sets out a scenario which might be called 'the international law approach', and then discusses its drawbacks.

In 'the international law approach' the Thai government agencies effectively enforce the main applicable international norms and laws. This would mean making sure that migrant workers are registered legally, by means including the active identification and vigorous prosecution of the employers of unregistered migrants. The government would also fulfil its undertaking to apply Thai labour protection measures to the migrants, including the minimum wage, and provision of free and compulsory primary education for migrant children.

The attempt to impose a ban on virtually all child labour under the age of 15 has been criticized by some as making unjustified Western-style assumptions about children (Bourdillon 2006). It reflects an ideology which 'sees childhood as a time to be cared for by others, free for learning and leisure' rather than a period 'continuous with the

adult world' in which work is normal to the developmental process (p. 1202). Children can be harmed developmentally by being prevented from working, as well as because of possible needs to get income for their personal and family needs. Of course this argument, also, could be carried too far and used to support mere exploitation. But it helps make an important case for flexibility in approaches to the needs of children in difficult circumstances.

The application of labour protection measures to migrant worker families – if it were done properly – would probably counter-balance the household financial effects of lost income from children who go to school instead of working. But this does not necessarily mean that it would be in the best interests of the children and their families for the children to stop work, even then.

One must also bear in mind the effects that 'the international law approach' would have on the numbers of migrants employed. Since the costs of employing them would rise greatly, the amount of employment would probably fall considerably. There is a temptation to dismiss the importance of this by saying that it only means going back to the normal condition of having people stay in their own country. But this would not be a state of normality from the point of view of many of the people concerned, for whom their residence in Thailand is a way of life; or, at least, for whom the condition of having some family members in Burma/Myanmar and some in Thailand is part of a longstanding survival strategy.

For many it may be more than a privileged choice. Migration from Burma to Thailand is not only about the lure of cash jobs on the eastern side of the border than the actions of an undemocratic and discriminatory regime on the western side (Grundy-Warr 2004; The Federation of Trade Unions – Burma 2006 pp. 26-27). Many of the migrant workers are undeclared refugees. Thailand has not ratified the United Nations Refugee Convention of 1951 or its 1967 Protocol, and hence it does not recognize refugees within its boundaries (Baek and Subramaniam 2008). It allows the UN to administer 'temporary camps' where designated 'displaced persons' can stay without being immediately returned where they came from. But, besides understandable reluctance to face the restrictions and hard conditions of these camps, it can be risky for migrants to present themselves for the procedure to determine displacement status, since an unfavourable decision may mean immediate deportation (ibid. p. 22). The market in registered and unregistered labour hence takes some of the strain off the refugee problem. Conversely, if the unregistered labour market were eliminated, the refugee problem would become more acute. Hence, an 'international law approach' to the question of migrant children and their education would have to be extended to application of international law and norms on refugees as well.

This scenario looks increasingly far-fetched, the closer one examines it. Strong forces oppose it. Employers will resist the costs of higher wages and improved facilities. The Thai government faces pressure from the employer businesses, besides additional costs of providing schools and other services, and wider harm to its pragmatic relations with the Burma/Myanmar government. All this is not to say that the scenario cannot serve as an ideal around which to organize long-term campaigning. But it means that activism and policy-making must also work at another – more immediate – level for the sake of the welfare of these many thousands of migrant worker children.

Ways forward

Some lessons can be learned from the approach of the BMWEC. Its approach demonstrates a kind of pragmatic flexibility. A keynote statement currently featured on the major pages of its website is particularly revealing.

BMWEC is conducting a pilot project with the Thai Ministry of Education for the proper recognition of Migrant Education. This project involves providing accreditation to migrant schools by the government. We have come far, but the process is very long. We are still only half way and need much more international support to succeed. Advocacy and awareness is a necessity for the schools, which are still illegal, to be able to run. (BMWEC 2010)

BMWEC is engaged in ongoing dialogue and partnership with a ministry of the Thai government, yet it is capable of acknowledging openly that its schools are illegal. Within a Western-style legalistic paradigm this might seem an untenable contradiction, yet it appears to represent a reasonably stable and constructive process. It involves a patient mobilisation of resources and supporters. Such an approach, in which contradictions are managed so that they do not become major confrontations, has produced the major achievement of allowing these schools to exist, and contribute in a modest though valuable way to the development of thousands of children. More than that: the schools have become important centres for protection and identity of children who might otherwise be de-humanized in the eyes of Thai institutions (Pyne 2007 pp. 174-177).

But this primarily helps the children who can afford not to work. Does a pragmatic and flexible approach have anything to offer to others? Various writers have collected examples from other countries of ways in which the calendars and timetables of schooling have been made to complement those of work, so that children have a chance to engage in both (Admassie 2003; Bourdillon 2006 p. 1218). But these examples often refer to family subsistence labour, or in local economies dominated by seasonal work patterns. The kind of industrial efficiency with which the migrant labour force is managed in Mae Sot and Phob Phra may not even leave enough space for this. Almost all the child labourers in our study were working at least eight hours a day, and usually seven days a week.

It may be that voluntary agencies concerned with working children would have to replicate BMWEC's approach of negotiation and compromise, but with the employers rather than the government, opening up possibilities for children to be given the option of taking days and hours off in order to pursue education. This would have to go hand in hand with innovative models of education provision: models involving mobile teachers, and curricula which provided clear benefits to the children. Such curricula might include teaching about the health risks to the children in their work, and ways of protecting themselves against them. It might also include education designed to help children organize themselves, make active life-choices, and pursue human rights.

The idea of such an approach clearly raises many questions. Would employers find it too threatening to enter into such dialogue? On the other hand, might it run the risk of subsidising an exploitative economic production process? Would it complement or undermine the pressure created by simultaneous pursuit of 'the international law

approach'? Would it be possible to find the resources necessary to support mobile teachers? The obstacles are formidable, but the challenge – for both academic researchers and practical activists – is pressing.

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Learning to sustain knowledge: different aspects of motivation an example of life-long learning

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Learning to sustain knowledge: different aspects of motivation an example of life-long learning

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Abstract:

In this age of information where there is spread of new techniques and skills for a job, every profession demands new and fresh knowledge to perform the work up to the standards. So a person must have the passion of learning throughout one's life span called lifelong learning in order to promote and impart the professional skills. In life-long learning there are certain motives varying from person to person due to their working conditions as well as needs. So life-long learning is self motivated, self-guided and is always planned and goal oriented. Due to this it is also a catch-cry and main focus of education for sustainable development (ESD) in all over the world. In Pakistani scenario, certain steps have been taken by the Government. So, this study was conducted to see different motives of sustaining knowledge through life-long learning at higher education level. A self constructed survey questionnaire was used to collect the required information after checking its reliability from MPhil and Ph.D scholars of The Islamia University Bahawalpur, Pakistan. Total numbers of respondents were 118 from different disciplines; out of them 62 members are from applied sciences and 52 are of social sciences subjects. Findings of the study show that most of the respondents were agreed with that they were learning to sustain their subject knowledge.

1 Introduction:

“The most important attitude that can be formed is that of the desire to go on learning”. John Dewey

Motivation is a fundamental process that shapes mind and behavior so, is essential to determine a person for learning. Motivation is known to be expressed differently at different stages of life of a person and it evolves over time {Mortin, 2005}. In life-long learning there are certain motives varying from person to person due to their needs of working conditions. According to education psychology there are two types of learning motives; intrinsic and extrinsic. Intrinsic motivation is that creates curiosity among learners to promote subject matter knowledge while extrinsic motivation of learning is to get prestige by writing degree with name, get monetary reward, learning culture, etc (www.innovativelearning.com). So among lifelong learners these two types of motivation can be found simultaneously. As according to Maslow theory lifelong learning is need based either to enhance knowledge competency or to get reward monetarily. So, in this globalize age, these two types of motivations are embedded. During lifelong learning, a learner is mature enough to decide and direct his/her future direction so, process is self-motivated, self-guided, planned and goal oriented. But the question is that why it is needed? Answer to this is that information and technology has changed us and our society to a knowledge society. In this knowledge society we have to learn new things to keep us survive in this society. Because in knowledge society, knowledge is developed and applied in new ways (World Bank report, 2003). So can be said that we are living in a society where learning has no age limits but has become a lifelong process. For example we buy a new gadget for our home/house

and do not know its procedure that how to use it. So we read its instruction book or consult any other person who knows about it. It is the simplest form of lifelong learning.

During late 60s and early 70s in the world, the word lifelong learning was being used seriously when it was seen and still is means to overcome the problems being faced in an age of uncertainty and continuing changes and growth in knowledge. It is all due to industrially advanced societies that have been subjected to the maelstrom of three revolutions, technological, economic and social by nature. The advent of computerization and a range of information technologies have resulted in enormous technological changes. So great are the changes that it has been claimed, with reasonable justification that the natures of work, skill and knowledge have changed and are changing as a result of these (Zuboff, 1988, Escrigas & Lobera, 2009). In turn, technological revolution has been accompanied by an economic revolution as new technologies have superseded existing equipment, manufacturing processes and methods of industrial organization (Cornfold, 2000}. The globalization of world trade has further increased economic competition with the adoption of improved production processes by many of which were once patronizingly referred to as third world countries. As a result of these technological and economic changes, there has been social changes allied to these because some professions have been rendered outdated and a whole raft of new enterprises and sources of wealth, power and status have emerged. So, to keep and restore the positions in these circumstances were needed to update knowledge and a trend of lifelong term emerged that means learning is a life-long process. According to Harvey (2004) in 21st century to create an enriching and dynamic society it is crucial to form a lifelong learning society that is also a scream cry of education for sustainable development (ESD) and important goal of new millennium goals (Cornford,2000). So in this age of information where there is spread of new techniques and skills for a job, every profession demands new and fresh knowledge to perform the work up to the standards. A person to work efficiently must have the passion of learning throughout one's life span called lifelong learning in order to promote and impart the required professional skills as well as to live in society. In lifelong learning there are certain motives varying from person to person due to their working conditions as well as needs so learn what is meaningful for him/her (Illeris, 2006).

It is education that along with other opportunities promotes a productive citizenry and economically underprivileged sections of society. Because people need to learn work skills and to learn to relate to others, live in societies, communities and in families to become more caring and supportive (Sutherland & Crowther, 2006). Due to the spread of informative technology making human expertise development has become more significant to face the challenges of life. It is only education that provides opportunity to equip a person with modern skills to compete and benefit (Kazmi, 2005) fresh knowledge. The concept of lifelong learning (Griffiths & Ryan, 2008) is that everyone should have equal and open access to high quality learning opportunities. It is based on four pillars of learning:

- Learning to know; learning how to learn other than within specific sets of knowledge.
- Learning to do; developing the competence and ability to respond new challenges and new demands of life.
- Learning to live together; create flexibility and ability to resolve conflicts peacefully, nurturing community potential,
- Learning to be; learning to contribute for community development, aesthetic and diverse cultural appreciation, and prove one's skills in practical life.

According to The Japanese Ministry of Education, Culture, Sports, Science and Technology (2004) in 21st century to face the knowledge challenges a person in order to create an enriching and dynamic society, it is vital to form a lifelong learning society in which one can freely choose learning opportunities at any time throughout one's life span and in which proper recognition is accorded to those learning achievements. It is lifelong learning that embraces many concepts including initial education for disadvantaged groups, continuing education and training for well-qualified and is subject to considerable local, regional and national interpretation (European University Association, 2009).

Lifelong learning comprises two main aspects first is to review various systems comprehensively especially education to create a lifelong learning society; and the other is learning at all stages of life. It may be formal, non-formal or informal learning as sports, cultural activities, hobbies, recreation and volunteer activities are useful in this perspective. Learning especially adult-learning that may be called in most of the cases is being done outside formal system of education. During adult-learning either formal or informal, learners plan, organize and direct his/her study dimensions especially to choose the subjects and study dimensions. Knowledge and skills are related to effective economical production and maintenance of prosperity of society and of oneself. It means that continuous learning throughout lifespan make possible to maintain knowledge and skills currency. According to a survey (Chisholm, L; Anne Larson; Mossoux, Anne-France, 2004) lifelong learning has mixed purposes, that is, both work-related and personal aims. The longer the educational experiences (higher the level of qualification) the more likely people want to see themselves as having recently learned in all sorts of settings. But people are more likely to invest for learning that would promote their rank and income. In Pakistani scenario certain steps are taken by Government to promote this culture. In this perspective higher education (HEC) launched different types of scholarships, among these are indigenous program, split-cite, foreign faculty development, foreign scholarship, etc. In the same way with the help of foreign donor agencies as Fulbright, USAID, commonwealth has launched different types of scholarships for higher education. These are efforts to motivate and restore educational levels in the country.

1.1. Learning for knowledge:

It is knowledge that makes societies progress and major aim of publicly funded institutions is to provide some form of public good by imparting knowledge. But industrialization during 1960s and 1970s demanded skilled workforce that affected all aspects of our life. There is an example of education sector that resulted in the increase of numbers of students in institutions so much that it becomes very difficult for institutions to accommodate them. So, educational institutions got private partnership, became industries that changed the demands of the stakeholders and created an environment of competition (Malik, Danish & Usman, 2010) to satisfy students (that are their major stakeholders) with competent workforce. So in this changing scenario every person needs to update one's knowledge and skills to keep up and live in organization. It gives rise to life-long learning that means to learn through out our life to sustain our knowledge and skills needed to work according to the need of the age. There is another aspect of lifelong learning that is provision of second chances to update basic skills and also offering learning opportunities at more advanced levels. All this means that education provides the needed opportunities that can truly be tailored to the needs of the learner, or indeed to potential learners (European Union, 2003). So, most of the people tried to enhance their knowledge through life-long learning during their professional life. According to Bologna Process (2009) major aim of life-long is to improve the recognition of prior learning.

1.2. Learning for earning:

Knowledge has been linked to effective economic production and the maintenance of a society's prosperity. That probably has put stress on learning through the lifespan and appears to be normal for all (Cornford, 2000). There is substantial evidence that those with higher levels of skill and knowledge are less likely to be unemployed and more likely to gain a higher income. In Pakistani scenario Government give stipend to those who have acquired higher education or above the required criteria for the post serving. Because high qualified person works in a better way and also that complex skills are only learned over long periods of time and in particular motivation, which is allied to will in along with self-regulation. Now organizations promote lifelong learning to become genuine learning organizations (Harper, Gray, North & Brown, 2010).

1.3. Learning for prestige:

It is human nature to be honored and every person always desire to acquire good position in the society where he/she is living. So every person struggles to acquire identity and strive for it. Stanulis, Campbell& Hicks (2002) studied that how a novice teacher tried her best to make her identity and embraced elements of constructivist perspectives, since teacher's identity development is influenced by culture and the ins and outs of everyday interactions with others especially at workplace. So in learning society, a person with extra qualification and skills to use and benefit is honored. So it is another factor of motivation among learners to learn more knowledge.

No doubt there are a lot other factors that motivate for lifelong learning. But this study focuses only on three aspects of learning at higher education level that are learning to enhance knowledge, learning for prestige and learning for monetary benefits.

2 Objectives:

1. To review different aspects of life-long learning.
2. To evaluate different aspects of motivation for life-long learning at higher education.
3. To suggest some measures for betterment.

3 Significance:

This study was designed to find out different aspects of learning that creates motivation among learners to learn. At the stage of learning at university level, learners become mature enough to decide about their future and to direct to a better direction. With its' help a person tried to produce competent skill that help him/her to work on his/her workplace to glorify him/her with success. This study focused only on three motives; learning for knowledge, learning for better earning and learning to earn prestige. The major aim of this study was to find out the factor/s that motivates learners to sustain their knowledge by lifelong learning.

4 Research methodology:

It is purely a descriptive study that was designed to find out motives of life-long learning. A self structured survey questionnaire was used to collect the required information. In this study only three perspectives were selected that are learning to sustain knowledge, learning for earning and learning to acquire prestige in the society. In Pakistan trends towards higher education has been increased during last decade when Higher Education Commission launched scholarship programs especially in doctoral

programs in different categories. So this study was designed to find out attitudes of scholars towards these programs.

4.1. Population and sample:

Population of this study is all the student scholars of all the disciplines of The Islamia University Bahawalpur, Pakistan. The required information were collected during the year of 2009. Total number of scholars from the said university is 153 and categories of this are working persons and jobless, scholarship holders and scholars without scholarship. Sample of this study comprised of 114 scholars from different disciplines. The detail of this sample is as; 52 working persons, 62 jobless; 20 scholarship holders and 92 without scholarship, 62 from applied sciences and 52 from social sciences.

4.2. Instrument for data collection and its reliability:

A self structured survey questionnaire based on three point likert-scales was used to collect the required information. It was divided into three parts that are learning to enhance knowledge, learning for earning and learning for prestige. Reliability of the tool was tested with the formula of Cronbach's Alpha (internal consistency) and found 0.73 that was found within range (Ingalill, Thomas, Jonhn & Bondmark, 2007) due to having value >0.70.

5 Findings and discussion

The collected data was coded giving the values Not at all=1, Possibility=2 and Definitely= 3, and analyzed with the help of SPSS-16. In it at first stage simple percentage of the responses was calculated. So the values presented in table-1, table-2 and table-3 are percentage values.

5.1. Results with respect to three domains:

Table-1: Learning for knowledge

Q#	Statement	Definitely	Possibility	<i>Not at all</i>
1	I am doing M.Phil/Ph.D to learn more about my subject.	78.1	15.8	6.1
2	I am doing M.Phil/Ph.D because I want to broaden my vision in my subject.	77.2	17.5	5.3
3	I am doing M.Phil/Ph.D because I want to get knowledge of international level in my subject	67.5	26.3	6.1
4	I am doing M.Phil/Ph.D because learning new things gives me mental satisfaction	62.3	28.1	9.6
5	I am doing M.Phil/Ph.D because it gives chance to share knowledge globally.	53.5	38.8	7.9

Table-1: presents the respondents' responses about learning to enhance their knowledge. According to this 78.1% shows that majority of the scholars learn to get more subject knowledge, 77.2% to broaden their vision about subject knowledge, 67.5% to get worldly subject knowledge, 62.3% learn for mental satisfaction and only 53.5% learn to get chance of sharing knowledge. The results shows that majority in lifelong learning learn to get more subject matter knowledge globally. The major function of higher

educations is to work the highest intellectual formation for the coming age (Bowden & Marton, 1998) by imparting worldly knowledge. But in this case according to the finding most of the learners learn from international standards but not share globally.

Table-2: Learning for Prestige

Q#	Statement	Definitely	Possibility	<i>Not at all</i>
6	I am doing M.Phil/Ph.D because I want to come into level with respect to knowledge in my subject.	62.3	34.2	3.5
7	I am doing M.Phil/Ph.D to earn prestige in society	39.5	40.4	20.2
8	I am doing M.Phil/Ph.D because I want to impress people by writing doctor with my name.	15.8	19.3	64.9
9	I want to be a more respectable person in society.	35.1	50.9	14.0

Table-2 presents findings of the results of respondents' learning for prestige. According to this 62.3% learn to come to be in rank in his/her subject knowledge, 39.5% learn to earn prestige, only 15.8% to want to impress others to write doctor with their name, and only 35.1% wanted to be respected in society due to this. No doubt learning knowledge of high caliber is a thing of honor but most the respondents learn to come into rank by learning more at this stage.

Table-3: Life-long learning to increase their earning.

Q#	Statement	Definitely	Possibility	<i>Not at all</i>
10	I am doing M.Phil/Ph.D to get a good job.	35.1	47.4	17.5
11	I want to live a luxurious life.	19.3	46.5	34.2
12	I am doing M.Phil/Ph.D to get stipend.	16.7	35.1	48.2
13	I am doing M.Phil/Ph.D that it will increase my pay.	28.1	40.4	31.6
14	I am doing M.Phil/Ph.D because my guardians forced me to do this.	7.9	12.3	79.8

Table-3 present the results from gathered information that 35.1% learn to get good job, 19.3% to pass luxurious life, only 16.7% to get stipend on doing Ph.D, only 28.1% for increase in pay and only 7.9% replied that they are learning that their guardians forced them to learn more. Because the main objective of the lifelong learning is not only to qualify but to produce such a skills that they can perform their jobs in a better way and earn (Marzo-Navarro, Pedraja-Iglesias & Rivera-Torres,2005) more. But majority of the respondents are not sure that they learn at this stage to earn more. So,if we see the values of possibly and definitely by adding the respondents seemed that they are earning higher degrees by lifelong learning to earn their living. So it can be said that they are learning to get better job.

5.2. Overall results with respect to three aspects of learning

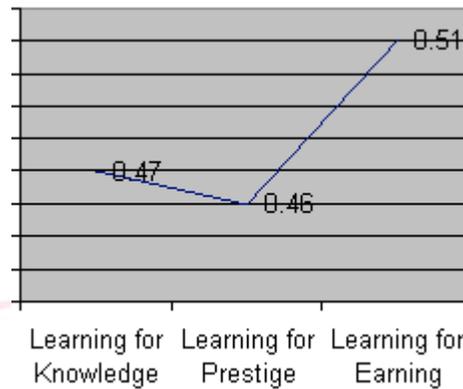
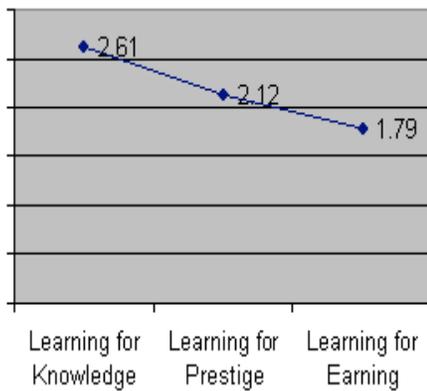


Figure-1: Mean values of overall results Figure-2: Standard Deviation of over all result

Figure-1 and figure-2 present overall picture of the result with respect to three domains of learning. According to the results that are presented in mean values per item that have; mean of leaning for knowledge is 2.61(Max=3), learning for prestige is 2.12 and learning for earning is 1.79. That show that majority of the people read in the form of lifelong learning to earn more knowledge to create knowledge competency that is gained by learning up to date knowledge. The calculated standard deviation shows that there is consistency in the result of ‘learning for knowledge’ that shows that majority of the learners are learning to gain more and fresh knowledge in their subject.

5.3. Results with respect to employed and unemployed categories

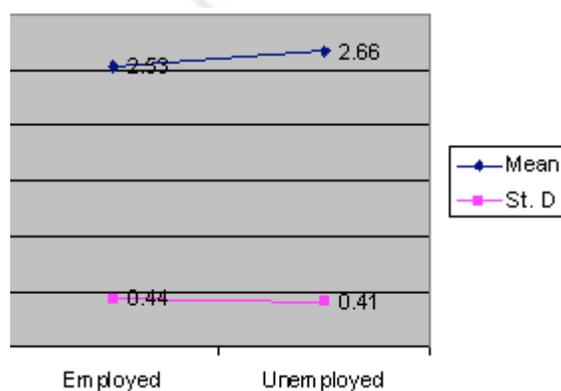


Figure-3: Variable-1, knowledge

Figure-3 presents the difference of mean values between employed and unemployed respondents that is 2.53 (maximum=3) of employed category and 2.66 from unemployed. In the same way standard deviation values are 0.44 and 0.41 of employed and of unemployed respectively. So it can be said that unemployed learners are more eager to learn more to gain subject knowledge competency and standard deviation shows more consistency of the respondents’ results as compare to contestant category.

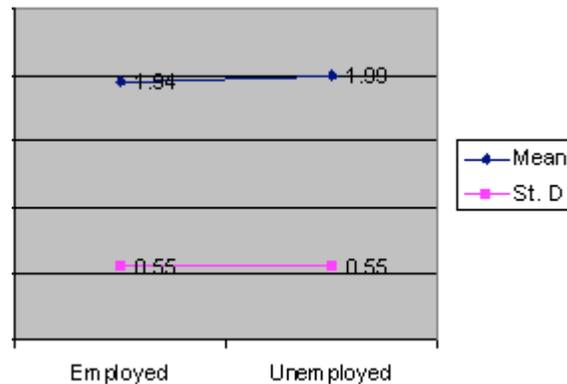


Figure-4: Variable-1, prestige

Figure-4 presents calculated mean values of employed to earn prestige by increasing qualification level that is 1.94 and 1.99 (max=3) of employed and unemployed respondent categories respectively. The standard values of the two categories are 0.55 means equal consistency. So in this there is no wide gap of calculated so they are equally desired to earn prestige to earn higher degree of qualification but low mean values show that a few people think so.

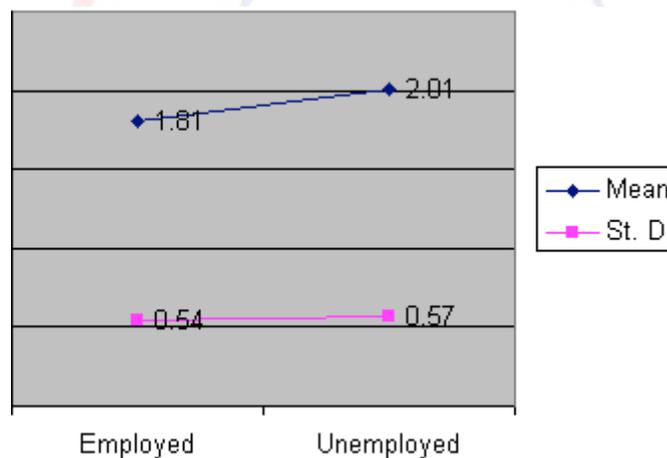


Figure-5: Variable-2, earning

In figure-5 calculated mean values of two categories 1.81 and 2.01 (max=3) shows that unemployed persons are more desirous to earn higher degrees to earn more than that of employed people. The calculated standard values 0.54 and 0.57 shows nearly equal consistency.

5.4. Results with respect the subjects of pure science and applied science

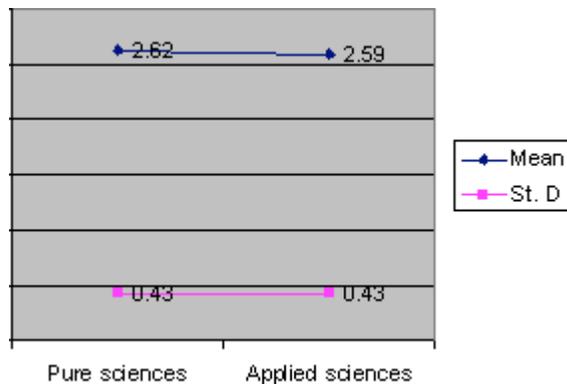


Figure-6: Variable-2, knowledge

Figure-6 shows mean values 2.62 (Max=3) and 2.59 of pure science subjects and applied science subjects respectively that students learning in pure science disciplines are in better conditions in learning for more knowledge. The calculated values of standard deviation show equal consistency in both the categories.

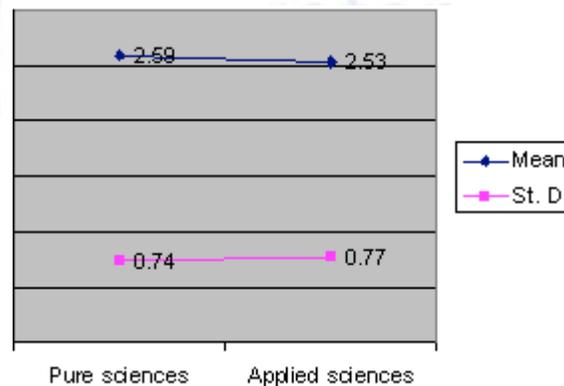


Figure-7: Variable-2, prestige

Figure-7 presents the picture of findings of the result about learning for prestige at higher education level in which mean values are 2.59, 2.53 (Max=3) from respondents of pure science subjects and applied science subjects respectively. Standard deviation values 0.74 and 0.77 shows more consistency among disciplines of applied sciences. So it can be resulted that more respondents from pure science subjects learn to earn prestige as compare to respondents from applied science subjects.

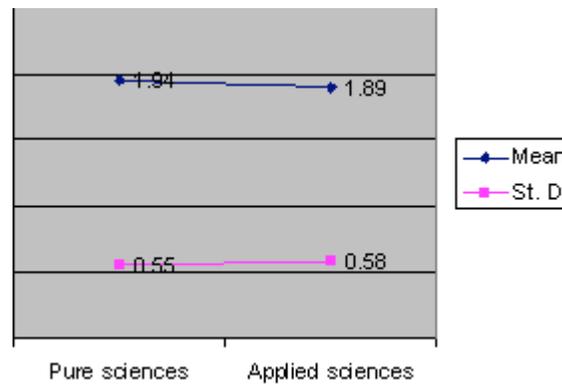


Figure-8: Variable-2, earning

Figure-8 shows mean values 1.94, 1.89 (Max=3) that more respondents from pure science subjects learn to earn more as compare to applied science respondents. In the same way consistency among pure science respondents is more than that of applied science respondents.

6 Conclusions:

- Majority of the respondents definitely learn to get more subject knowledge during lifelong learning.
- Majority of the respondents learn to broaden their vision about their respective subject.
- Most of the respondents wanted to get knowledge of international level in their subjects.
- Overall results shows that majority of the respondents at this stage learn to get more and up to date subject knowledge.
- Unemployed respondents are more eager to learn and get more competencies in their subject knowledge as compare to working persons but gap is not so wide.
- The respondents from pure science disciplines learn more for knowledge as compared to the respondents from applied sciences.
- The respondents from pure science disciplines are more desirous to earn prestige by acquiring higher degree than those of applied science disciplines.

7 Suggestions:

- At higher education level, it is perceived that a person has knowledge of globally recognized. So higher education should impart its responsibilities to impart worldly recognized knowledge and create curiosity among learners to learn from all over the world.
- Higher education institutions with the financial cooperation of Higher Education Commission should organize international level of conferences to share worldly knowledge.
- Institutions should help and encourage foreign travels to attend conferences to share worldly knowledge and to see what is going on, on other parts of the world.
- Conditions and amount of foreign travel grants should be increased and made easy for scholars.

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A multivariate framework for the analysis of the convergence in Higher Education

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Abstract

Debates and policies in the world about the diversity of higher education institutions and educational systems quality have changed substantially over the years. In 1999, the Bologna Declaration was signed to establish a European Higher Education Area (EHEA) by 2010. The Bologna process supposes an attempt to increase mobility and improve the comparability and competitiveness of European universities.

In this work, we analyze the main features of educational systems as the student and staff mobility, effective outcomes and employability, study framework or widening access to rate the similarity of world countries. The question addressed is if higher education systems are converging, diverging or not changing at all during the last years. Applying multivariate techniques (MDS) is provided a spatial representation not only the European Higher Education Area but other world educational systems as for example, Japan, Canada, United States, Australia, between others. This multivariate scope allows us to determine the possible convergence of EHEA and other countries and seek the factors that cause the obtained results.

Topics of Congress:

Community, Culture, Globalization and Internationalization; Educational Vision, Policy, Leadership, Management and Administration

A multivariate framework for the analysis of the convergence in Higher Education

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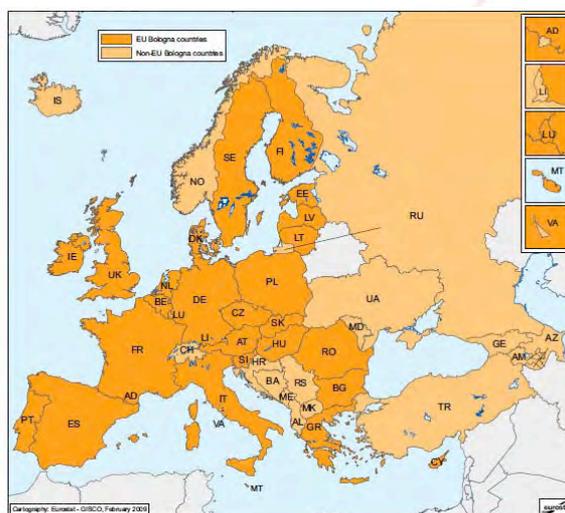
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1. Introduction

European higher education institutions have accepted the challenge in constructing the European Higher Education Area (EHEA) under the fundamental principles laid down in the Bologna Magna Charta Universitatum.

The Bologna Declaration, which was signed in the Italian city of Bologna on 19 June 1999 by ministers in charge of higher education from 29 European countries, sets out “the objective of increasing the international competitiveness of the European system of higher education” and points out the need “to ensure that the European higher education system acquires a world-wide degree of attraction”. Today, the Bologna Process unites 47 countries under the aim of creating a Higher Education Area based on international cooperation and academic exchange that is attractive to European students and staff as well as to students and staff from other parts of the world.

Figure 1. Bologna countries



The internationalisation of higher education has been consistently identified as a major trend since the late 1980s. This process of internationalisation is manifesting itself in a variety of ways. Not only are exchanges of faculty and students becoming increasingly common but also the universities are striving to respond to the needs of the rapidly globalizing economy by internationalising their curricula. The Sorbonne declaration of 25th of May 1998, which was underpinned by Bologna process, emphasized the creation of the European area of higher education as a key way to

promote citizens' mobility and employability and the Continent's overall development (Bologna Declaration, 1999).

The Bologna Process is leading to greater compatibility and comparability of the systems of higher education with the adoption of a system degrees essentially based on two main cycles (undergraduate and graduate) as well as with the establishment of a system of credits (ECTS system). The education policies shall remove learning obstacles: flexible study paths, full recognition of study achievements, study support and the full portability of grants and loans, among others, are necessary requirements.

The ongoing reforms have had a strong impact on how European higher education relates to higher education in other parts of the world. This is a goal further pursued in the Ministerial Meetings of Prague (2001), Berlin (2003), Bergen (2005) and London (2007). Following the European Councils in Lisbon (2000) and Barcelona (2002) aimed at making Europe "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion" and calling for further action and closer co-operation in the context of the Bologna Process. So, the education is turned in one of the main tools for facing subjects as the growth or knowledge economies development, among others (Jones, 2007).

In many parts of the world, "the European reform model" has created considerable interest (Pavel Zgaga, 2006). Debates about the diversity of higher education institutions and educational systems quality have increased during the last years. Many universities in Europe have accepted the process of harmonization as inevitable (Nóvoa, 2002, Ahola and Mesikämnen, 2003) and other world countries follow the Bologna process with attention.

To measure the progress in the implementation of EHEA the main sources of information are the national reports prepared by representatives of national governments, the report Focus on the Structure of Higher Education in Europe prepared by EURYDICE and the statistical information of Eurostat. As stated by Fejes (2006) and Gornitzka (2005) these types of studies do not apparently provide a clear picture of reality and done progress. Complementary, research about Bologna process has appeared around social issues (Kladis, 2003; Nyborg, 2005), descriptive progress of implementation (Reichert and Tauch, 2004), personal reflections (Wächter, 2004; Froment, 2003) or critical views (Nóvoa and Lawn, 2002; Fejes, 2006), among others.

In this paper, the question addressed is if higher education systems are converging, diverging or not changing at all during the last years. We analyze the convergence of EHEA countries and other world countries in the education field and seek the factor that causes the obtained results. With this aim, in next section we develop a multivariate technique to explore the diversity of higher education in the world. The statistics for the monitoring of the social dimension and mobility of the Bologna Process provide by Eurostat are employed with this finality.

2. Methodology

The world higher education consists of a highly diverse set of national higher education systems. At London meeting (2007) of the Ministers responsible for higher education in European Union, the social dimension of the Bologna Process was emphasized:

“We share the societal aspiration that the student body entering, participating in and completing higher education at all levels should reflect the diversity of our populations. We reaffirm the importance of students being able to complete their studies without obstacles related to their social and economic background. (London Communiqué 2007, 2.18)”

In spite of the population diversity, today the higher education systems seem to follow a number of common goals. In this work, we analyze the main features of educational systems to rate the similarity of world countries.

Eurostat, together with Eurostudent and the data collection working-group set up by the Bologna Follow-up group, defined a set of indicators to monitor progress in mobility and the social dimension of the Bologna Process. We employ the statistics provided by Eurostat that allow us monitoring the progress not only in European and not European universities but along the time. We compare the results in 2001 and 2005 of key education indicators. We have selected features related with the study framework (public expenditure on tertiary education, tertiary education institutions' income from private sources, public financial aid to tertiary students), student and staff mobility (students who are nationals of a given country, studying in another country; number of foreign students studying in a given country) and effective outcomes and employability (gross graduation rate).

These variables supply basic and interesting information about the characteristics of higher education systems: Once a student has entered the higher education system, an effective use of public and private resources should provide an environment conducive to the successful completion of studies (Eurostat, 2009). The ability of higher institutions to transform enrolled students into qualified future workers can be observed by graduation rates. And to become employable you need to be created as a mobile subject; if you become mobile you will have a greater chance to attain a job as your competence can be matched with a suitable employment. Such mobility will also make a country more prosperous as it will contribute to creating mobile citizens that makes the most of his/hers competencies.

This data collection on education statistics covers the Member States, the EFTA/EEA countries, the candidate countries, South-East European countries as well as OECD Member States situated outside Europe as Australia, Canada, Japan, Korea, Mexico, New Zealand or United States. Some of these countries must be excluded from the analysis due the lack of information.

A multivariate technique has been applied to systematize this information. Multidimensional scaling procedure (MSD) has been conducted in order to group the countries together in specific configurations based upon the selected educational indicators. The purpose of multidimensional scaling (MDS) is to provide a visual

representation of the pattern of proximities among the set of countries. The more similar countries, the closer together they are positioned in the space, and vice versa. The MDS analysis has been conducted with the program ALSCAL which is available as module within SPSS. ALSCAL performs classical non-metric multidimensional scaling to uncover the dimensions on which countries can be compared based on indicators of their education system. The graphical representation from 2001 and 2005 are gathered in the figure n° 2 and figure n° 3.

Figure n° 2. Model 2001

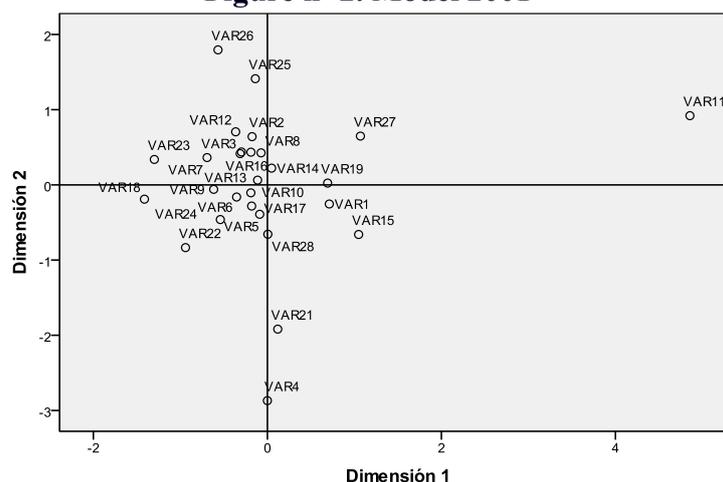
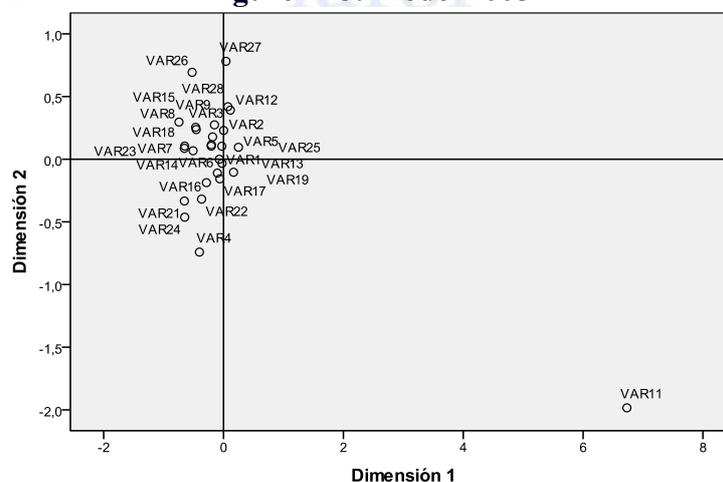


Figure n° 3. Model 2005



The goodness of fit between the data and their spatial representations can be calculated in several ways, with one of the most common being Kruskal's Stress and the R^2 (squared correlation distances). The stress value goes from 0 (perfect fit) to 1 (the map captures nothing about the data). Generally, we are looking for stress values less than 0,2 . The values of Stress and squared correlation distances are 0,140 and 0,951 in 2001 and 0,807 and 0,991 in 2005 so, the obtained MDS models have a high goodness of fit.

Six clusters of countries, collected in the table n°1, are derived from the graphical representation in 2001.

Table n° 1. Higher education clusters. 2001.

1	2	3	4	5	6
Cyprus (11)	Denmark (4) Finland (21)	United States (25) Japan (26)	Belgium (1) Slovenia (19) Malta (15) Australia (27)	Poland (18) United Kingdom (23) Sweden (22)	Czech Republic (3) Netherlands (16) Spain (8) Slovakia (20) Bulgaria (2) Latvia (12) Italy (10) Hungary (14) Greece (7) Germany (5) Austria (17) Ireland (6) Lithuania (13) France (9) Norway (24) New Zealand (28)

In 2005, a convergence between educational systems has been produced. We can point out two big clusters, Cyprus and the rest of countries. These results show a strong harmonization in the European Higher Education Area. The differentiation is also minor for the rest of countries. “Countries outside of Europe have already recognized the profound revolution rolling from Cork to Vladivostok with parts of the Bologna Process having been imitated in Latin America, North Africa, and Australia, resulting in a global shift in higher education leadership” (Adelman, 2009). If we split the last cluster we can meet the groups gather in the next table:

Table n° 2. Higher education clusters. 2005.

1	2	3	4	5	6
Cyprus (11)	Australia (27)	Japan (26)	Denmark (4) Finland (21) Sweden (22) Norway (24) Netherlands (16)	Malta (15) United States (25) Poland (18) Spain (8) Greece (7) Czech Republic (3)	Rest of countries

The results point out a differentiation attempt of non European countries as Australia and Japan. In the European Higher Education Area different tendencies have been arisen. Nordic countries, south and some of the central territories and the rest of the countries are the three basic blocks in European Higher Education.

A deeper explanation of clusters implies an interpretation of dimensions. The figure graphically plots each of countries on two dimensions. However, this plot does not make clear how these two dimensions best could be typified. To make the interpretation process more clear the correlations between our six indicators and the two dimensions are studied in the table n° 3.

Table n° 3. Correlations between variables and dimensions

	2001		2005	
	Dimension 1	Dimension 2	Dimension 1	Dimension 2
Public expenditure	-0,010	-0,780	0,087	-0,597
Private expenditure	0,050	-0,028	-0,006	-0,149
Grants	0,357	0,715	0,370	0,178
Graduation rate	-0,670	-0,447	-0,615	0,269
Student abroad	0,854	0,189	0,976	-0,775
Foreign student	0,500	-0,304	-0,154	0,317

The dimension 1 gathers the mobility of students and graduation rate. The signal of correlations helps to characterize the countries. Countries with high student mobility will come out in the positive axe 1. In contrast, the grants have an inverse behavior. The dimension 2 represents an axe of expenditures in both years. It is related negatively with the public and private expenditure, so the countries with high expenditures in education should appear in the negative part of the axe.

3. Conclusions

Debates and policies in the world about the diversity of higher education institutions and educational systems quality have changed substantially over the years. In many parts of the world, the Bologna process has brought considerable interest (Zgaga, 2006). Many universities in Europe have accepted the process of Bologna transformation as inevitable and other world countries follow it with attention (Nóvoa, 2002).

In 2005, a convergence of basic educational characteristics has been produced. Cyprus is different from the rest and some soft tendencies can be pointed out for the rest of countries.

Cyprus has kept a differentiate position in terms of higher education along the time. The proportion of young people opting for the high education in Cyprus “is exceptionally high, currently about 60% of the relevant age group. This has caused concern among the country’s policy makers who are aware of the limited capacity of the Cyprus economy to accommodate the increasing supply of higher education graduates” (Menon, 2010).

Two non-European countries – Australia and Japan- shape each one a cluster. The Australian Government is undertaking a comprehensive review of the higher education sector to ensure that Australia's higher education institutions are best placed to contribute to the nation's future. Australia seems to follow a different path to Bologna process given the results. Japan also shows a soft differentiation. Unlike, after World War II, American higher education ideas were imposed in Japan (Witt, 2002), the 2005 results present a Japan far from its heritage.

In the European Higher Education Area, two types of systems are different from the rest. In one hand, Nordic countries are those that invest the most public resources in education and have the access and enrollment rates among the best in the world. Their impact in research and development is among the highest. In other hand, the south

countries have suffered a gap between the strong demand for higher education and the limited demand of the domestic economy for highly educated personnel (Liagouras et al., 2003).

The rest of European countries are in the same group. The called process of harmonization has produced in terms of general education indicators. In South East Europe countries, the Bologna Process has been perceived as a key driver for rebuilding higher education systems that all share a common heritage and have jointed to the rest.

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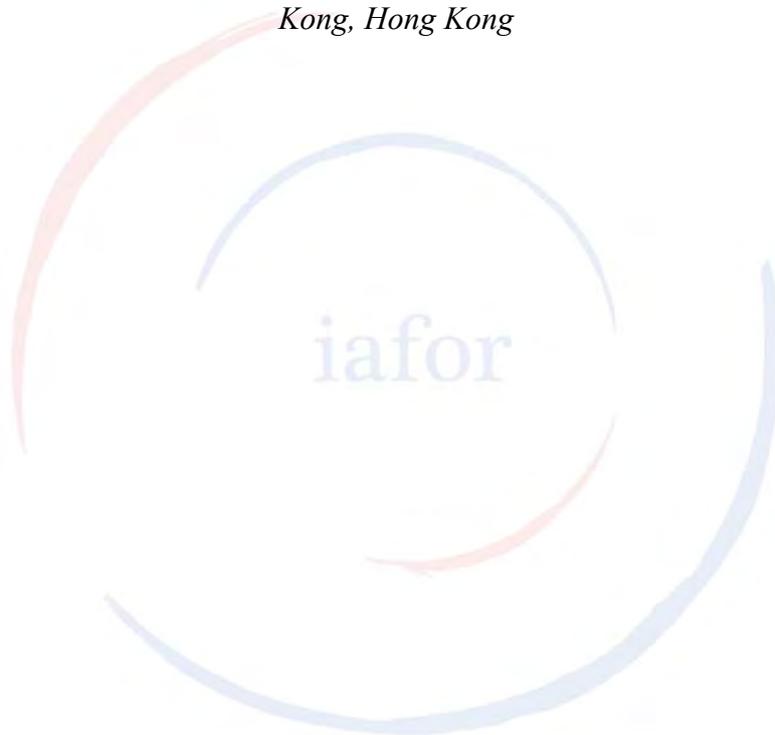
Differences in Resting EEG Coherence Related to Academic Performance

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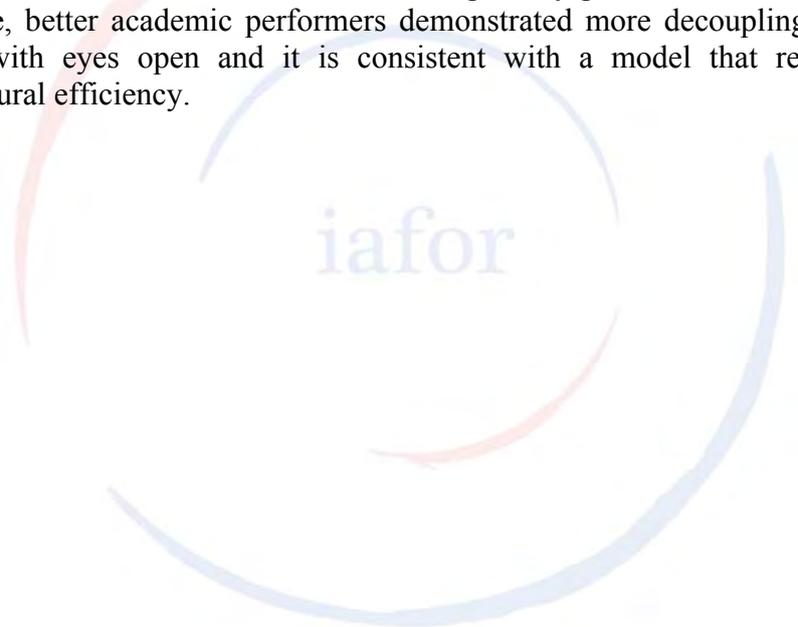
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Abstract

EEG coherence has extensively been used to investigate brain activity and cognitive function. In contrast, relatively less is known about the relationship between resting EEG coherence and academic performance. In the present study, a total of 60 healthy normal participants from Institute of Textiles and Clothing, The Hong Kong Polytechnic University were recruited. The EEG was recorded during resting period with eyes open for 3 minutes from 64 Ag/AgCl-sintered electrodes mounted in a stretch-lycra Quik-Cap. The EEG was analyzed over 64 electrode positions in the theta (4 - 8 Hz), alpha (8 - 12 Hz) and beta (12 - 25 Hz) frequency bands as these three frequency bands are found to be associated closely with cognitive function. Coherence, defined as the spectral cross-correlation between two signals normalized by their power spectra was calculated and grouped into intrahemispheric short-range (between adjacent electrodes pairs, such as F1-F3, F2-F4) or (intrahemispheric long-range (at least one electrode was in between, such as F1-C1, F2-C2) coherence. The interhemispheric coherences were separately calculated within the frontal, central, temporal, and parietal/occipital cortical regions. The results showed that academic performance, as measured by GPA, was negatively correlated with intra- and interhemispheric coherence during resting condition and the correlation was especially pronounced for alpha frequency band. Therefore, better academic performers demonstrated more decoupling of brain areas when resting with eyes open and it is consistent with a model that relates decreased coherence to neural efficiency.

The logo for iafor (International Association for Frontiers of Research) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular pattern.

Differences in Resting EEG Coherence Related to Academic Performance

Mei-chun Cheung¹ and Agnes S. Chan^{2,3}¹*Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hong Kong*²*Department of Psychology, The Chinese University of Hong Kong, Hong Kong*³*Integrative Neuropsychological Rehabilitation Centre, The Chinese University of Hong Kong, Hong Kong***Introduction**

Given that cognitive function, such as attention, language and memory, are subserved by interconnected neural networks in the brain (Mesulam, 1990), one of the psychophysiological methods that can provide evidence for the functional coupling between brain regions during cognitive processing is the coherence analysis of EEG (Rappelsberger & Petsche, 1988; Rappelsberger, 1989; Weiss & Rappelsberger, 1996; Anokhin et al., 1999; Clarke et al., 2007, 2008; Barry et al., 2009). EEG coherence is a measure of linear synchronization between signals at two electrode sites as a function of frequency (Thatcher et al., 1986; Nunez et al., 1997) and reflects the degree of functional cooperation between neuronal substrates (Weiss et al., 2000; Weiss & Mueller, 2003). The examination of temporal synchronization of neuronal activities during various cognitive tasks by calculating coherence between two EEG signals has provided useful information about underlying cortical coupling and connectivity between distinct brain regions (Weiss & Mueller, 2003; Clarke et al., 2005, 2007, 2008; Barry et al., 2009). Research suggests that high EEG coherence indicates strong structural or functional connection between cortical regions (Fein et al., 1988; Thatcher et al., 2008) and is associated with various cognitive tasks, such as memory (Klimesch, 1999; Weiss and Rappelsberger, 2000; Sauseng et al., 2005), language (Weiss & Mueller, 2003; Cheung, Chan, Sze, 2009, 2010), intelligence (Thatcher, North, & Biver, 2005), and brain disorder, such as Autistic Spectrum Disorder (Coben et al., 2008), Attention-Deficit/Hyperactivity Disorder (Barry et al., 2002, 2004, 2005, 2006; Dupuy et al., 2008), and Alzheimer's disease (Hogan et al., 2003; van der Hiele et al., 2007).

According to the neural efficiency hypothesis (Haier et al., 1988, 1992), "intelligence is not a function of how hard the brain works, but rather how efficiency it works". Therefore, brighter individuals may not need to work hard, but know how to work smartly. Extensive studies have shown the relationship between neural efficiency and intelligence (Jausovec & Jausovec, 2000, 2003; Jausovec, 1996, 2000; Neubauer & Fink, 2009) that highly intelligent individuals display lower brain activation while they engage in cognitive tasks. One of the frequently used measures is EEG alpha activity. For instance, as compared with gifted individuals, average individuals displayed lower alpha power (greater mental effort) during different information processing tasks (Jausovec, 1996, 2000). However, Petsche (1996, 1997) argue that since EEG coherence can provide functional relations between brain regions, it may be a better indicator for differences in intelligence. The argument is supported by some studies that demonstrate negative correlation between coherence measures and IQ (Jausovec & Jausovec, 2000; Thatcher & Walker, 1985). By comparing with normal children, mentally retarded children demonstrated a global increase of EEG coherences in all bands (Gasser et al., 1987). The higher coherence pattern at rest is also observed in children with Down's syndrome (Schmid et al., 1992), children with learning problems (Leisman & Ashkenazy, 1980) and with reading-writing difficulties (Marosi et al., 1995). Therefore, the individual difference in brain activity may not only be revealed during cognitive tasks, but can also be observed during resting state, as measured by EEG coherence. At present, relatively little is known about the relationship between resting EEG coherence and academic performance which will be investigated in the present study and it is speculated that better academic

performer will have a lower EEG coherence at rest.

Methods

Participants

A total of 50 university students (age: 20.7 ± 1.0 ; years of education: 15.10 ± 0.35 , grade point average: 3.09 ± 0.39 , 9 males) from the Institute of Textiles and Clothing, The Hong Kong Polytechnic University, were recruited. All participants were native Cantonese-speakers who had begun to learn English before the age of 6 and had at least 12 years of education in English. They all participated voluntarily and gave informed consent in accordance to the institutional guidelines. Their academic performance was evaluated by their overall grade point average (GPA, maximum = 4.00).

EEG Recording

The EEG was recorded from 64 Ag/AgCl-sintered electrodes mounted in a stretch-lycra Quik-Cap (Neuroscan, El Paso, TX, USA) with electrode placement in accordance with the international 10-10 system (Chatrian et al., 1985; American Electroencephalographic Society, 1994; Nuwer et al., 1998). A ground electrode was placed on the forehead anterior to Fz. The standard reference electrode of the cap, placed between Cz and CPz, was used during acquisition. Electrode impedances were under 10 k Ω and homologous sites were within 1 k Ω of each other. Signals were amplified with a Neuroscan SynAmps² amplifier unit (EL Paso, TX, USA) with a bandpass of 0.05 to 200 Hz and digitized at a sampling rate of 1000 Hz. During EEG recording, subjects were invited to rest with eyes open for 3 minutes.

EEG Data Processing and Analysis

The EEG data underwent offline processing for artifact removal and re-montaged the reference to linked ears using the NeuroGuide software program (NeuroGuide, v.2.5.2) as averaged earlobe reference $[(A1+A2)/2]$ is commonly used for EEG coherence analysis (Thatcher, North, & Biver, 2005; Weiss & Rappelsberger, 1996, 1998; Weiss et al., 2002, 2005). Split-half reliability tests and test-retest reliability tests were conducted on the selected EEG segments. Only data that had at least one minute of artifact-free data and with >90% reliability were subsequently entered into the spectral analyses. Fast Fourier Transformation (FFT) was used to translate signals to the frequency domain. The EEG was analyzed over 64 electrode positions in the theta (4 - 8 Hz), alpha (8 - 12 Hz) and beta (12 - 25 Hz) frequency bands.

Coherence, defined as the spectral cross-correlation between two signals normalized by their power spectra (Thatcher et al., 1986, 2005, 2008), was calculated between all the electrode pairs, except for the eight midline electrodes (Fpz, Fz, FCz, Cz, CPz, Pz, POz, Oz).

Coherence values were transformed by using Fisher's z -transform. Following published literature (Barry et al., 2002, 2004, 2005, 2006, 2009; Clarke et al., 2005, 2007; 2008; Dupuy et al., 2008), the means were inverse-transformed for reporting. The coherence values were grouped into (i) intrahemispheric short-range (between adjacent electrodes pairs, such as F1-F3) or (ii) intrahemispheric long-range (at least one electrode was in between, such as F1-C1) coherence. The interhemispheric coherences were separately calculated within (iii) the frontal (Fp1-Fp2, AF3-AF4, F1-F2, F3-F4, F5-F6, F7-F8), (iv) central (FC1-FC2, FC3-FC4, FC5-FC6, C1-C2, C3-C4, C5-C6, CP1-CP2, CP3-CP4, CP5-CP6), (v) temporal (FT7-FT8, T3-T4, TP7-TP8), and (vi) parietal/occipital (P1-P2, P3-P4, P5-P6, P7-P8, PO3-PO4, PO5-PO6, PO7-PO8, O1-O2) cortical regions Coben et al., 2008; Dupuy et al., 2008; Cheung, Chan, & Sze, 2009, 2010).

Results

Intrahemispheric coherence and GPA

The relationship between intrahemispheric coherence and GPA was determined by using Pearson's correlation coefficients. As revealed in Figure 1, significant negative correlations between short- and long-range intrahemispheric coherence and GPA were obtained in the alpha frequency bands in both the left (short: $r(60) = -0.446$, $p = 0.000$; long: $r(60) = -0.348$, $p = 0.006$) and right (short: $r(60) = -0.385$, $p = 0.002$; long: $r(60) = -0.375$, $p = 0.003$) hemispheres, respectively.

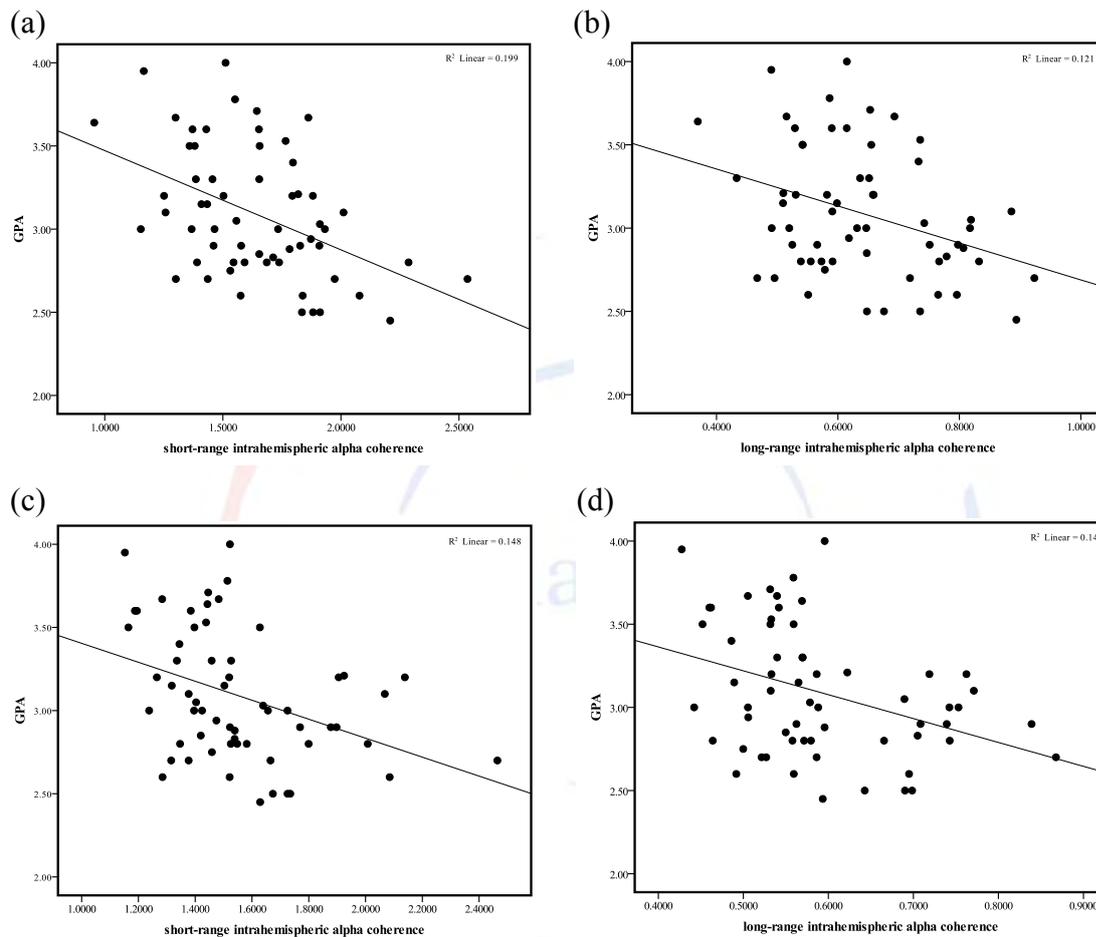


Figure 1. Association between GPA and (a) short-range (b) long-range intrahemispheric alpha coherence in the left hemisphere and (c) short-range (d) long-range intrahemispheric alpha coherence in the right hemisphere.

It was further shown that intrahemispheric beta coherence was also inversely correlated with GPA and the association was significant for short- and long-range coherence in both the left (short: $r(60) = -0.356$, $p = 0.005$; long: $r(60) = -0.344$, $p = 0.007$) and right (short: $r(60) = -0.355$, $p = 0.005$; long: $r(60) = -0.347$, $p = 0.007$) hemispheres, respectively (Figure 2). No significant correlation was found between intrahemispheric coherence and GPA in either hemisphere for theta frequency band.

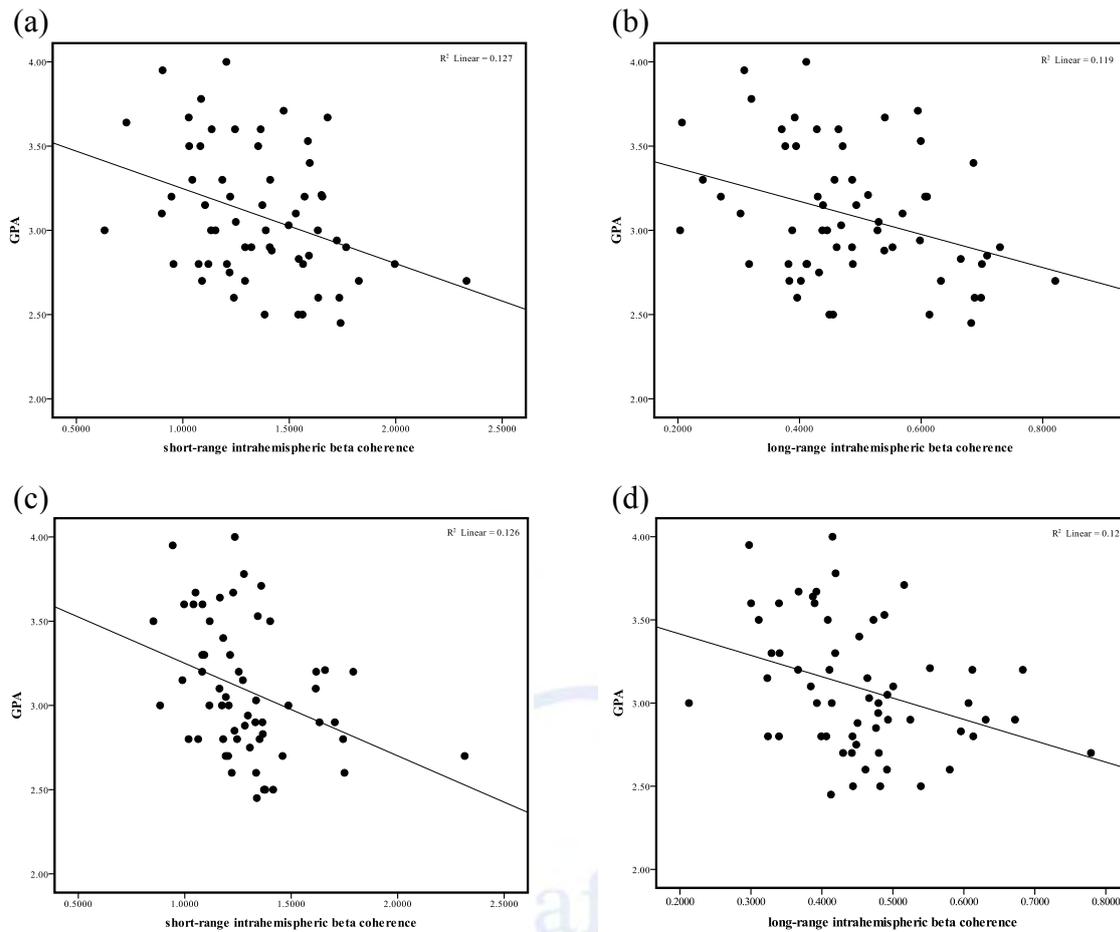
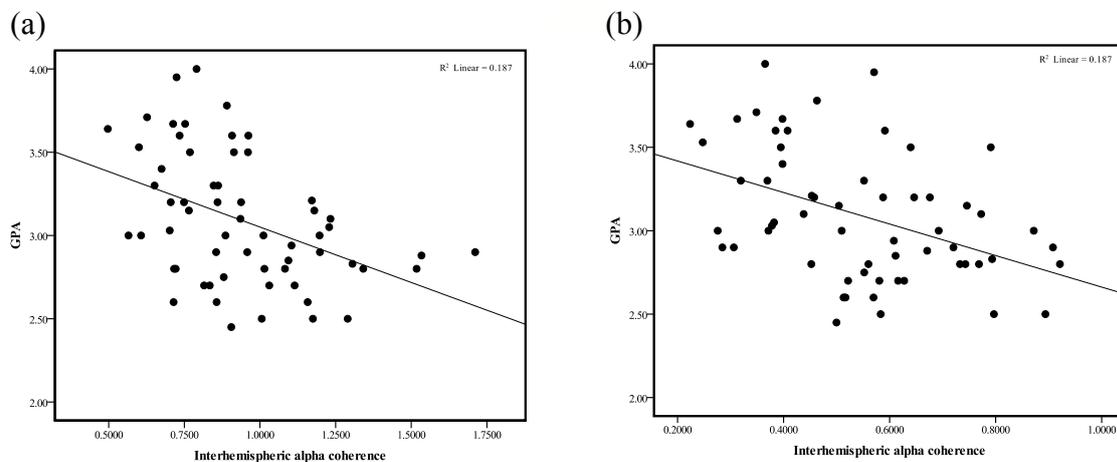


Figure 2. Association between GPA and (a) short-range (b) long-range intrahemispheric beta coherence in the left hemisphere and (c) short-range (d) long-range intrahemispheric beta coherence in the right hemisphere.

Interhemispheric coherence and GPA

As revealed in Figure 3, significant negative correlation between interhemispheric alpha coherence and GPA was found in all four cortical regions (frontal: $r(60) = -0.432, p = 0.001$; temporal: $r(60) = -0.432, p = 0.001$; central: $r(60) = -0.438, p = 0.000$; parietal/occipital: $r(60) = -0.377, p = 0.003$)



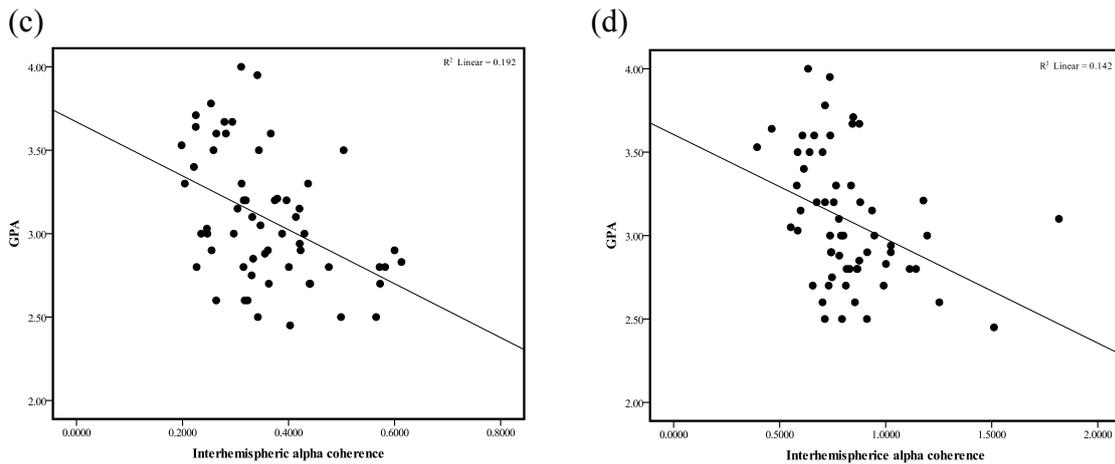


Figure 3. Association between GPA and interhemispheric alpha coherence in the (a) frontal (b) temporal (c) central and (d) parietal/occipital cortical regions

Similar to interhemispheric alpha coherence, interhemispheric beta coherence was negatively correlated with GPA and the association was significant in frontal ($r(60) = -0.366, p = 0.004$), temporal ($r(60) = -0.368, p = 0.004$) and central ($r(60) = -0.374, p = 0.003$) cortical regions (Figure 4). No significant correlation was found between interhemispheric theta coherence and GPA.

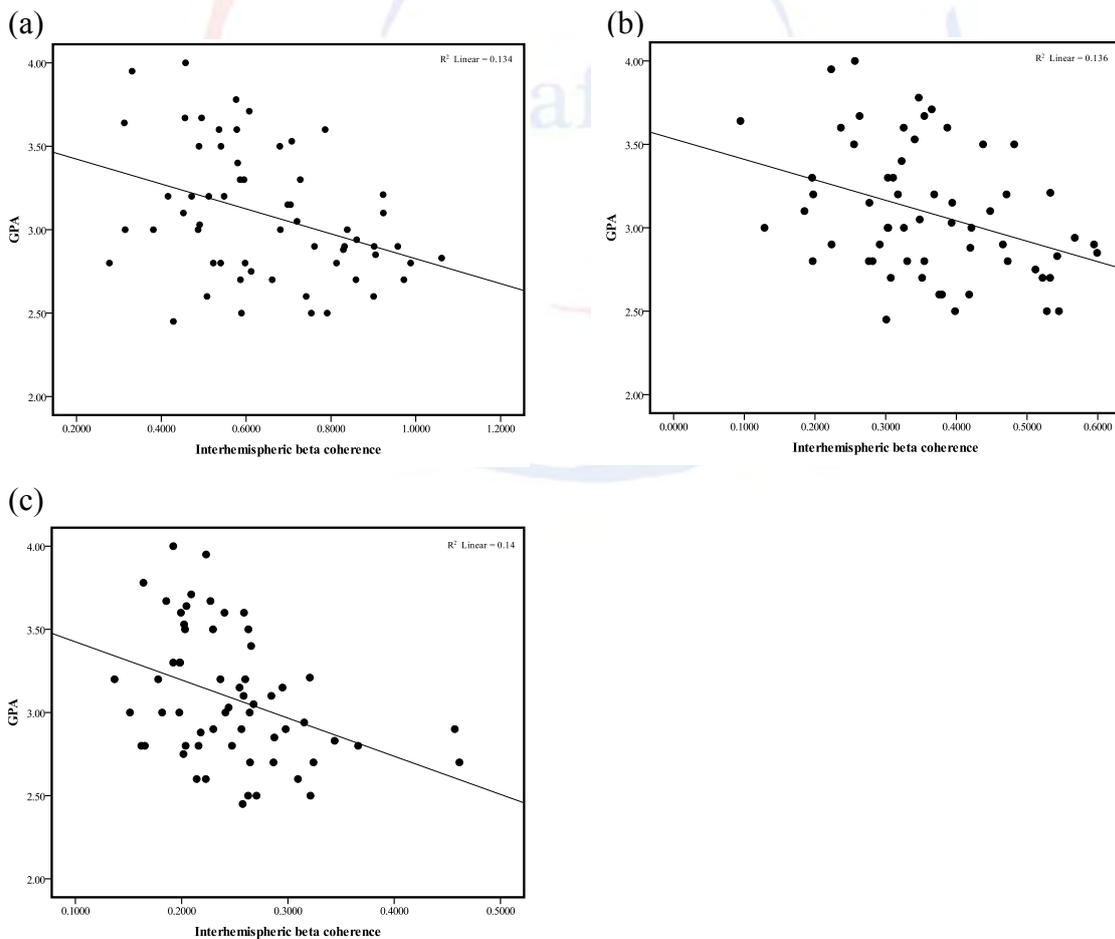


Figure 4. Association between GPA and interhemispheric beta coherence in the (a) frontal (b) temporal (c) central cortical regions

Discussion

In the present study, the main purpose was to investigate the relationship between resting EEG coherence and academic performance, as measured by GPA, for university students. The results demonstrated that academic performance was negatively correlated with intra- and interhemispheric alpha and beta coherence during resting condition and the association was especially pronounced for alpha frequency band. Consistent with findings on intelligence (Jausovec & Jausovec, 2000; Thatcher & Walker, 1985), EEG coherence measures at rest are also negatively related with academic performance. Individual difference can be observed by brain activity during resting state and a more decoupling of brain areas is found among better academic performers. Given that EEG was recorded at rest in the present study, the cognitive demands during recording were relatively minimal. Therefore, the observed decoupling of brain areas in fact provides further empirical support to the neural efficiency hypothesis proposed by Haier (1988, 1992) that brighter individuals use their brain more efficiently by allocating optimal amount of energy resources to cope with the task demands.

The observed variation in resting EEG coherence was more obvious for alpha and beta frequency bands whereas no significant association was found between theta frequency band and GPA. One possible explanation is that higher frequency bands, such as alpha and beta bands, are more sensitive to cognitive processing. For instance, alpha frequency band is more associated with memory processing (Klimesch, 1999) whereas beta frequency band is more associated with language processing (Weiss & Mueller, 2003). Therefore, it could be possible that brighter individuals will use these energy resources only when they engage in cognitive task performance. During resting state, they will save these resources by lowering the EEG coherence in these frequency bands.

This was an initial study to investigate the resting EEG coherence and academic performance. Several limitations are addressed. First of all, academic performance was measured by GPA obtained by university students in the present study. Since calculation and evaluation standard of GPA may be varied from one university to another, generalization of the results requires further investigation across different universities. In addition, EEG coherence varies with age that normal children show higher coherence measures between vertex and the posterior cortical regions and a decrease in interhemispheric coherence in the frontal regions with age (Marosi et al., 1992). The observed pattern may be different in children and adolescents that deserves for studies. Finally, gender effect is found to be a moderator variable in neural efficiency (Jausovec & Jausovec, 2005, 2008). However, due to biased sample, gender effect was not investigated in the present study.

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Internet Strategy, Ideological Concern and Cultural Divergence:

A comparative case study of International Language Education

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Internet Strategy, Ideological Concern and Cultural Divergence:

A comparative case study of International Language Education

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1. Introduction

As a new medium, the Internet challenges conventional media, and increasingly plays a crucial role in the field of foreign language education. In this conference paper, I intend to discuss how the International E-language education strategically utilizes the Internet, balances the technical benefit, ideological concern and cultural divergence, and hence promotes the language education efficiency.

It is not a new story that many Internet-based forms of communication remarkably enhance the long-distance language teaching and learning aims, and develops into a manageable and dependable force not to be ignored in this field. In fact, many researchers from all around the world have particularly discussed this issue, covering the history and status quo of the role that the Internet plays in this area¹, analyzing a great many practical cases and accounts of effective ways in which this promising technology works², techniques of Internet-based ways of communicating³, so on and so forth. However, most scholars emphasize the implementation of Internet-mediated communication techniques in the process of language teaching-and-learning, as well as the relationships between the two elements. However, hidden behind mere advanced techniques and language education, the unavoidable ideological concerns and cultural divergence among different civilizations should not also be ignored, and deserves further discussion in the filed of E-language education.

Regarding the essential inner ties between the Internet and foreign language education, implementation of Internet-based means has been endowed with a crucial significance in the process of language teaching and learning. On the one

¹ Such as Charles Juwah ed., *Interactions in Online Education* (Routledge, London and New York, 2006); Gavin Dudeney, *The Internet and the Language Classroom* (Cambridge University Press, Cambridge, 2007).

² For example, like Mark Warschauer, *Telecollaboration in Foreign Language...* (University of Hawaii Press, Honolulu, 1996); ---, *Virtual Connections* (University of Hawaii Press, Honolulu, 1995); Ian Lancashire ed., *Teaching Literature and Language Online* (The Modern Language Association of America, New York, 2009).

³ Such like Joseph Zajda and Donna Gibbs ed., *Comparative Information Technology* (Springer, 2008); Rachel A. Karchmer, Marla H. Mallette, Julia Kara-Soteriou and Donald J. Leu Jr. ed., *Innovative Approaches to Literacy Education* (Reading Association, Newark, 2005).

hand, similar as foreign language education, the Internet also technically contributed to bridging the gap between regions and cultures, which goes beyond the political, cultural and social restriction. This inner conformity of aims destined the Internet to play a constructive and indispensable role in the field of foreign language education.

More importantly, on the other hand, both the Internet and foreign language education unavoidably have to confront ideological and cultural divergence; it is this potential in common that doubles the risk of implementation of Internet-mediated techniques in this field, and increases the challenges it may bump into. First, as for language education, no matter how it wards off sensitive and controversial themes (such as politics-related issues), the wider and deeper the language education develops, the more possible it would encounter (if not challenge) these sensitive elements hidden behind, because of the inseparable relation between the reality and language. Second, as for the Internet, its unprecedented means of information communication brings about “the physical difficulty of controlling the flow of information” and thus “an essential anarchy”⁴. In an ideological concerned context, the Internet is usually located in a predicament, if not opposition to the authority/orthodox.

The above discussion points to two distinguished implications about the Internet and foreign language education: on the one hand, it is the inner conformity of aims that maximizes the utilization of the Internet in this area. The application of Internet-based means fundamentally reshapes the form of long-distance language education, and facilitates its extension in an increasingly rapid way. On the other hand, as mentioned above, the doubled risk of touching and challenging ideological concerns also makes it necessary to utilize the Internet very strategically and appropriately, in order to keep the efficiency of language teaching and learning from negatively effect—if not annihilation.

In this sense, one may notice the dual significance of implementation of the Internet in foreign language education, which deserves further discussion from the perspective of ideological concerned factors. For example, regardless of cultural divergence and institutional difference, is there any “code”⁵ in the Internet utilization in the process of foreign language popularization? If yes, what are the main features of the code, and how do they facilitate the progress of language education? Based on the status quo, to what extent can we make assumption about the future of the Internet utilization?

⁴ Mei Huang, “Obedience, Confrontation and Riposte: The Internet and The Traditional Media in Mainland China” (Master Thesis, The University of Texas at Austin, 2010), 4.

⁵ As Lessig argues: “We can build, or architect, or code cyberspace to protect values that we believe are fundamental, or we can build, or architect, or code cyberspace to allow those values to disappear. [. . .] Code is never found; it is only ever made, and only ever made by us.”

See Lessig, Lawrence, *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999), 6.

Likewise, in this paper, I have the loan of this term and define the “code” as the law in implementation of Internet-mediated means.

With all these questions, I propose to conduct my discussion based on a comparative case of the Germany-based Goethe Institute and the Mainland China-based Confucius Institute. It is obvious that in ideologically different states, apolitical education institutes commonly utilize the Internet for International language popularization, regardless if this process might be already formed and shaped by distinctive ideological concerns⁶. Other than the obvious ideological divergence in between, I specifically examine the websites of the two institutes, summarize three universal features shared in common, and partially assume the “code” of implementation of Internet-mediated means to a certain extent.

2. A Profile of the Comparative Model

Goethe Institute, aka. Goethe-Institut (GI), is a renowned Germany-based institute aiming for International cultural exchange, especially promoting the German language education abroad. Here I will examine this institute from the three following perspectives:

First, from the perspective of objects, it is “to promote the study of the German language abroad, to encourage international cultural cooperation and to convey an all-round image of Germany by providing information on its culture, society and politics.” Second, from the perspective of information and knowledge it provides to the public, other than language education, it also provides knowledge about German literature, arts, culture, society and noticeably, politics⁷. Third, from the perspective of partnership, it extensively establishes strategic partnership with 1) (apolitical) institutions in Germany, 2) Other intermediary organizations outside and 3) Germany Federal states. In other words, besides mere exchange of language and other apolitical contents, it also consists partially of political concerns, such as the values of “civil society and democratic culture”, German political constitutions, political history and thoughts, etc. Since the first Goethe Institute was founded in 1951, there have been founded nearly 150 institutes all around the world⁸.

Likewise, Confucius Institute, aka. 孔子学院, a Beijing-based non-profit cultural and educational institute in Beijing, also aims to advance International

⁶ It is another question that whether International language education aim to the same goal in ideologically different states or not. This paper focuses on the application of the Internet in E-language education and the general characteristics of this application—features shared in common among different states. However, it is still an interesting question that deserves further research in this field.

⁷ Politics definitely covers a certain share of all knowledge Goethe Institute provides. See its English official website:

“We promote the study of German abroad and encourage international cultural exchange. We also foster knowledge about Germany by providing information on its culture, society and politics.” See <http://www.goethe.de/uun/enindex.htm> (accessed 10/14/10).

⁸ All information is from the official website of Goethe Institute, see <http://www.goethe.de/uun/org/enindex.htm> (accessed 10/14/10).

Chinese language teaching and learning. First, from the perspective of objects, it was established to “promote the teaching of Chinese as a foreign language and for exchange and co-operation in educational and cultural fields.” Second, from the perspective of information, knowledge and activities it covers, it is clear that Confucius Institute deliberately keeps its content within the range of education and culture, without any politics-related issues or concerns. Third, from the perspective of partnership, although it is under the Office of Chinese Language Council International—a national governmental office, it also has established partnership with other cultural and education institutions in and beyond China, especially local educational organizations in other countries⁹. However, it is usually considered a platform for the Chinese government rather than an educational and cultural non-profit organization¹⁰.

In both Goethe Institute and Confucius Institute, Internet-mediated means of communication obviously and broadly take effect. In this case, one may find a great number of ways to pierce into the Internet utilization in the field of foreign language education. However, out of all possible approaches, I intend to explore the Chinese version of the official website of Goethe Institute and the official website of Confucius Institute.

First, it is official websites that most typically display guidelines, principles and ideological concerns of the two institutes. Although a lot of Internet-based implements have been applied, such like paid on-line courses, blogs and so on, the framework, design, content and development of official websites still displays the most representative strategies and tactics, which makes websites efficient and practical objects of research. Second, why do I focus on the Chinese version of the official website of Goethe Institute? Along with the (Chinese version) official website of Confucius Institute together, this choice clearly points to a Sino-based and ideological-concerned context. Considering the ideological divergence between Mainland China and the western world that is represented by Germany, within such a context the model can be put under scrutinization as a typical example that how the Internet has been strategically and appropriately implemented, which thus annihilates potential obstructions caused by ideological elements.

I will examine Chinese version of the two websites in the following parts, compare similarities between them from three aspects and try to partially assume the code of the Internet Implementation.

⁹ All information is from the official website of Confucius Institute, see <http://www.Chinese.cn> (accessed 10/14/10).

¹⁰ Many other materials may support this point of view, such as "Confucius deal close despite concerns", The Australian, August 22, 2007; Christine Armario, "China expands language institutes at US colleges", Associated Press, October 30, 2009; "Chinese government classroom grant divides S. Calif. community suspicious of motivation", Associated Press, 24 Apr 2010; Jian Junbo, "Confucianism a vital string in China's bow", Asia Times Online, 09 Oct 2009; "A message from Confucius: New ways of projecting soft power", Economist.com, 22 Oct 2009.

3. Three Main Features in Common

Regardless of versions of language, both similarities and differences between the two Chinese websites can be found in this comparative case. In this paper, I intend to focus more on similarities than difference, and partially draw out the code of the Internet from all features shared in common. It is not that practical to attribute differences between two websites to correspondent reasons so this approach seems more efficient than discussing differences within the whole context, under ideological restrictions, abroad partnerships and all other controversial causal elements. Noticeably, I summarize all similarities into three categories: 1) Themes and topics; 2) Values and implications and 3) interactivities between the virtual world and real world.

Strategy I: Apolitical Themes and Topics

They both keep themes within the apolitical range, and comparatively have topics neutralized, such as language, literature, visual arts, culture, so on and so forth (fig.1). In other words, political values, concerns or even sensitive issues will not appear in any sense. Based upon all subjects and topics has the language education been carried out; in this sense, this approach will effectively minimize potential resistance in reality and enhance the efficiency of language education, say nothing of avoid direct ideological conflicts and disputes.

Official Website (Chinese version)	Themes, topics	
	Apolitical	Political
Goethe Institute	Architecture, drama, literature, film, fashion, Design, music, regions, environment, economy, Society, culture, climate.	N/A
Confucius Institute	Kung-fu, food, performing arts, travel, people, Treasure, TCM (traditional Chinese medicine), China town	N/A

(Fig. 1)

Also, one may find it more emphatic to make an inner comparison between the original version and Chinese version of the official website of Goethe Institute. Compared the original version, in the Chinese version any information that indicates political concerns has been eliminated. Moreover, this apolitical tone has been deliberately strengthened and highlighted, which just substantially footnotes the above guideline. Considering the inevitable political divergence between Mainland China and the Western world, it is rational to attribute the alternation in Chinese version to different groups of website censors and users. The original official website in English and German, mainly faces to web users outside Mainland China, while the Chinese version must gain an approval from strict Chinese censorship.

Therefore, in order to keep the main objectives—language education and cultural exchange from potential obstacles, such a tactic must be implemented to the website. In fact, it will not make any change to the principles and objectives of

Goethe Institute, but only represent the Internet-mediated strategy in the era of globalization.

Goethe Institute	Different Themes and topics
Original version	Civil society, democratic culture, Germany-Germany history (20 years Since the Fall of the Wall), National Socialism, Politics and States, Migration and Integration, 1968
Chinese version	All Above N/A

(Fig. 2)

Strategy II: Universal Value and Implications

Even though sensitive topics and controversial have been tactfully eluded, official websites still inevitably publicize certain values along with language teaching and learning, and other cultural exchange activities. At this point, the Chinese version of Goethe Institute and the Confucius Institute, both publicize universal values, rather than specific values or significances in respective societies.

Universal value does not only refer to values for (almost) all human beings, but also means values that (almost) all human beings have reason to value it¹¹. Thanks to those modified themes and topics (see the previous part), they both cautiously keep the content of website in control, publicize apolitical spots in a neutral and objective tone, and thus disseminate significances that (almost) all people believe they have value. Either in the Chinese version website of Goethe Institute, or the Confucius Institute Online, all topics and themes listed and depicted represent the common concerns and values for (almost) all human beings (see fig.1), regardless of politics, states, social systems, or ideologies. As in Fig 2, in its Chinese version, Goethe Institute watchfully chooses not to unfold an instruction to any key word of specific political culture in Germany. Likewise, either in the Chinese or English version, Confucius Institute completely stays away from any politics-related topic and avoids any risky implications.

This strategy evading controversial issues, legalizes the language across national and cultural boundaries and thus facilitates the main objectives of the institute: language education and cultural exchange.

¹¹ As Jahanbegloo writes, “Universal values...are values that a great many human beings in the vast majority of places and situations, at almost all times, do in fact hold in common, whether consciously and explicitly or as expressed in their behaviour...”Jahanbegloo, Ramin, *Conversations With Isaiah Berlin*. McArthur & Co. Reprinted 2007, Halban Publishers, 37.

However, Mahamad Gandhi took non-violence for example, and argued that more than values that all people value, the concept of universal value also includes values that all people have reason to value. See Amartya Sen 'Democracy as a Universal Value'. *Journal of Democracy*, 1999, 10 (3): 3-17.

Strategy III: Virtual World and Real World

Besides apolitical themes and universal values, one more strategy has also been implemented to both Goethe Institute and Confucius Institute: to establish strong online/offline relationship. Not only does the website function as a platform for long-distance education, but also a showcase and billboard for activities in the real world. Furthermore, once it integrates activities in virtual world into the real world and vice versa, i.e. creates perfect it will build up a strong tie between the two worlds, keep the online activities within the control of orthodoxy—or to say, the traditional authority, and thus lessens potential out-of-control risks. It does not only advances language education and cultural exchange, but even more importantly, indicates the interactivity between the two worlds (fig 3).

Website	Offline Activities	Online Activities
Goethe Institute	Reader club meeting; Press Salon; Reading; Art Seminar, etc	E language courses, Blog, Online forum, e-journal subscription, etc
Confucius Institute	Language seminars, Summer camp, cultural forum, etc	E language courses, Blog, Online forum, e-journal subscription, etc

(Fig. 3)

As mentioned in Introduction, the Internet naturally gains an essential anarchy, because of the comparative uncontrollability of the flow of information. In this sense, it should be an effective way to establish a strong tie between the virtual world and real world, in order to decrease this uncontrollability and possible conflicts. Otherwise, without the bridge in between, the essentially anarchic Internet might be pushed to the opposition of orthodoxy—the authority in the real world, which consequently doubles the potential of ideological concerned conflicts and disputes. In this context, interactivity between the virtual world and real world can be considered a necessary and natural demand for the development of the Internet.

Furthermore, the Internet and foreign language education joint with each other at the point of Interactivity. Interactivity, which represents the quality and level of engagement of both the teacher and learner, is considered the core of teaching-and-learning¹². In this sense, the interactivity strengthened by the Internet does facilitate the process of language education and thus makes itself an efficient strategy in the case of Goethe Institute and Confucius Institute.

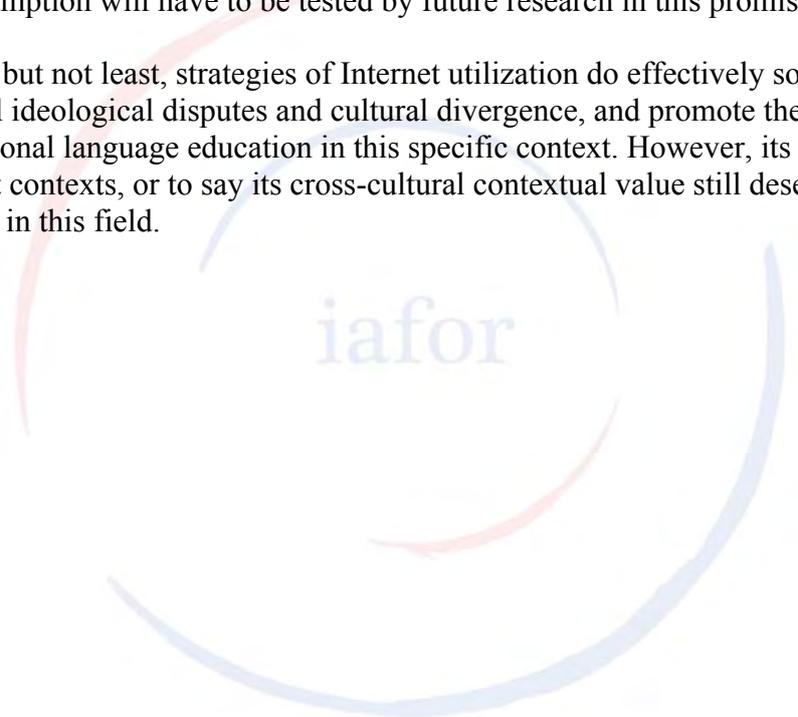
4. Conclusion and Assumptions

¹² Charles Juwah ed., *Interactions in Online Education*, (Routledge, London and New York, 2006), title page.

Based upon Chinese websites of Goethe Institute and Confucius Institute, I summarize three main features of their Internet-mediated strategies and discuss how these strategies contribute to the main objectives of the two institutions: foreign language education and cross-cultural exchange. Noticeably, it is the inner conformity between the Internet and foreign language education that endows the Internet with constructive significance in the field of foreign language education.

In this paper I specifically scrutinize official websites of the two institutions, only one of a great many Internet-based Implements utilized in this field. My profile of those three strategies just fractionally forms a part of the code of implementation of Internet-mediated means. Regarding many other means like I list in Fig. 3, such as blog, (online) forum, electronic subscription, etc, I assume that every single Internet-mediated mean has its own specific characteristics, and all together form a big picture of the code of Internet implementation. However, this assumption will have to be tested by future research in this promising field.

Last but not least, strategies of Internet utilization do effectively soften potential ideological disputes and cultural divergence, and promote the International language education in this specific context. However, its value in different contexts, or to say its cross-cultural contextual value still deserves future research in this field.

The logo for the International Association for Foreign Language Research (iafor) is centered on the page. It features the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular graphic element.

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---, *Telecollaboration in Foreign Language...* University of Hawaii Press, Honolulu, 1996.

Zajda, Joseph and Gibbs, Donna ed., *Comparative Information Technology*. Springer, 2008.

Online Resources (All Accessed on 10/14/2010)

Websites:

Confucius Institute:

<http://resources.chinese.cn>

Goethe Institute:

<http://www.goethe.de/ins/cn/lp/zhindex.htm> (Chinese version)

<http://www.goethe.de/enindex.htm> (English/German version)

Articles:

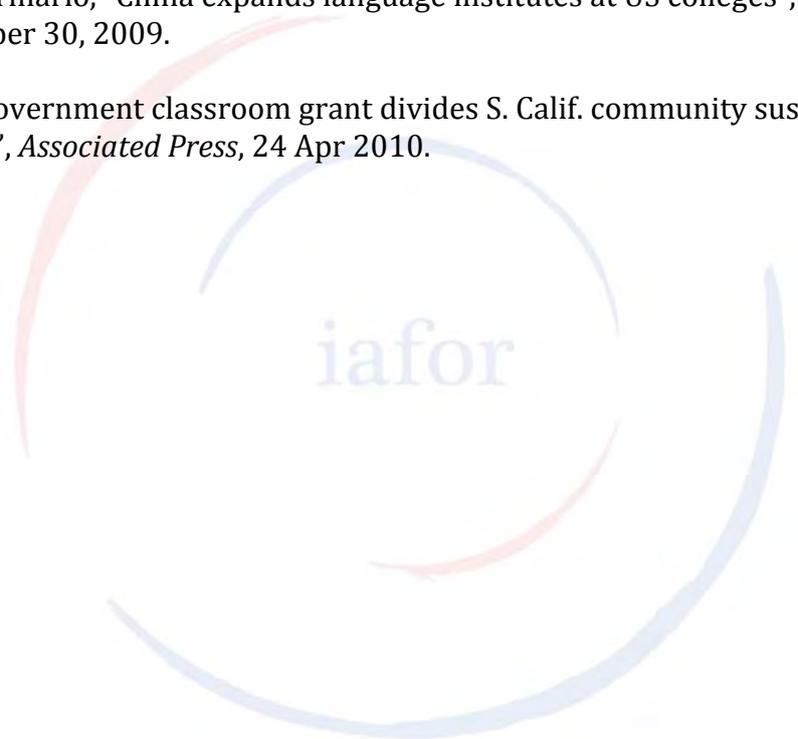
"Confucius deal close despite concerns", *The Australian*, August 22, 2007.

Jian Junbo, "Confucianism a vital string in China's bow", *Asia Times Online*, 09 Oct 2009.

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The logo for the International Association for Educational Research (IAFOR) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of red, orange, and blue, creating a dynamic, swirling effect.

AN INVESTIGATION INTO THE CULTURAL AWARENESS OF ENGLISH LANGUAGE TEACHING STUDENTS

Dr. Isil YALÇIN, Uludag University

This paper introduces a descriptive study that investigates attitudes and awareness of 182 second year English Language Teaching students towards culture and its relationship to foreign language learning and teaching. A survey was administered, which comprised 24 statements with a 3-point scale (agreement - partial agreement - disagreement), and an additional item that explores whether the subjects are aware of the countries that speak English as the native or second official language. The subjects' opinions about the survey are also sought and presented. The findings reveal that the subjects are aware of some aspects of culture, like its strong relationship with language, and its contribution to our understanding of other people. However, they should particularly be introduced some other cultural knowledge, for example about individualist and collectivist societies, and about independence of culture of a language from its native speakers. The paper concludes with the limitations of the study and some suggestions for further research.

INTRODUCTION

An ELT (English language teaching) student once complained that when she was talking to some individuals about the existence of cultural differences, they perceived it as an insult, as if being called “*kültürsüz*” (“cultureless”, i.e. unintellectual). There seems to be little agreement on the interpretation of the term *culture*. Before the Second World War, culture meant knowledge on literature, social institutions and historical events. Different from this “high culture” (Scollon and Scollon, 1995:126, also called capital “C” culture) in the intellectual and artistic sense, the anthropological sense of culture has been developed by researching language in social interaction and intercultural communication after the war. Brown (1994:164) defined culture as “the ideas, customs, skills, arts, and tools that characterize a given group of people in a given period of time,” and anthropologists put in short as “the whole way of life of a people or group” (Thanasoulas, 2001). This small “c” culture (Alptekin, 2002:59; Thanasoulas, 2001) is also referred to as “any of the customs, worldview, language, kinship system, social organization, and other taken-for-granted day-to-day practices of a people which set that group apart as a distinctive group” (Scollon and Scollon, 1995). As various examples, Lewis and McCook (2002) made research on whether teachers in Asia implemented the principles of Communicative Language Teaching they were introduced in courses, and this study was called as “*cultures of teaching*”; Collins and Green (1992) studied *classroom settings as cultures*; Houtte (2004:37) tested *academic culture* according to gender differences in secondary education; Keddie (2004) studied six and eight year-olds’ *peer culture*.

Culture is an important aspect of foreign language (FL) learning and, thus, of foreign language teaching. This study focuses on cultural awareness of second year ELT students in the EFL (English as a foreign language) context.

THE SIGNIFICANCE OF CULTURAL AWARENESS FOR FOREIGN LANGUAGE LEARNING AND TEACHING

Cultural awareness is gradually being regarded as more significant not only for success in professional areas such as translation and business (e.g. Olk, 2003; Grosse, 2004), but also in education. As Brewster, Ellis and Girard (2003:146) explains, “an increasing number of countries, such as those within the European Union, include *cultural awareness* and *intercultural learning* as part of their educational and language teaching policies to promote international understanding and world peace.” Learning about foreign language culture has a twofold advantage for ELT students, one for being language learners and the other for being prospective language teachers. The strong relationship between culture and foreign language learning and teaching is handled in the relevant literature with different positions. As for how to integrate culture into the curriculum, some researchers believe that it should be presented within the normal language classroom, and not as a separate subject by way of *meta-talk* (e.g. Baker, 2002; Thanasoulas, 2001) and others argue that it should be introduced in an “indirect and covert” way (Guest, 2002:160).

Engaged in teaching of English for better international and intercultural communication, Alptekin (2002:58) likens learning a foreign language to a kind of “enculturation” process. Learning a foreign language helps the learner gain new perspectives and cultural reference forms peculiar to the target language culture and its speakers. Thanasoulas (2002) and Tseng (2002) add to this stance that, though culture is inherent in language teaching, we should not be satisfied with this and accommodate *overt* culture teaching in language classrooms. *Cultivation theory*, as described by Tseng, stresses that individuals perceive reality in different ways through culture, and that culture helps us to see the world from a broader point of view. This seems to be a *raison d'être* for concentrating on culture in the EFL classrooms.

Analogously, cultural knowledge is vital for English language teachers since “we can’t teach what we don’t know” (Gary Howard, 1999 cited by Weinstein, 2004:36). Multilingual and multicultural ESL (English as a second language) classes may not need to attend to cultural differences and comparisons (Kramsch, 2001) but monolingual EFL classes apparently need to promote cross-cultural understanding for various largely overlapping and interrelated gains.

Knowledge of culture contributes to our *understanding of different modes of perception and thus to language use*, since human beings tend to see reality through their own culture (Brown, 1994). This subjectivity may lead to serious overgeneralizations and oversimplifications for others, and can also be seen within the same culture. An awareness of cultural similarities and differences, social conventions and stereotypes is needed for effective communication. A *stereotype* is maintained by simplifying the characteristics of a society, possessing a narrow perspective and focusing on individuals (Scollon and Scollon, 1995; Brown, 1994; Baker, 2002; Dash, 2003; Ha, 2004). Stereotyping blinds us to others. Ignoring the major differences between different groups is a mistake called *the lumping fallacy*, and concluding from a single dimension that there is commonality across all the characteristics of two groups is called *the solidarity fallacy* (Scollon and Scollon, 1995:161). When we encounter comprehension

difficulties or misconceptions in foreign language learning due to cultural dissimilarity or overgeneralization, the teacher has to provide background information for learners to understand cultural content inherent in the target language (Baloto, 1996:31).

Comparing different cultures with each other and with the native culture can be beneficial for language learners. However, both language teachers and learners should have accurate understanding of each of the cultures being compared (Lado, 1986; Baker, 2002). And in this case, the non-native, bilingual English teacher seems to be in a more advantageous position, because students from the same culture as the teacher can better be taught similarities and differences between different cultures (e.g. Baker, 2002; Alptekin, 2002; McKay, 2003).

Communication is largely dependent on culture (e.g. Thanasoulas, 2001). When we successfully communicate with different cultures, we can learn about different attitudes, values, beliefs, stereotypes, non-verbal behaviour, face-saving, structural discourse, language reflecting discourses, and realization of speech acts (Kramsch, 2001). For providing foreign language learners with an appropriate setting to communicate in English, teachers are advised to study “academic research conducted in applied linguistics, pragmatics, discourse analysis, linguistic anthropology, ethnography and cultural studies” (Kramsch, 2001:203). Communication can be better achieved by seeing perspectives of different people, and this vision also contributes to *understanding of our native culture*. Therefore, the culture of the learners should also be embraced in a foreign language teaching program, as well as other cultures (McKay, 2003; Itakura, 2004). For example, Parker and Educational Services Staff (1986) inform the reader about the needs of the Middle Eastern student, such as a paternal relationship and being brought up in a paternalistic society. Diversity within culture also needs to be taken into consideration. Tseng (2002:15) recommends that “classroom environments must allow and encourage students to recognize their own culture, to transact with cultures ... and to reflect on these transactions” in a process in the language teaching curriculum (also Wendt, 2002).

Other reasons for learning about culture are interest (it is interesting to read and know about how people behave), usefulness (we need to know how to behave when we talk), need (to keep conversations going with native speakers), and the links between thought, language, and culture (to understand as well as to be understood) (Lewis, 1999; Sardi, 2002).

However, integration of culture into the language curriculum may bring some problems (e.g. Sardi, 2002). Native speakers of a language may be seen as the “owners of the language” (Lewis, 1999:215), but those who speak the language as a FL or second language outnumber the native users. Besides, which culture of native speakers should be taught in ELT is another issue that seems problematic. Then, as Sardi maintains, “any cultural heritage and any value system” can be introduced by way of teaching English. Another problem can be “alienation” of learners from people in their home culture, the target culture, or from themselves (also Brown, 1994:173). This can be overcome by raising cultural awareness and introducing cultural knowledge via readings, films, games, “culture capsules” and “culturgrams” as presented on the web sites, with a mainstream approach so as not to be advocating a particular culture.

Young, intermediate, and other upper-level language learners can be introduced to cultural traits by using authentic situations and materials such as typical food, toys, clothes, comics, newspapers, t-shirts, posters, videotapes, and so on (Brewster et al., 2003; Lewis, 1999; Kramsch, 2001; Baker, 2002).

When learners are trying to figure out different cultural traits, they may mistake meanings, or experience difficulties, as “pitfalls” (Lewis, 1999:214):

- *Generalizing from examples in textbooks and films*
- *Limiting culture to one country*
- *Remembering ethnic minorities*
- *Gaining a superficial view of the new culture*
- *Glorifying the new culture*
- *Seeing a culture as static*
- *Blaming misunderstandings on cultural differences*

One of the studies conducted regarding cultural stereotypes is by Itakura (2004). Itakura tried to find out the nature of 30 Cantonese university students’ stereotypical assumptions about the target culture, which was Japanese, and whether these assumptions could be modified in some way. The data was collected via e-mail messages, project reports, and interviews. It was found that the newly obtained cultural input was different from the existing assumptions which were based on the media; previously held different assumptions were modified whereas those based on previous classroom teaching were retained.

It seems necessary to test these arguments in the literature by empirical studies in the language teaching field and explore the cultural awareness of our ELT students.

AIM OF THE STUDY

The present study aims to investigate second year ELT students’ attitudes and awareness with regard to different aspects of culture and its relationship with the foreign language teaching field.

METHOD

Subjects

The subjects of this study were 182 second-grade students in the ELT department of Anadolu University. They were all volunteers to participate in the study, signing the initial consent part of the survey form (see Appendix A). This grade level was chosen for two reasons: the first was the students’ shared instructional background, which had lasted for at least a year and a half. This variable of background can thus be controlled to some extent for the validity of the findings. The second reason was that, if deemed necessary in due course, time would be saved for the results peculiar to this group of learners to be used as a basis for re-designing the upcoming lessons, by for instance integrating more cultural elements with more effective methods during the next two years of education.

As for the characteristics of the subjects, the age range was 19-26 while the majority (81 %) of them was 19 or 20 years of age (see Table 1 below). 140 subjects were female (76.9 %) and 42 were male (23.1 %).

Table 1. Age frequencies and percentages of the subject group

AG

		Frequenc	Percen	Valid	Cumulativ Percen
Valid	1	6	36,	36,	36,
	2	8	44,	44,	80,
	2	2	13,	13,	94,
	2	8	4,	4,	98,
	2	2	1,	1,	99,
	2	1	,	,	100,
	Tota	18	100,	100,	

All the learners except one stated that their native language was Turkish, as can be seen in Table 2. English was naturally their primary foreign language whereas German was the second most known foreign language (36.8 %) as they indicated on the survey form. Among those who expressed different foreign languages as known, 7 students stated two (one of whom 3) more foreign languages except English as languages they knew while the rest of the students generally expressed one other foreign language than English.

Table 2. Numbers and percentages of the languages spoken by the subject group

	Native language		Foreign language	
	<i>f</i>		<i>f</i>	percent
ENGLISH	0		100	100
GERMAN	0		67	36,8
FRENCH	0		5	2,7
RUSSIAN	0		4	2,2
ITALIAN	0		3	1,6
BULGARIAN	0		2	1,1
GREEK	0		1	0,5
DUTCH	0		1	0,5
TURKMEN	0		1	0,5
OZBEK	0		1	0,5
ARABIC	0		1	0,5
TURKISH	181		1	0,5
KURDISH	1		0	0

By the time the data was collected, the students had completed their third term in their ELT education.

Instrument

The data collection instrument was the survey form devised by the researcher herself as a consequence of a careful review of the most relevant literature in the culture and foreign language education field (Lewis, 1999; Brown, 1994; Thanasoulas, 2001; Whorf, 1997; Holme, 2002; Tavares and Cavalcanti, 1996). It was examined and confirmed by both an instructor with a PhD in ELT and an associate professor in the Educational Sciences department, for its content validity and reliability as an attitude scale as well as the language used in translations into Turkish.

Piloting of the instrument was realized at two different times to different representative groups of 53 first and third graders in the same department; the first administration to 26 learners led to a number of changes on a few items and the elimination of an item, which resulted in the formation of the second survey form. Administered to 27 learners, this form was found to be non-problematic and appropriate for the main data collection. Piloting phase numerical data was not included in the main data collected and analysed statistically as frequencies, but the opinions added were found to be noteworthy and were noted in the relevant sections.

In order not to have a non-native language as a barrier to communication in this basically culture-related survey, the language used in the instrument was Turkish, the assumed native language of the potential learners. It took more or less nine minutes for the subjects to complete the whole survey form.

The first part of the form introduces the document by stating the topic, and purpose of the study; potential benefits, and absence of threats for the learners; the confidential nature of the research, instructions for the items to be responded to, contact information of the researcher, and a short dotted line for signature. This is preceded by Brown's (1994) definition of the term "culture" as adopted in this study. This definition was meant to serve as a proper stimulus for the respondent to become concentrated on the topic. This part is followed by the respondent's demographic and background information. The second part comprises 24 items to be responded to on a 3-point scale of agreement (I agree – I partially agree – I disagree). The 25th item asked the learners to mark the countries in the list where English is spoken as the first or the second official language. This item was adapted from an activity developed by Tavares and Cavalcanti (1996). In the final part, the respondents were kindly asked to express their opinions on the survey. The learners were presented with options to state their feelings, or to give explanations for their answers; they could write on the blank areas between the items, or in the blank box provided at the end, or on the other blank side of the form paper, or send an electronic mail to the researcher using the address provided on the form.

Procedure

Following their completion of a one-hour multiple choice final test in the Development and Learning course in Turkish, all the second graders were shown the survey form, and verbally asked to participate in the study. Upon their willingness to participate, they were each given a form by the invigilator in their class. Totally 9 research assistants in 9

classes, including the present researcher, collected the survey forms in this fashion. The assistants were particularly asked not to inform the students about the survey before the time of data collection so as not to confuse their minds and distort either application. Except for about 15 students, all the students agreed to fill in the form of their own will, and indicated this with their signature at the beginning of the form right after the instructions addressed to them.

DATA ANALYSIS

Having examined the data collected, some elimination had to be made from the main data forms before the analysis. These five eliminated forms were due to the respondents' not being a second grader, being from another branch of study than ELT, or choosing the same response on the scale for all the items.

The responses were analysed using the SPSS 11.0.0 and Microsoft Excel for Windows programs by the researcher.

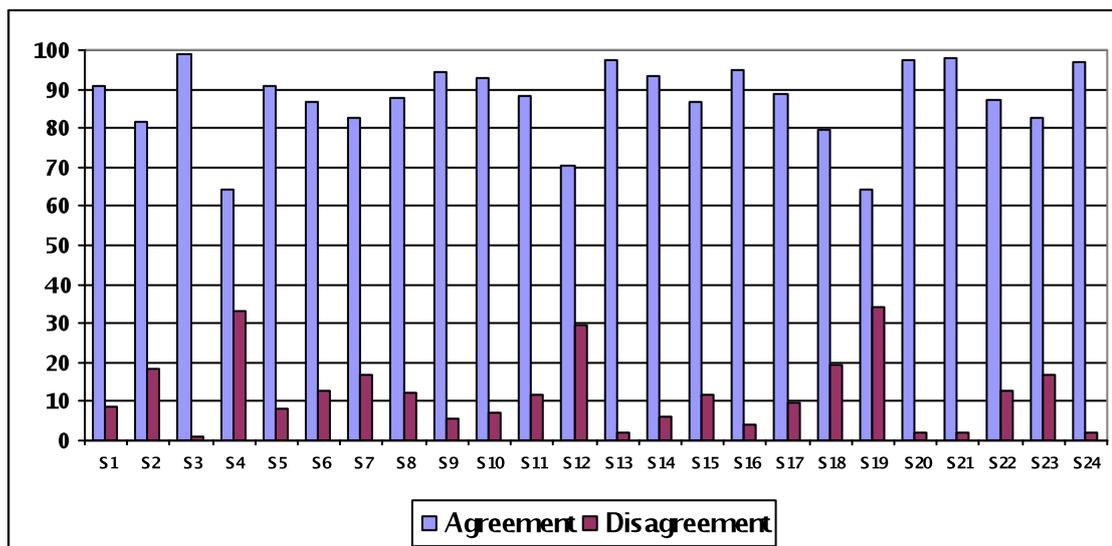
FINDINGS AND DISCUSSION

From this part onwards, the findings of the research will be presented statement by statement, with agreement frequencies and percentages on SPSS output tables, and discussed on the basis of the relevant literature.

For each item, generally only one or two students left some of the statements unanswered on their forms while nine statements were never left unanswered (This is shown as "missing system" in the following tables). A cluster of students opted to write explanations for their answers between the statements while nearly half of the entire subject group (44 %) wrote their opinions in the space left at the end and a few went on to the back of the page. These opinions will be presented both in the relevant statements below and in the final part of the findings section as a whole.

The frequencies of the responses to statements from 1 to 24 were also tabulated altogether to give a whole picture to the reader, and presented in Appendix B. Graph 1 below displays the total agreement and disagreement percentages to all the statements in the survey. As can be clearly seen, there is a tendency to agree with the given statements, and no disagreement rate exceeds any of the agreement rates. It is quite interesting to see the bars ending in "peaks and troughs" just as waves.

Graph 1. General display of agreement and disagreement percentages



Statement 1.

Foreign language learners must know about the culture of the language for improvement in language learning.

S

		Frequenc	Percen	Valid	Cumulativ Percen
Vali	I	7	40,	40,	40,
	I partially	9	50,	50,	91,
	I	1	8,	8,	100,
	Tota	18	99,	100,	
Missin	Syste	1	,		
Tota		18	100,		

Almost all (91.2 %) of the students agreed that culture knowledge is needed for improvement in language learning, though half of them all agreed partially. The small number of learners who disagreed (8.8 %) and the partial agreement of just half of the whole population, I would like to suggest, might have stemmed from the strong, assertive word “must” (in Turkish “şarttır”), and thus they reacted to it. One student did not prefer answering this item.

This indicates that a great majority of the subjects accept the importance of knowing about the target culture for foreign language learning; though a group of students assumingly put forward other important aspects of successful language learning. Interestingly, student no. 101 added below his disagreed item that “learning a second culture may cause loss of identity, or assimilation in societies without strong identities, like ours.”

Statement 2.

Foreign language learners can learn about a culture without visiting the country / countries where this culture dominates.



To a large extent (81.9 %), the subjects expressed their belief in the potential opportunities and/or abilities for learning about different cultures without necessarily visiting the relevant country or countries. However, 33 subjects (18.1 %) chose to disagree with this statement. It can be suggested that nearly one fifth of the students see a visit to the foreign country as crucial, or at least quite necessary, for successful foreign language learning while most of the students appear to be motivated enough for cultural studies of the target language they are learning and will soon be teaching.

Student no. 98 needed to add her opinion besides her disagreement that the foreign language country should be visited by the contribution of our university in helping and providing opportunities.

Statement 3.

A strong relationship exists between a language and the culture of the society that uses it.



iator

The relationship between language and culture in a society was agreed on with the highest rate (98.9 %) of students in this survey. The existence of the adjective “strong” may have caused a small group (7 %) of students to state partial agreement.

This positive finding points out the students’ awareness of language as affecting the society and being affected by the society. Student no. 101 agreed and added his comment that “if you seize the language of a society, you can easily affect its culture.”

Statement 4.

All members of a given culture have almost the same characteristics.



This stereotyping, or “the lumping fallacy” (Scollon and Scollon, 1995:161), was rejected by a third (33 %) of the students, and left unanswered by 5 students. This was the second least agreed on item in the survey. Around half (48.9 %) partially agreed on this statement, which may indicate a bias towards grouping people under the same categorization, but the word “almost” makes the statement look softer and more acceptable. Consequently, this finding points to a necessity to remove stereotyping and prejudicial judgments against cultural groups for language learning development.

Statement 5.

When you plan to visit a foreign country, it will suffice for you to know the most popular (common) language to communicate with people.



The logo for the International Association for Foreign Language Research (iafor), featuring the word "iafor" in a light blue, lowercase, sans-serif font. The logo is centered and overlaid on a large, faint circular graphic composed of two curved lines, one red and one blue, forming a partial circle.

The responses to this statement were weighted on the agreement side (91.7 %) which means to say that speaking the same language is the only condition for communication with the people you first meet.

The students in general seem to have missed the culture dimension for successful communication, except for the 8.2 %. As Thanasoulas (2001) maintains, culture is the basis for communication. Furthermore, with a holistic approach, the citizens of the same country can be thought to possess the same characteristics, but this preconception may cause foreigners difficulties in the visited country, since local people may not speak the language, or at least the standard way as you learned it.

Student no. 149, partially agreeing with this statement, added her comment by saying that “*knowing a language is not enough without knowledge of culture*”. This comment is parallel to what has been suggested above, and thus indicates that the student could take culture dimension into account.

Statement 6.

The language used in a society affects thoughts and behaviour of the people in that society.

□□□□

The students expressed their recognition of the relation between the language spoken and thought and behaviour of people, with a high percentage (87.3 %). This finding is a desirable outcome which demonstrates that the second year students have the conception argued by Whorf (1997) as “human beings ... at the mercy of the particular language” (p.443), and Lewis (1999:214) saying “(t)he way people think is closely bound with language.”

A piloting phase student and also student no. 118 noted beside her and his disagreements that people’s thoughts and behaviour consequently affect the language they use. Considering that cultural norms are connected with linguistic ones (Whorf, 1997:461), this response also seems sensible.

Statement 7.

The main aim of learning a foreign language is to know how to build a successful communication cross-culturally.

□□□□

Once more a majority (82.9 %) believed that communication among different cultures underlies foreign language instruction. It is my assumption that those who disagreed with this statement (17.1 %) might have thought about the instrumental purposes of foreign language learning, such as having a qualified occupation.

Statement 8.

Our culture-bound world view may cause us make overgeneralizations for the other cultures.

□□□□

The fallacy of making overgeneralizations is recognized by most of the learners (87.9 %) whereas 12.1 % do not share this viewpoint.

Student no.31 noted besides her disagreement that this statement was not valid for everybody. Actually this case was already implied within the statement by employing the modal “may” to indicate a possible fallacy.

Statement 9.

Both learners and teachers of a foreign language need to understand cultural differences to recognize, to respect and value every human being as an individual.

□□□□

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Another widely held (94.5 %) belief is that recognizing personhood of every human being is essential for successful language learning and teaching. Those students who disagreed with this statement (5.5 %) may presumably have considered the other conditions for respecting human beings as individuals.

Statement 10.

An individual's attitudes toward people who speak the foreign language he/she tries to learn affect his / her foreign language learning proficiency.

□□□□

More than half (65.9 %) of the student subjects accept the effect of attitudes towards the speakers of the foreign language being learned while 26.9 % partially agreed with this item, perhaps owing to the worked-out possibility of not being affected by their

attitudes. However, negative attitudes may result in a decrease in motivation and thus in success in foreign language learning.

Student no. 101 added an example to his agreement by mentioning that those who are against the USA and Britain reject learning English.

Statement 11.

Acquiring a second language means acquiring a second identity.

====

While most (88.5 %) of the second grade students in the study agreed, partially or not, around one tenth of the whole group opted to disagree with this perspective adopted from Brown (1994:165). I would suggest that this latter group of learners encountered and thought about such a seemingly strong idea for the first time, and reacted to it without sparing much time to reflect over it.

Student no. 16, who partially agreed, noted this: *“not an identity, but culture, in my opinion”*. This may also be voicing other partial agreements on this item.

Statement 12.

Some students may find second language learning and second culture learning as threatening and employ defence mechanisms.

====

This is the third least-agreed item among all the statements with 70.3 % total agreement, and 29.7 % disagreement. This seems to be understandable since a person in such a deep involvement in the relationship with the second language “cannot make a metacommunicative statement” (Brown, 1994:172). That is, they may not be consciously aware of their reaction to foreign language learning.

Student no. 61 wrote a long statement of her opinions, extending to the back page. Related to her agreement, she expressed that she did not find culture learning as threatening, and that the most necessary cultural information should be introduced to them, as being ELT learners.

Statement 13.

Classroom environments must provide opportunities and encourage students to recognize their own culture and reflect on the similarities and differences with other cultures.

□□□□

This is the third most agreed statement in the survey (97.8 %). It seems that the students are aware of the importance of the language classroom for the students to discover cultural similarities and differences for themselves.

Besides his disagreement, student no. 101 added that education should not aim at “doing make-up to someone else’s eye” (i.e. to persuade someone by tricks). However, this explanation seems to indicate an insufficient understanding of the item, and thus should be eliminated.

Statement 14.

Introducing culture within foreign language teaching requires a great deal of time and effort.

□□□□

Most (93.9 %) of the learners are of the mind that considerable time and effort are needed to integrate culture teaching into the foreign language curriculum, with only 6.1% disagreement. One student left this item unanswered. Below her agreement of the item, student no. 148 pointed at the importance of effort since she said she has been dealing with English for ten years and still has insufficiencies.

Thanasoulas (2001) makes an analogy between teaching culture and teaching how to breathe; namely, we can only teach *about* it by showing the way. It may be too simplistic to say that culture can be taught easily; surely it does not happen overnight as well. However, the relevant articles in the field reveal tremendous ways and tools to introduce culture in the class, overtly or covertly, as depicted in the literature review

section. It can be argued here that ELT students should be made aware of and recognize the need for effective culture teaching and learning in the language classroom. Discussion of this statement can be converged with the next statement as they seem to be related.

Statement 15.

The teacher's approach to language teaching limits to a great extent how cultural aspects will be dealt with in the classroom.

□□□□

The dependence of the introduction of cultural elements on the teacher's approach to language teaching is largely accepted (88.3 %) by the students. This finding may indicate that, by combining with the last finding above, teachers can introduce culture in the language classroom when they can spare the needed time and effort for preparing and applying effective activities and materials.

Statement 16.

The aim of teaching culture in foreign language education is to increase students' awareness and develop their curiosity towards the target culture and their own, helping them to make comparisons among cultures.

□□□□

This is one of the mostly agreed items in this instrument with a very high rate (96.1 % cumulative agreement). This indicates that the subjects generally recognize the main aim of culture teaching in ELT. It is my assumption that those who partially agree and disagree may possess either some negative feelings for culture teaching, or suppose different aims.

Statement 17.

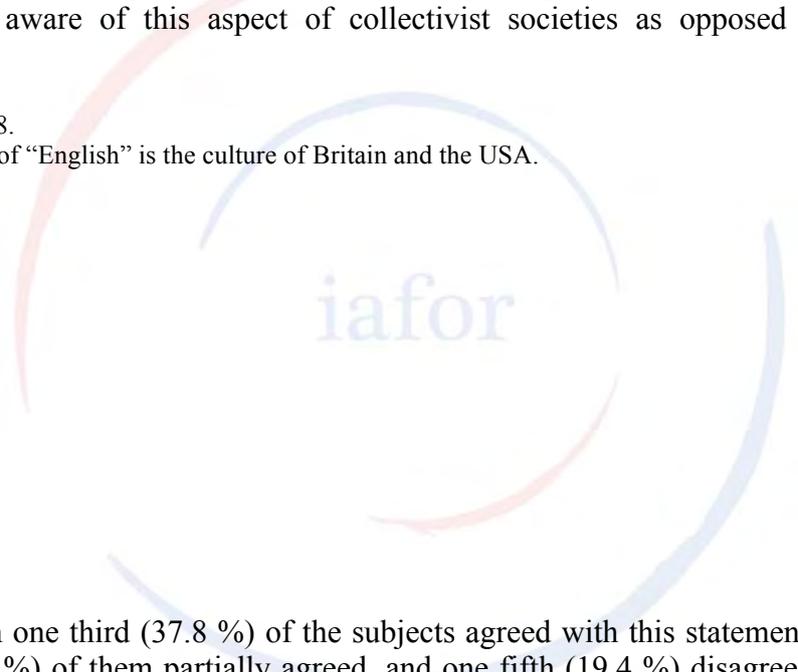
(In the anthropological sense) in individualist societies, *education* is a way of gaining prestige in one's social environment, as opposed to the situation in collectivist societies.



Only one tenth (9.9 %) of all the students chose to oppose to this seemingly tricky statement while a great majority accepted it and two students did not answer it. Setting out from what Hofstede (1986, cited by Brown, 1994:177) expressed, collectivist societies acknowledge education as a way of gaining social status. The present subjects were not aware of this aspect of collectivist societies as opposed to individualist societies.

Statement 18.

The culture of “English” is the culture of Britain and the USA.



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More than one third (37.8 %) of the subjects agreed with this statement while a higher rate (42.8 %) of them partially agreed, and one fifth (19.4 %) disagreed. Two students did not give an answer for this item. This statement was a very powerful indicator of the tendency of students to see a language as belonging to particular nations, especially to its native speakers.

Obviously they forget or are not aware of how many different groups of people speak English all over the world (Lewis, 1999:215; McKay, 2003:139). So, the culture of English should not be limited to one or a few native English-speaking countries, as suggested by Alptekin (2002), and English lessons should accommodate introduction of different cultural elements.

A piloting phase student noted a “sub-cultures?” statement next to her disagreement response. This may indicate an awareness of the existence of other cultures of English.

Statement 19.

When you cannot communicate with a foreign native speaker in his or her language, you will take the blame for non-understanding.



This is the least agreed statement in the survey (65.4 %). The number of students who disagree is approximately one third (34.6 %) of the whole population. Three students left this statement unanswered. This statement contains a situation where one can easily accept the responsibility for miscommunication, for being less fluent in the foreign language used when it can be a “shared communication problem” (Lewis, 1999:225). Those who partially agree (42.9 %) and disagree to this statement may have taken this last point into consideration, but 21.4 % of the students apparently took the blame, and thus are in need of support for better communication.

Statement 20.

When we communicate with others, we simultaneously communicate a certain amount of information and indicate our current expectations about the relationship between or among participants.



This is another mostly agreed item with 97.8 % cumulative agreement. One student did not respond and only four (2.2 %) rejected to comply with this statement.

This item, though seeming shorter in Turkish, may need further reflection for the respondent, but we see that the students generally found it reasonable and aptly decided to agree with it.

Statement 21.

Knowing about characteristics of different cultures helps people overcome preconceived ideas and overgeneralizations.

□□□□

This is the second most agreed item (97.8 %) in the study, with only 2 % disagreement. From this desirable outcome, we can conclude that the subject group is aware of the merits of cultural knowledge for effective communication and for recognition of people as unique individuals, with more tolerance.

Statement 22.

Cultures change with the generations.

□□□□

This statement reflects the dynamic nature of cultures, and agreed on by a large number of students (159 subjects, 87.4 %). 23 students (12.6 %) may have thought about the “fixed displays of culture for tourists” (Lewis, 1999:216). The students who are aware of this change can keep on being informed about culture, primarily with the native culture, through reading, going to movies, or searching on the World Wide Web.

Statement 23.

All the miscommunication that arises with people is due to cultural differences.

□□□□

A large number of students (119 subjects, 65.4 %) partially agreed with this statement. For example, student no. 70, who partially agreed, stated the possibility of individual differences as the reason in the statement. This finding seems attributable to both their acceptance of the situation described (perhaps because of their personal experiences), and their hesitation to totally agree, because they can naturally think of other reasons for miscommunication. This latter viewpoint can also apply to those who disagree (17 %).

Statement 24.

Feelings are universal; but people express them in diverse ways in different parts of the world.

□□□□

This is another mostly agreed item, and the second non-partially agreed item (97.8 %). It shows that the students know about the diversity of cultures and their varying practices in daily life.

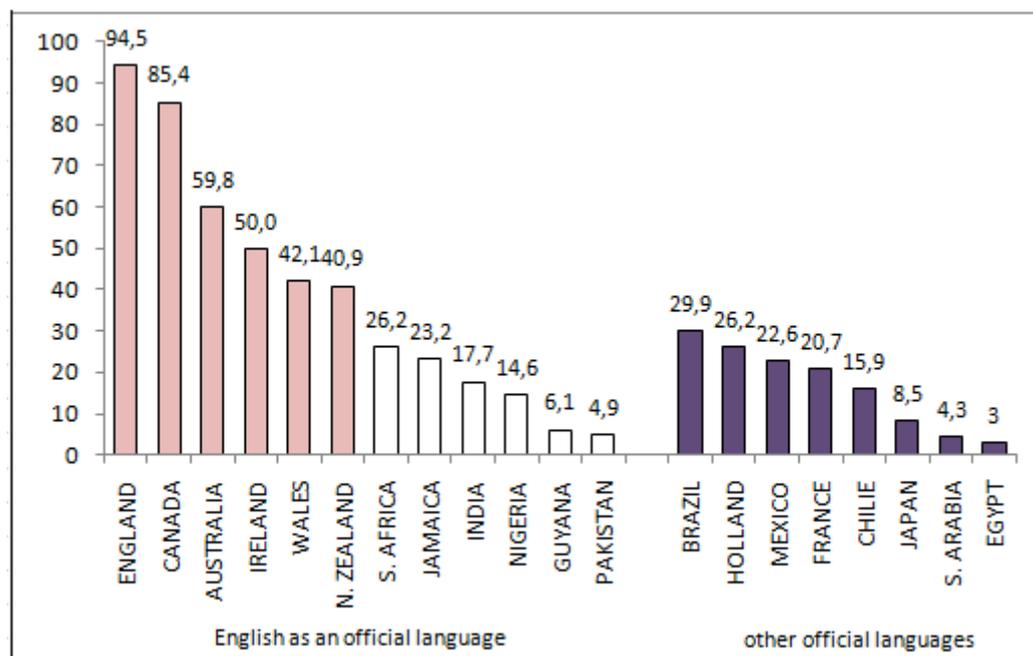
Statement 25.

Mark the countries where English is spoken as the native or second (official) language.

<i>country</i>	<i>f</i>	valid percent	<i>country</i>	<i>f</i>	valid percent
AUSTRALIA	98	59,8	CANADA	140	85,4
EGYPT	5	3,0	FRANCE	34	20,7
HOLLAND	43	26,2	IRELAND	82	50,0
JAPAN	14	8,5	N. ZEALAND	67	40,9
PAKISTAN	8	4,9	S. AFRICA	43	26,2
BRAZIL	49	29,9	CHILE	26	15,9
ENGLAND	155	94,5	GUYANA	10	6,1
INDIA	29	17,7	JAMAICA	38	23,2
MEXICO	37	22,6	NIGERIA	24	14,6
S. ARABIA	7	4,3	WALES	69	42,1

Based on Tavares and Cavalcanti (1996) and the relevant web sites on these countries, those countries that were to be marked by the respondents are written in bold letters on the table above. The data displayed above and Graph 2 below show that the highest rates of correct guesses belong to England (94.5 %), Canada (85.4 %), and Australia (59.8 %) while the correct guess rates decrease for the other countries in the list, with the least correct guess rate for Pakistan (4.9 %).

Graph 2. Correct guess rates and incorrect guess rates for English-speaking countries



Student no. 149 added a comment to this part. She said that she expressed the significance of cultural knowledge all along the survey items but that she became aware of her lack of knowledge of English-speaking countries, and thus was grateful for this.

This section of the survey served for both the subjects and ourselves to notice a lack of knowledge about the foreign language we think we know or are still learning/teaching, and thus to take some measures for better language courses.

Statement 26.

This is the end of the survey. Please express your evaluations on the survey since they are invaluable for the research conducted.

This request was responded to by almost half (44 %) of the students in the main study. Taken together with the evaluations in the piloted data forms, the added statements can be categorized as follows:

- Explanation for ideas
- Advice / request for implementation of ideas
- Comments on the survey format and content

Regarding *explanations*, a student maintained that she did not feel obliged to know about the country or society of the foreign language being learned, while two other students, one from the pilot study, expressed that they would like to learn about culture and use this knowledge whenever needed but not adopt or accept it. There were eleven

learners in the main study who wished to confirm and stress the relationship of culture to language.

Besides explanations, there were *suggestions* and *requests* from a group of students. Eight students, one from the pilot study, articulated their hope for being informed about the results of the study, and hope for change in the language learning/teaching processes by the implementation of the results. Furthermore, 8 students suggested culture should be a component of the language teaching curriculum, either elective or compulsory, and suggested discussions on culture during the courses received. There were also recommendations from 10 students, 4 from the piloting phase, for the survey to include open-ended, more in number, and more specific questions. For administering this survey, 8 students preferred expressing their thanks in the space provided, some in detail by referring to the merits of the survey as mentioned below. One student particularly expressed that she was grateful for having her awareness and curiosity increased about different groups of people who speak English.

As for the *comments* on the survey, the respondents profusely expressed, both in the piloting (14 students) and in the main study (50 students), their appreciation of being administered such a survey, as in their own words: a “*beneficial, meaningful, relevant, well-designed, well-chosen, comprehensive, intensive, valuable, different, interesting, enlightening*” survey which “*stresses important aspects, clarifying language-culture connection*” for the ELT field.

SUMMARY

The findings of the present research on cultural awareness of ELT learners can be summarized under two headings, which have been handled with a complementary approach so far: knowledge about culture, and the relationship between culture and foreign language instruction.

In general, the second grade students can be accepted as recognizing and acknowledging the value of cultural awareness and its teaching in schools. They are conscious about some characteristics of culture, the subjectivity people may have due to their culture-bound viewpoints, and its probable consequence as making overgeneralizations for other cultures. Nevertheless, they seem to have predetermined ideas associated with cultural differences as forming the basis for miscommunication between people. Moreover, they may be lacking information regarding individualist and collectivist societies.

Alongside cultural knowledge, the relationship between culture and foreign language instruction is also studied in this research. The findings revealed the subjects’ perspectives as that knowledge about the target culture is critical for improvement in foreign language learning, but one does not have to visit the target language countries for this purpose; language and culture are interwoven, affecting the thoughts and behaviour of people; language learning has the aim of communicating successfully in the different culture, and of respecting individuals’ personhood; culture teaching is determined by the teacher’s approach to language teaching. Regrettably, a majority believes that the culture of native English-speaking countries is the “English culture”

whereas the current points of view indicate all the people on the earth who speak English, no matter as a first, second, or foreign language. It is also pleasing to see that the majority understand the aim of culture teaching in foreign language classes in terms of raising awareness and curiosity.

CONCLUSION

This descriptive study aimed to explore attitudes and awareness of second year ELT students with regard to knowledge of culture and its relationship with the ELT field. It can be concluded from the findings of this research that there is a need for systematic presentation of different aspects of culture, and different cultural traits from different societies. Rather than independent studies, culture teaching ought to be integrated into the usual classroom teaching activities, without focusing on and/or imposing one nation's culture, which leads to "cultural imperialism" (e.g. Thanasoulas, 2001). Presenting the features of both students' native culture and foreign cultures, we can apply what Thanasoulas offered, as cultural problem solving as a way to develop "cultural strategic competence".

By incorporating culture into the foreign language instruction program, we can "help learners become successful bilingual and intercultural individuals who are able to function well in both local and international settings" (Alptekin, 2002:63). I think that the subjects who participated in this research will most probably remember the survey, reflect over the statements further, and find opportunities to express and apply the content in their education and teaching practice. This is quite evident from the reactions they expressed both on the survey forms and when they were handing in their forms to the researcher and her assistant colleagues. Introducing to the students differing characteristics of individualist and collectivist societies can be very appropriate in order to have them form correct schemas as early as possible.

A limitation to the study may be that being in a position to collect the data after a final exam may have put limits on the quantity and quality of the responses, although only two students expressed their difficulty in filling out the survey form, and students generally completed their exam in less than an hour.

For further research, a valuable opportunity for confirmation and explanation of the results can be to conduct interviews with the respondents. In addition, for avoiding any effects of the order of the statements, which are distributed randomly, different survey forms can be developed with items in reverse order. Alternatively, a standard test such as the one used by Brown (2004), the Cultural Diversity Awareness Inventory, can be utilized for data collection.

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Collaborative Virtual Game for Packaging Design

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Abstract: This paper presents an application of collaborative virtual game for packaging design. Game was divided into two activities, folding packaging, FOP, and finding packaging, FIP, games. In the FOP, students are given a structural model of a package and they are required to fold it into a completed package. The folding steps were controlled by the system in which students must select a corrected sequence of each specific component. If they can select a component correctly, the system will show the folding animation. On the other hand, if students select a wrong component, the system will give the students a warning and their scores will be deducted. For the second game, the FIP was designed to let students to practice their thinking by finding and matching a structural model of an unknown package with a set of 3D packages with which are randomly selected from the system. If they cannot choose correctly, the score will be deducted from their total scores. In addition, the system also provides a folding tutorial such as a folding process and other information. After students pass this game, they can practice with a real paper. The pilot result showed that students can fold packages more rapidly and it can decrease the use of paper in folding practices.

Keywords: collaborative, Virtual Reality, game-based learning, packaging design

1. INTRODUCTION

Today students are different from the preceding decades, even as those differed from earlier students. Using games, not necessarily video games, for teaching is one way to shift to a more appropriate learning format for the Digital Generation. Make learning more fun, and students will be more motivated. Collaborative VR games can be integrated more tightly with specific domains within the curriculum. Games are still evolving. Rather than their simpler predecessors, today's games are coming to represent "distributed authentic professionalism," meaning that players are learning how to be a professional—a soldier, an astronaut, an entrepreneur, and so on. Knowledge and skills are built into the virtual characters, objects, and environments; the players must master the skills they don't have as well as integrate their skills with those of the virtual characters and other players. These types of games distribute expertise among the virtual characters and the real-world players. More than just a game, they are networked communication systems with interactive chat, internal e-mail, and messaging. [1]



Fig. 1 The example of VR Solider game

NESTA Future lab [2] describe how games can facilitate learning. It is important to emphasize that games and play may be effective learning environments, not because they are "fun" [3]. but because they are immersive, require the player to make frequent, important decisions, have clear goals, adapt to each player individually, and involve a social network. Games have many attributes detailed below that are associated with how people learn. The following paper describes the use and characteristics of the collaborative virtual reality game for packaging design learning. It begins with related work on practice in virtual environments. Then it describes the results of a preliminary evaluation made with a group of packaging design students.

Game-Based learning has great potential to support immersive learning experiences. Learning can be defined as "the act, process, or experience of gaining knowledge or skill." To engage in this act of gaining knowledge or skill, learners must be motivated. [4], "When people are intrinsically motivated to learn, they not only learn more, they also have a more positive experience." Games meet both these tests for effective learning environments: they are active experiences, and they have the capacity to provide intrinsic motivation.

Gaming environments are quite unlike any other environments we immerse ourselves in because they allow us to freely do as we please with little or no consequence. If this were all that gaming environments consisted of, however, they

would get very boring very quickly. So then, should gaming environments be tightly guided, question-answer scenarios with finite end states? Just like learning environments shouldn't restrict the learner's ability to more freely construct knowledge, the game environment should not restrict the player's cognitive process but rather allow the game player to freely make choices that help to reach an end goal.

A game is "a system in which players engage in artificial conflict, defined by rules, which result in a quantifiable outcome." The goal of successful game design is the creation of meaningful 'play' which is achieved by creating game-play that enables discernable and integrated interaction by the player. Johann Huizinga [5] defines play as "a free activity standing quite consciously outside 'ordinary' life as being 'not serious', but at the same time absorbing the player intensely and utterly". Through their use of immersive experiences, games provide opportunity for play which can result in flow experiences.

Lepper and Malone [6], in an attempt to define specific principles for instructional game design, illustrate four key attributes that educational games must employ. First, games must introduce challenge. Through goal reaching and feedback, the learner should continually feel challenged as difficulty increases in concordance to increased skills. Second, the game should create sensory and cognitive curiosity within the learner. Third, the learner should feel a sense of control through endogenous feedback provided by the game. Fourth, games should use fantasy to reinforces the instructional goals and stimulate the prior interests of the learner.

Through the four lenses of motivation, flow, learning environments, and game design, there are clear connections that show how learning and gaming are fundamentally built from the same base.

2. GAME BASED LEARNING MODEL

Most researchers conceptualize learning as multidimensional construct of learning skills, cognitive learning outcomes, such as procedural, declarative and strategic knowledge, and attitudes. The game based learning model is used in formal education very successfully, in particular, in military, medicine, physical, etc. training. The main characteristic of an educational game is the fact that instructional content is blurred with game characteristics. The game should be motivating, so the learner repeats cycles within a game context. While repeating e.g. playing a game, the learner is expected to elicit desirable behaviors based on emotional or cognitive reactions which result from interaction with and feedback from game play. In Figure 1, one can see the debriefing process

between the game cycle and the achievement of the learning outcomes. Debriefing provides a link between simulation and the real world, draws a relationship between the game events and real-world events, connects game experience and learning. This part of the model corresponds, as [7] have written, to "doing, reflecting, understanding, and applying"



Fig. 2 Model of game-based learning [7]

3. Taxonomy of Intrinsic Motivations for Learning

The Taxonomy of Intrinsic Motivations for Learning was developed by Thomas W. Malone and Mark R. Lepper [6]. It is based on theoretical discussions on motivation both authors previously developed. The taxonomy is divided into two sections.

I. Individual Motivations

A. Challenge

A.1. Goals

A.2. Uncertain Outcomes

A.3. Performance Feedback

A.4. Self-esteem

B. Curiosity

B.1. Sensory Curiosity

B.2. Cognitive Curiosity

C. Control

C.1. Contingency

C.2. Choice

C.3. Power

D. Fantasy

D.1. Emotional Aspects

D.2. Cognitive Aspects

D.3. Endogeneity

II. Interpersonal Motivations

A. Cooperation

B. Competition

C. Recognition

Malone and Lepper's Taxonomy is loosely based on several cognitive theories of motivation. Each aspect of their taxonomy is described below. Challenge Activities that provide an optimal level of challenge neither too difficult or too easy. This is supported by the Yerks-Dodson Law, Lewin's Theory of Systems Under Tension [8], and Atkinson and Birch's Dynamic Action Theory [9]. Stating an explicit goal is important in a traditional environment. Ausubel's (1968) theory of advanced organizers supports this concept. For environments that may not have explicit goals, such as open-ended learning environments or

open-ended case studies, emergent goals can be generated by the learners themselves [6]. An uncertain outcome is desirable to make the learning environment challenging. Malone & Lepper [6] suggest this can be accomplished by varying the difficulty levels of the instruction, establishing multiple levels of goals (i.e., varying time constraints), providing incomplete information and making the learner seek out the missing elements, and applying randomness where possible (i.e., varying the room size when calculating the amount of paint needed to paint the room). Performance feedback that is frequent, clear, constructive, and encouraging (building self-esteem) is required to make instruction intrinsically motivating. Numerous studies on feedback support these assumptions. 12 Curiosity – Sensory curiosity occurs when changes in light, sound, smell, etc. occur and one attends to that change. Special effects, such as zooming in, etc. all fall under this category. One use of sensory curiosity is for gaining attention. Cognitive curiosity can be stimulated by incompleteness in the learning environment, an inconsistency, or an unparsimonious event. Control – Control plays an important part in motivation, according to Malone and Lepper [6] Learners will seek control of their learning environment. Knowles (1980) concurs with this statement, explaining that as a person matures, s/he moves from dependency to increasing self-directedness. When a learner makes a choice or takes an action, the result must be contingent upon that choice or action. Also, the learner must be able to make a reasonable amount of choices and not be straitjacketed into one learning path. Finally, the learner must perceive that s/he has power over the learning environment, which is demonstrated both through overt contingent responses to actions and the ability to make choices. Fantasy – Fantasy is a category unique to the Malone and Lepper Taxonomy. In a fantasy environment, mental images of physical or social situations not actually present are evoked. A role-playing game might fall under the fantasy category, as might a case study. From an emotional standpoint, fantasies can help one to experience power, success, fame, and fortune. For a fantasy to fulfill an emotional need, the learner probably needs to identify with the character(s) in the fantasy. Thus, a case study that contains a person or persons similar to the learner will probably evoke a strong emotional response and be more interesting (and motivating) to the learner. Fantasies may also help a learner to relate new learning to past experience. For example, using a dartboard simulation (or fantasy), something the learner is familiar with, the rules of physics can be explored in a way that makes sense to the learner. Finally, fantasies where the skills to be learned and the fantasy itself are tied together in an endogenous relationship are believed to be more motivational. Such fantasies may provide for a state of flow. Such a state of flow must qualify as an optimally motivating

experience. Flow is discussed in more detail in the following section. The second part of Malone and Lepper's Taxonomy deals with interpersonal motivations. They believe that cooperation and competition are equally important and should be used appropriately. Also, a learner's achievement should be made available to other people, so the need for recognition in the individual is satisfied.

4. COLLABORATIVE LEARNING

Most researchers agree that an important role in current learning structures is played by "collaborative learning", which allows participants to exchange information as well as to produce ideas, simplify problems, and resolve the tasks. In this model the teacher is the active partner, moderator and advisor of the educational process, not just a repository of the information importing his or her own knowledge to passive students in traditional education.

5. THE METHODOLOGY

In this case the VRGBL was divided into two activities, folding packaging, FOP, and finding packaging, FIP, games. In the FOP, students are given a structural model of a package and they are required to fold it into a completed package. The folding steps were controlled by the system in which students must select a corrected sequence of each specific component. If they can select a component correctly, the system will show the folding animation. On the other hand, if students select a wrong component, the system will give the students a warning and their scores will be deducted. For the second game, the FIP was designed to let students to practice their thinking by finding and matching a structural model of an unknown package with a set of 3D packages with which are randomly selected from the system. If they cannot choose correctly, the score will be deducted from their total scores. In addition, the system also provides a folding tutorial such as a folding process and other information. The view of VRGBL shown in Fig.3



Fig.3 The view of VRGBL game

The constructivist method of design is different from the linear task-oriented method of an instructional system design approach. Designers who use a constructivist method to create learning environments are less focused on a how-to or process approach but emphasis elements that facilitate a learning process. Designers applying this method take into account seven pedagogical goals: 1) to provide an experience with the knowledge-construction process, 2) to provide experiences encouraging appreciation of multiple perspectives, 3) to embed learning in realistic and relevant contexts, 4) to encourage ownership in the learning process, 5) to embed learning in social experience, 6) to encourage the use of multiple modes of representation, and 7) to encourage self-awareness of the knowledge construction process.

5. EXPERIMENT RESULTS

The rules of the game are created by the players themselves. Players can define what correct or not correct. The players have to select a role and try to survive in the virtual world. Learner can interact with other students to develop new knowledge and fashion their own needs and capacities. Game-based learning helps the students easily to transfer learning from classroom to “real life” and back, or information from one subject to another. Therefore this method requires that the trainer and students play nontraditional roles such as interaction and collaboration with each other within the educational process. The experiment shown in Fig. 4



Fig. 4 shown the experiment of this research

6. CONCLUSIONS AND FURTHER WORK

The main idea is to design Educational games where learner's actions in the game are assessed causing his knowledge model to be updated. Based on the learner model, a pedagogical agent tailors instructional strategies, intervenes in the game providing hints or more help accordingly.

The game is also supported by an authoring tool. Putting the architecture into practice we have described our own Educational system. The environment is used to teach computer algorithms. It is a virtual world consisting of stages, where the learner controlling his avatar has to bypass the obstacles by ordering his own methods in algorithmic structures. Actions of the learner are monitored; learner's model is updated causing the pedagogical agent to provide help as appropriate. The application is supported by an authoring tool with which we can change or alter the game by means of graphics, stages, objects, obstacles, methods to bypass obstacles and teaching strategies applied by the pedagogical agent. One further step would be to add multi-user functionality. Students would be able to collaborate in order to design the appropriate algorithms.

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Conceptualizing education for global citizenship in Asia: using corporate social responsibility (CSR) as informing principles

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Conceptualizing education for global citizenship in Asia: using corporate social responsibility (CSR) as informing principles

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The concept of “borders”, “nation-states”, “sovereignty” and “citizenship” is increasingly becoming elusive as globalization integrates the world and creates different configurations of communities, belongings and identities. With the level of connectivity and interdependency in the world today, the world works as an intricate machine that is supported by micromarkets and systems linking, supporting and overlapping one another. Nonetheless, the world is made up of individuals, and collectively, people define societies, and who we are as a human race.

Global citizenship (GC) is citizenship extended to the global level that basically falls under three concerns: environment, health, and human rights. It is based on a common belief that humanity strives in one direction, with one goal in mind that is the advancement and welfare of all humankind. Global citizens not only believe in this aspiration, they bear the responsibility and commitment to uphold this belief in ethics, equity and justice. The genesis of GC traces to social activism and corporate social responsibility (CSR), the response/reaction to social pressure in the American business model, corporate social responsibility (CSR). CSR is certainly not the only existing form of GC, but is one of the forms that is better structured, increasingly recognized and practiced in business. Other forms range from international law, philanthropy, to non-government organizations (NGOs), to volunteerism, with each having its place and purpose with definable outcomes.

Citizens of the world – individuals, corporations and universities

CSR has grown from a reaction to public pressure as a result of social movements and activism, to government policies and regulations in some industries, and as an integrated part of corporate identity, business strategy, a showcase of leadership and good practice. The CSR framework is structured in a sustainable manner. CSR is the common ground that holds the core values of all stakeholders involved with the corporation’s business and operational model. It is also perceived as an agent to improve corporate image and to build corporate citizenship, which in return strengthens the infrastructure of the corporation’s business. How CSR is manifested and what actions it comprises is a result of the leadership in the corporation and guidance determined by stakeholder interests. Whether CSR is a common underlying value that drives the business or is cosmetic green washing depends upon how CSR is perceived and carried out by leaders of the corporation.

In education, the aspiration to develop GC has appeared on many university’s mission statements in the past decade, and yet strategies and actions have been scattered and incoherent. Efforts range from educational activities such as those taught through the curriculum or guided by faculty members, to student exchange abroad, volunteering programs and student-led activities that are facilitated by the university. The objectives of these efforts can be broad and sweeping, hence, without a coherent core or specific purpose. GC is also a critical attribute to develop among undergraduates as they will be the society’s human and social capital in addressing and battling global issues and concerns such as aging societies, sustainable development, economic disparities, and global health care and education. As

important as educating undergraduates and nurturing future leaders, GC reflects the university's identity and core values as led by the university's president and senate, which have direct impact on the university's governance, quality and reputation. In order to proliferate GC, the university has to embrace GC at its core – its mission as an educational institution and a social enterprise.

GC, in principle, is a construct based on the individual and his/her relationship with the society since values are culturally based, and the immediate circle of socioeconomic environment varies. CSR is an institutionalized form of GC whereby the spirit of CSR is to ensure or enhance the well-being of its stakeholders, including its community in which the corporation operates and has an affect while running its business and generating profits in a sustainable business model. This relationship is mutual, since demand and supply work interdependently. The underlying drive of both GC and CSR is nevertheless humanistic. It is social movement and social activism that applied pressure and compel businesses and government to behave in an ethical and responsible way. This collective power can only come together because of individuals imbued with strong beliefs, similar concerns and value systems. Its efforts could aim to satisfy stakeholders at the bottom-line, or it could be used strategically to ensure or strengthen its competitiveness in the industry. Ultimately, and ideally, it is an all-win scenario.

In order to make the parallel between CSR and GC, this paper will first explore the concept of CSR and its correlations with businesses, individuals, communities and the greater society. The essence of CSR is the shared values of businesses, individuals, and government, and the CSR profile of a company is in fact the outcome of distributive justice that is “concerned with the distribution of the conditions and goods which affect individual well-being”.¹ Second, this paper will explore the concept of GC as the shared values of university and its collective members. Universities have the power to lead and mobilize the society through their activities in research and education, and their involvement and association with the public and private sectors. GC is essentially the conceptual framework that is central to the university's operation and educational aims. Citizenship, in terms of civic responsibility, justice and welfare, is a multi-layered, multi-dimensional concept that acts on multiple platforms and could be manifested in many ways. GC and CSR are both manifestation of citizenship. Just as CSR is the manifestation of the citizenship of business operation, GC is the manifestation of the citizenship of a university as a form of organizational citizenship (university governance and operation), and as institutional citizenship (educational and student operations).

GC is contextual, and above all “personal”; it is an individualized relationship with the world, including senses of belonging, responsibilities, and beliefs. Universities amidst globalization and internationalization while balancing operations, have to find their fit as an institution that leads and develop global citizens. The fit is contextualized in the local region and derived from the university's philosophy underpinning its vision and mission. GC and the education of GC is crucial under the circumstances of globalization that is transforming every aspect of life today. This paper will attempt to make a suggestion for the role of GC in the university and in higher education by drawing associations with the role of CSR and businesses.

CSR and social impact

CSR is a highly intricate concept and hotly debated in the world of business and finance. Its value or its motif can both be sound and controversial at the same time depending on the perspective. Business is undeniably a key player and a driving agent in globalization. The impact can be both positive and negative at the same time. In 1995, the United Nation Global Compact (UNGC)² initiative was announced and in 1999, UNGC was established as a strategic policy to “mainstream the ten principles in business activities around the world” which falls under four categories - human rights, labour, environment and anti-corruption. The purpose of UNGC is to “catalyze actions in support of broader UN goals, including the Millenium Development Goals³” which effectively brought about international leadership that led businesses to be involved in helping end extreme poverty and hunger, implement better and more effective health care systems, universal education and environmental sustainability by 2015. Efforts had started out as corporate philanthropy that supported the work of non-govnermnet organizations (NGOs), and as corporate responsibility, corporate citizenship and CSR. From year 2000 to 2010, the number of companies signing onto UNGC grew from merely 47, to over 8000 companies. The significant growth in the number of NGOs around the world which largely operate by receiving financial and infrastructural support reflect the involvement from the private sector.

As CSR practices have become a common practice and to some extent a basic requirement for multinational corporations, an increasing number of organizations have stepped-up from CSR to corporate global citizenship (CGC). This concept of CGC was headed by the World Economic Forum in 2002.⁴ CGC is used interchangeably with the term, global corporate citizenship (GCC), whereby the organization adopts a business model where it becomes a stakeholder in the global system, working together with governments, academia, and civil society to tackle global and local issues.⁵ The rationale behind GCC is that companies rely on global development for growth and hence it is in their best interest to play an active role along with governments and international organization to meet global challenges.⁶ However, GCC requires much more effort and expertise than CSR since it requires five core principles to be well-developed and bilaterally working with one another - corporate governance, corporate philanthropy, CSR, corporate social entrepreneurship (social investing), and global corporate citizenship.⁷ As more and more organizations build sound CSR foundations, GCC will likely be better adopted by organizations in the coming decade.

While policies and guidelines came about in the 1990s, the public has in fact acted upon corporates as early as the 1970s in the form of social activism and social movement following a democratic movement in western society after the end of World War II. As globalization began to take shape as a result of full-fledged capitalism and technological advancement that accelerated trade, migration and exploitation of natural and human resources, advocacy for human rights, fair trade and sustainable development grew stronger and louder. Between 1970s and 90s, social pressure was aggressive and radical which became effective at mandating early forms of CSR practices.

As CSR practices became increasingly visible in the market place, social activism decentralized and became distributed to the individual consumer level which added incredible pressure (and incentives!) for companies to practice CSR. Product

differentiation added diversity to the market and practicing CSR, in some cases, became profitable since there was increasing demand in the market.⁸ The agent of consumer's increased awareness and concerns leading to changes in behaviours was likely the various pandemics and epidemics causing food recall, illnesses and deaths. Other factors were heightened awareness of sustainability issues and concerns for climate change, increased reportage and awareness of activities and programmes promoted by UN agencies, and general news or internet exposure of corporate scandals and misbehaviours that led to public scrutiny and individualized boycotting of corporate operations and practices.

According to Smelser's theory of collective behaviour, social activism is a creation of generalized beliefs that are acted upon that can be "norm-oriented" or "value-oriented" whereby the former tries to restore standards or create norms based on a generalized belief, and the latter tries to restore or create value according to a generalized belief.⁹ CSR can be understood in a similar way to Smelser's theory. There are those who practise CSR as a status quo, those who practise to stay competitive, those who use it as a marketing tool, and those who practise it as an innovative and competitive business strategy. These differences in practices create varying results. Nonetheless, research on the correlation of CSR practices and public evaluation is positive, which is suggested by the observation of "increased purchase behaviour, higher customer satisfaction and market value of a firm – all of which is believed to translate into increased profitability for the corporation".¹⁰ However, the full value of CSR has yet to be realized. As Porter and Kramer pointed out, "if, instead, corporations were to analyze their prospects for social responsibility using the same frameworks that guide their core business choices, they would discover that CSR can be much more than a cost, a constraint, or a charitable deed – it can be a source of opportunity, innovation, and competitive advantage."¹¹

In corporate practice, social accounting, in fact, started in the 1970s as social pressure mounted. This quickly pushed some of the multinational corporations to shift from a shareholder-driven model that maximizes returns to wealth and capital, to a stakeholder-driven model. In a stakeholder-driven model, the corporation takes into account their stakeholders' profit and well-being, and aims to maximize "profit" among shareholders, suppliers, consumers, employees, and communities. This model pushes corporations to aim for long-term value, as well as quarterly revenue. It also shifts the center of the business to the stakeholders who in turn determine the management model of the corporation, and mandate it to act in a socially responsible way. Certainly, there are ongoing debates and criticisms about its value, justification of cost and benefit, scope and boundary, effectiveness and accountability. In recent years preceding 2010, annual reports on CSR practices have become a common practice to keep investors informed. International standards such as ISO9000/14000 and ISO26000¹², and GRI-reporting¹³ are increasingly common. Furthermore, the number of sustainability indices on stock exchanges are growing, which indicates an increasing demand for "responsible investment" among institutional investors¹⁴ that ultimately represent a collective society of individuals. As evident in the trends of CSR and the demand for accountability, it can be inferred that there are certainly demands for social responsibility in the political economy today.

The CSR attraction

While CSR practices have their extrinsic benefits such as reputation and customer trust, competitive edge, and industry leadership, CSR practices also have their intrinsic benefit. CSR is found to be correlated to corporate citizenship, enhanced productivity, and positively impacting the employee's personal identity.^{15,16,17} A study by Rupp et al. suggested that, "employee perceptions of CSR will exert positive effects on individually-relevant outcomes such as organizational attractiveness, job satisfaction, organizational commitment, citizenship behaviour, and job performance".¹⁸ The relationship between CSR and the individual is a feedback loop where well-managed CSR practices and positive CSR vision sheds a positive image to employees, and employees will feel positively about their work, and hence, acquire a positive work attitude, good performance, and have a personal sense of belonging and commitment towards the organization's practice. Commitment and work attitude is also tied in with job satisfaction and turnover rates.¹⁹ This personalized relationship with the organization then feeds back to strengthen the core values of the organization, enhances and its operation and bring about business benefits.

Research studies have also related CSR practices to job seeking behaviours. Ramasamy, Yeung and Yuan drew conclusions from signaling theory and social identity theory that resulted from a number of studies conducted primarily with undergraduates in the United States, which then informed their hypothesis-testing model among Chinese undergraduates.²⁰ Signaling theory suggests that job seekers infer the type of working conditions and management scheme from implicit and explicit information put forth by the organization.²¹ Social identity theory supplements the signaling theory in that job seekers match their personal identity, norms, and values, to the organization's to ensure the match is a good fit.²² These theories, therefore, support the significance of CSR in job searches.

Ramasamy, Yeung and Yuan also cited a similar study conducted among Chinese undergraduates and have found that company image and organizational culture is in fact regarded and comparable to job security, advancement opportunity and location.²³ In a larger study across six countries surveyed among business students on their perception of business ethics and moral judgements, Ahmed, Chung, and Eichenseher found Chinese students to be "skeptical on the relationship between CSR and long term profits and were uneasy with personal unethical behaviour".²⁴

The research by Ramasamy, Yeung and Yuan explored undergraduates' job search decisions in Shanghai, Xian, Hong Kong and Taiwan.²⁵ Ramasamy, Yeung and Yuan gave business students cases of three companies with a set of attributes such as philanthropy, ethical conduct, and safe work environment. Based on other factors such as salary, prospect, location, and company type, students were asked to make a decision as to whether they would work for any of the companies. The study did a conjoint analysis by quantifying students' desirability of each attribute identified, given the three company scenarios. The research found that students generally placed greater importance to a safe work environment, regular acts of philanthropy, and ethical conduct, than market average salaries. Undergraduates in Shanghai, Xian and Taiwan exhibited similar results while Hong Kong undergraduates clearly rejected jobs that are below market average salaries. Academic performance was also considered in the study. In China, academic performance did not have a significant difference in the relative importance of the job attributes, however, in

Hong Kong, “high performers are concerned for the type of company they work for while the low performers are more interested in the salaries they receive”.²⁶

On the contrary, in a frequently cited study, Chen compared Chinese and US employees and found Chinese in the People’s Republic of China gave higher priority to economic goals of their organization over humanistic goals as compared to the US employees.²⁷ In another study comparing Hong Kong and U.S. business undergraduates, Burton, Farh, and Hegarty found “Hong Kong respondents weighted economic responsibilities more heavily, and legal and ethical responsibilities less heavily, than did U.S. respondents”.²⁸ Although these studies are dated, these studies showed the economic implications on its relevance to need, equity and equality. A company has its priorities in its time and era; China and U.S. were in completely different zones of economic development in Chen’s comparison. Burton, Farh, and Hegarty also tried to explain the differences in the two cultures, “U.S. is a more legalistic culture than is Hong Kong, where the British emphasis on law coexists with a tradition that stresses duties more than rights”.²⁹

The argument on CSR and the role of business in society is ongoing, however, there is enough evidence that suggests CSR is not a fad. While there are pieces of academic and industry research that show the relevance of CSR to job seekers and employees, there is also research that shows otherwise.³⁰ Without a doubt, it is also questionable how significant the relevance of CSR is to job seekers. For instance, the unemployment rate in the post-2008 financial crisis and worldwide recession is a daunting reality, which will certainly have an impact on fresh graduates as anxiety and uncertainty loom. Gap year is gaining popularity among fresh undergraduates as some students want to explore opportunities among the growing NGO industry, test their fit in the industry, or do something outside of their academic expertise such as teaching English in Asian countries to pay off student loans. Not only is this true for fresh graduates, some who have been laid off would also choose to freelance or pursue short-term employment because they look at it as an opportunity to diversify their “portfolio”, to fulfill their personal aspirations, enjoy the flexibility and diversity, or simply treat it as a chance to build their “portfolio” as a way to move forward in the looming unemployment climate.³¹

Although the extent of impact to which a company’s CSR practices have on a job seeker’s decision is unclear, it is given that a good company with good corporate governance and a good reputation, which are aspects of CSR, will have a stronger appeal to attract talent and competent employees than those who do not. CSR offers a vision and a direction whereby the organization and employees share a common set of values, beliefs, and goals that then become the basis of corporate culture and identity.

GC, higher education and social impact

Knowledge and skills have become the baseline of the knowledge-based economy today. As recognized by OECD, knowledge is the “driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance”.³² Firms and organizations require graduates to be competent in their profession at the very least. However, in the knowledge-based economy driven by science and technology today, competence is more than professional skill-sets since knowledge and skills rapidly become obsolete. Firms

and organizations are thus looking for more than skills and knowledge; they are looking for those who also have a belief and value system that align with the organization's, and vision that could drive it forward, whether it is in the role of management, leadership or research and development. In the 21st century, the cultural system is the key mechanism in translating knowledge into action and direction, which also translates into products in the marketplace; this is nothing new in the field of organizational behaviour. Education plays a vital role in delivering human capital that is necessary for the growth of organizations and societies alike. The objectives of higher education have traditionally been the pursuit of knowledge that is both for the sake of knowledge itself and as means to an end beyond itself.³³ As a greater objective, universities as part of today's society should also aim to instil culture, values and beliefs which form the basis of character and citizenship among its members. In the changing environment under globalization today, universities are acknowledging these needs as observed in many universities' statements of vision and mission, strategic plans and programs. Compared with CSR as the practice of social responsibility of businesses, GC is the practice of global civic duties of universities, which address nurturing human capital as well as social capital.

In Canada and the United States, education for GC is largely based on "diversity" that promotes multiculturalism, inclusivity, and respect for individual and human rights. This is largely because Canada and US is a multicultural society composed of immigrants and thus tend to embrace democracy and the celebration of individuality. In the European Union and the United Kingdom, global citizenship is based on a utilitarian model, and education for GC is based on civic education of justice and morals. Europe, while being diverse in its population, culture and history, was divided by nation-states, currencies, and politics until the formation of EU. Citizenship, therefore, was defined by nationality, but the proximity to other nations and their interreliance has led citizenship education to be built upon justice. These differences in conceptualizing GC is due to differences in culture, socioeconomic history and politics.

Education for GC has so far been conceptualized and considered within the Western framework. To begin with, Asian countries unlike the West have a drastically different cultural landscape and are in different phases of economic development. Asia is divided into many pods of culture not only geographically, linguistically, and racially, but also by religion and ethnicity. Diversity defines Asia and differences fragment the population. Whilst the divide, people tend to be strongly connected and collective in pockets because of certain commonalities with which they identify. As evident in globalization today, one can have multiple identities, some overlapping and some may even be conflicting. Identities could be based on geography, nationality, religion, ethnicity, economic circumstances, sexuality, and language or dialect, however, because of locality, one may have to sublimate certain identities and illuminate others. In other words, Asians are incredibly hybridized and therefore readily able to adapt to the immediate society according to the needs by shifting focuses in their identity profile. These qualities make education for GC equally challenging as well as viable because of the hybridizing and unifying characteristics of Asians, and Asian societies.

Along the comparison between West and East, economically, Asia is providing many of the commodities necessary in the West. Financially, after the 2008 financial crisis

and rising anxiety in the financial health of central banks in PIIGS (Portugal, Ireland, Italy, Greece, Spain), Asia is more compelling, given the strength of the economy.^{34,35} The population of Asia's middle class has also risen to 56% of the population by 2008, that is, 1.9 billion people whose per capita consumption is between \$2 to \$20USD per day.³⁶ Even during recession, annual expenditure was estimated to be at \$4.3 trillion in 2008, which is nearly one third of private consumption in the OECD.³⁷ This figure is estimated to rise to \$32 trillion in annual expenditures by 2030, which is 43% of worldwide consumption, assuming that Asia grows at the rate it has been for the past 20 years.³⁸ It is noted and expected that spending on higher education, and the growing demand on quality higher education can be expected.³⁹ Since the Asian middle class has relatively lower income levels than Western middle class⁴⁰, it can be predicted that the demand for higher education within the Asian region will increase as the children of the Asian middle class graduate from secondary education.

The implications of the rising Asian middle class are beyond the financial and global economy. In a report by Asian Development Bank (ADB) in 2010, ADB identified two factors that drove the "creation and sustenance" of the middle class, these are (i) stable, secured, and well-paid jobs with good benefits, and (ii) higher education.⁴¹ Unlike education that has been underscored in the U.S. during its development, higher education earmarks the middle class in Asia. As a result, it has already been observed in the ADB 2010 report that "the middle class is helping to improve accountability in public services through more vocal demands for better services".⁴² This observation also explains the rising demands for a corporation's accountability and consumer product safety.

In addition, "the growth of Asia's middle class in the last two decades has been accompanied by effects such as new environmental and ecological problems, a rise in obesity, and an increase in chronic, non-communicable diseases".⁴³ This suggests aggravating anxieties over environmental and sustainability issues among the majority of people. Not only will environmental issues and sustainable development be considered in public policies in the near future that will affect business practices, people would likely shift towards favouring businesses which act with considerations to the environment and practise business that aligns with their personal values and beliefs. While multinational corporations are already gearing up CSR practices in Asia, businesses both foreign and native to Asia will inevitably face pressure from public policies, local communities, and consumers to practice CSR. In Singapore, for example, Singapore Compact for CSR is a national society that drives the nation's CSR movement.⁴⁴ In India, the Indian Ministry of Corporate Affairs introduced voluntary CSR guidelines and suggested that companies should allocate a percentage of their profit after tax as a CSR budget.⁴⁵

As discussed, the characteristics and practices of GC in Asia are shaped by the economy, government, and social pressure. The fact that economics play a significant part in driving GC is convincing since globalization is in effect largely driven by businesses and technological advancement. It is especially encouraging to see public policies emerging to counter the effects of economic development, population growth and urbanization, either as a result of public pressure or public interest. Nonetheless, part of the equation is undisputed social pressure that come from all angles and levels, from international expectations, to the growing middle

class in Asia who are educated, and those at the grassroots level who are most vulnerable yet at the same time hold equally high stakes in the socio-economic system. The rising awareness of the grassroots and the necessity to improve their well-being is gaining momentum across Asia. As an illustration of the impact of grassroots in Asia, in China, the population of migrant workers was at 131.8 million in 2006 (China Labour Bulletin),⁴⁶ which is approximately one third of the US population. The government, public community and their employers are concerned about this population since they have a direct impact on them, whether it is social issues, health and work-related injuries, hygiene and public health, or the mortality rate of pregnant migrant workers and the primary education of their children.

GC in Asia is unique given the nature of Asian societies being communal and collective. The collective and communal behaviour suggests strong cultural values with which individuals identify. It would be challenging to penetrate into this existing behaviour, but this collectivism could be used as the framework that facilitate the goals of GC. While others consider the focus of multicultural inclusivity and diversity, or promotion of civic duties and justice, GC in Asia would be promoted based on shared values and shared interests between communities. In this sense, the strategy of actualizing GC in higher education is no different from a company's CSR strategies.

In Asia, education for GC in higher education would need to be designed to harvest the collective and communal synergy among students, staff faculty members and the wider community. Activities which the university engages in should further be aligned strategically with social needs and public policies to be influential and effective. In terms of educational objectives of higher education today that tend to emphasize skills and knowledge, GC would supplement such endeavours in the sense that it connects ideas and disciplines, extends them to achieve humanistic goals that work towards improving social and environmental circumstances as stakes in globalization.

Conclusions

In summary, GC is shaped by the immediate society, and built from core values, beliefs and perceptions of the individual, who is part of communities, nation-state(s), and a global society and economy. It is relational and transformable to the needs of the immediate society, the nation and the geographical region, that then expands internationally and globally. GC is consciousness and clairvoyance of the interconnectedness of all life, systems, and matters in the global socioeconomy today. Education for GC in universities supplements the normative goals of higher education since it is beyond knowledge acquisition or mechanical perfection. It fulfills the value-oriented goals of higher education that aim to serve and improve society, as well as the enrichment and enlightenment of the individual. GC is shaped by the identity of the university that is steeped in philosophy and culture. Amidst globalization and the challenges it brings, conceptualizing GC according to the university's vision and mission, and strategically planning it within the university's operations could sharpen a university's identity and truly qualify it for the international stage since it operates with the world in mind as the core of its mission.

The virtues of GC are the passport universities can endow upon students as they enter the world not only as employees, entrepreneurs, public servants or diplomats, but also

as citizens of the world who have an impact on society through each and every decision made and acted upon that consequently causes a chain-effect that affects others directly or indirectly, where the person him/herself will also be affected some where along the way.

(w.c. at 5000)



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The Impact of Language Internationalization on a Chinese Language School: A Case Study

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INTRODUCTION

As China's role in world economy continues to rise, so does the popularity of Chinese language learning in different educational settings in many countries, ranging from community language schools to colleges, since, for example, as early as the 1990s in the U.S. (Chao, 1996; Linnell, 2001) and 2000s in Canada (Duff, 2008). In particular, in the U.S., among all education systems that offer Chinese language programs, community Chinese language schools are the most attended, accommodating students six times that of their mainstream counterparts (Everson & Xiao, 2009). As the enrollment grows, these community Chinese language schools face an increasing number of non-Mandarin-speaking students in their classrooms who speak non-Mandarin Chinese dialects or English at home (Lai, 2004; Lee, 1996). This new group of students thus brings new challenges to these schools, which medium of instruction has been Mandarin for Mandarin-speaking students in the past (Lai, 2004). The major challenge is that these new students do not speak Mandarin. Besides, they have a non-Chinese heritage background (Lee, 1996).

To respond to the challenges brought by non-Mandarin-speaking students, many Chinese language schools in the U.S. have adjusted their missions (Lee, 1996) to accommodate these new students. These adjustments include adaptations in the schools' class arrangements and their beliefs. This study examines such adjustments in one such school in the context of increasing international popularity of Chinese learning.

Research Questions

The purpose of this case study is to explore the management efforts of a community Chinese language school in the United States under the international impact of Chinese language learning. These management efforts, in Spolsky's (2004) theoretical terms, can be defined as *language management*. This *language management*, according to Spolsky (2004), includes whether the school changes its organization, its placement processes, curriculum design and teaching philosophy. In other words, *language management* deals with intervention by the school administration. Furthermore, *language management* is influenced by *language beliefs*, which refer to how the school, parents, and students think about the role the Chinese language plays in today's world.

Studies in the past have discussed issues of language management and language beliefs in community Chinese language schools separately; however, no studies have integrated and examined the two dimensions together and looked at how the two dimensions are affected by the internationalization of Chinese language learning.

This paper examines the adaptations in the management of a community Chinese language school in the United States by investigating the following two components: the school's language management and language beliefs. More specifically, the author pays close attention to the international impact of Chinese language learning on the school's language management.

Based on the above description, the research question of this study is: In the context of a global trend of Chinese language learning, how does a Chinese language school adapt its language management to face the challenges created by an increasing number of non-Mandarin-speaking students in its classrooms? This overarching question can be further divided into two parts. First, how does a Chinese language school adapt its language management to deal with the increasingly heterogeneous student body in its classrooms? Second, how do a school's language beliefs shape its language management decisions when facing a linguistically and culturally heterogeneous student body?

Theoretical Framework

This study uses Spolsky's (2004) language policy theory as a theoretical framework to explore the language management adaptations of one Chinese language school in New York City. As aforementioned, Spolsky (2004) sees language management as an intervention influenced by language beliefs.

The language management of the Chinese language school mainly refers to the school administrators' administrative measures in dealing with their non-Mandarin speaking students. These measures include curriculum design and adjustment and student placement in the school. As for the language beliefs, they are comprised of all the beliefs in, and attitudes towards, the inclusion of the non-Mandarin-speaking students by all of the school administrators, teachers, parents, and students themselves. Therefore, the school was the focus when analyzing and illustrating the school's past and current language policies, as well as the forces involved in the processes of forming, implementing, and adjusting these language policies to meet the needs of the two schools' non-Mandarin-speaking learners.

LITERATURE REVIEW

This section will discuss the literature concerning the international impact of Chinese language learning on a community Chinese language school in the U.S. by looking at the following three areas:

1. The international impact of Chinese language learning; and
2. Spolsky's (2004) language policy theory; and
3. The Chinese language schools in the U.S., focusing on their organization.

The International Impact of Chinese Language Learning

Chinese Language Learning in the World

Chinese language learning has become more and more popular in many countries recently, mainly because of China's booming economic development (Ding, 2008; Goh, 1999; Lo Bianco, 2007). Lo Bianco (2007) indicates that Chinese language learning is most emphasized in Asian countries. For countries such as European and North American ones, they too make efforts to invest more in Chinese language teaching (Agarwal, 2002; Goh, 1999). As the Chinese language gains its international popularity, the student population learning Chinese as a foreign language grows to be more than 30 million in over 100 countries, according to Mainland China's and Taiwan's studies (Chang, 2006; Xu, 2005).

Chinese Language Promotion Initiated by the Chinese-Speaking World

The Chinese-speaking world in this study refers to Mainland China and Taiwan (Li and Lee, 2004) where Mandarin, as a lingua franca, is used by about 1.196 billion Han ethnic Chinese (92% of the Mainland Chinese population) (Li and Lee, 2004) and by "an absolutely majority" of the 23 million Taiwanese people (Li, 2006, p. 149).

Mainland China. The language policy of promoting the Chinese language to the rest of the world has been receiving support from the Mainland Chinese government since 1987, when the National Office for Teaching Chinese as a Foreign Language (NOCFL) was established in Beijing (Ding, 2008). Moreover, China has been recruiting, training, and sending qualified

teachers to teach Chinese abroad since 1991 (Ding, 2008). Besides, NOCFL has also established Confucius Institutes overseas to provide Chinese language courses for foreign organizations and in foreign education systems (Ding, 2008; Ding and Saunders, 2006). Among these endeavors, the provision of Chinese language textbooks to overseas Chinese communities, including Chinese language schools, has been one of them (Ding, 2008).

In addition to promoting the Chinese language in overseas education settings, China also promotes the Chinese language through its overseas Chinese language test, i.e. the Chinese Proficiency Test (HSK) (Ding and Saunders, 2006). Since its inception in 1990, the HSK has seen over 400,000 examinees at its test sites in 37 countries (Ding and Saunders, 2006).

Taiwan. In the overview of the Chinese community language schools in the United States, Chao (1996, p. 10) points out that the “most frequently” used textbooks in these schools are from either Taiwan or Mainland China. Furthermore, Tang and Li (2001) indicate that Taiwan is more advanced in promoting Chinese abroad in that it has a well-established Internet Chinese language education website, a tool much more powerful than Mainland China’s traditional teaching materials. From the above information, it is clear that, Taiwan is very active in promoting the Chinese language abroad through developing state-of-the-art teaching/learning materials for overseas learners as it faced competition from its counterpart—Mainland China.

Taiwan’s efforts in promoting Chinese abroad can be further seen in the annual teacher training seminars held in Taiwan for Chinese teachers from the abroad (Peng, 1996). Similarly, for example, when it comes to situations in the U.S., conferences on teacher training also are available locally in different cities in the United States (Peng, 1996). A closer tie between Chinese language schools run by Taiwanese immigrants is established through the formation of the National Council of Associations of Chinese Language Schools (NCACLS) (Wang, 2007). According to NCACLS, about 85 percent of its member schools use textbooks published in Taiwan (P.-F. S. Wang, 1996).

This phenomenon of textbook preference may be explained from a political point of view. Politically, because the KMT had made Mandarin the only medium of instruction and the only language allowed in school, other mother tongues did not play any role in education in Taiwan until this decade (Li & Lee, 2004; Tsao, 2004). When Taiwanese immigrants came to the U.S. with their Mandarin-dominant language ability, they would chose to set up their own Chinese language schools in order to preserve their cultural, as well as linguistic, heritage (Chen, 1992).

The Status of the Chinese Language in the U.S.

The United States has increased its investment in teaching less commonly taught languages, including Chinese (Walton, 1992). According to a data from the U.S. Department of Education, there are approximately 24,000 students learning Chinese in elementary and secondary schools in the U.S. (U.S. Department of Education, 2006). Moreover, the Modern Language Association indicates in its report that 34,153 students enrolled in Chinese courses in U.S. higher education in 2002 (Welles, 2004). McGinnis also provides a similar enrollment statistics with a total number of 34,000 in higher education and another of 25,000 in K-12 schools (McGinnis, 2005).

However, the enrollment at Chinese language schools throughout the U.S. is excluded from this combined total. Both the National Council of Association of Chinese Language Schools (NCACLS) and The Chinese School Association in the United States (CSAUS) provide

statistics of their student enrollments. For the time being, NCACLS (NCACLS, 2006) has about 100,000 and the CSAUS (CSAUS, 2007) about 60,000, which constitutes a total of roughly 160,000 students.

In the education field, the College Board has launched the AP Chinese test programs in 2007 (College Board, 2006). More important, mainstream schools have now noticed the critical needs of foreign language learning, including Chinese (Brecht & Walton, 1994; Crookes, 1997; Kubler, 1987; Lange, 1987; Walton, 1992; Welles, 2004). In the context of the No Child Left Behind Act, foreign language programs in schools have not received much attention (Glisan, 2005). The U.S. Department of Education emphasizes that it is determined to change this situation by promoting the National Security Language Initiative project mentioned above. Wang (2007) indicates that more collaboration are expected between the Chinese language communities, including Chinese language schools, and the U.S. formal schools, in order to

...build consortia that serve as flywheels that will not only connect language pipelines from supply to demand, but will also generate usable energy that steadily flow in one direction and feeds into continuous loops of a system (p. 47).

Spolsky's Language Policy Theory

Spolsky (2004) defines language management as intervention. He further defines language beliefs as beliefs that “designate a speech community's consensus on what value to apply to each of the language variables or named language varieties that make up its repertoire” (p. 14). Moreover, he indicates that language beliefs “can be a basis for language management or a management policy can be intended to confirm or modify them” (p. 14).

In addition, Spolsky (2004) emphasizes the concept of *Context*. He indicates that, when looking at language, researchers need to consider the wider (e.g. social, political, and economic) contexts in the society where a language is used.

More importantly, Spolsky (2004) mentions globalization as a *Force*, or a *Condition*, which he explains as a major condition co-existing with language policies. In Spolsky's term, globalization has brought about changes in the past decade and the spread of English as a global language. By the same token, this study tries to explore the globalization of the Chinese language and its impact on the Chinese language schools in the United States.

The Chinese Language Schools in the U. S.

The following section will discuss the organization of the Chinese language school in a U.S. context.

The organization of the Chinese language school

The organization of the Chinese language school mainly refers to the types of classes found at the Chinese language school today. Lee (1996) and P.-F. S. Wang (1996) have pointed out that there are mainly three types of classes at the Chinese language schools, responding to the student composition in the school and the wishes of the school leadership: one is a class composed of only Mandarin-speaking students, a second one is an integrated class where most of the students are from different Chinese dialects backgrounds (including Mandarin), and the third one is a separate class set up for only non-Mandarin-speaking students.

METHODOLOGY

This is a case study of the language management of one Chinese language school, trying to

describe how the school's language management interacts with its language beliefs. The methods used were interviews and document collection, which will be discussed below.

Interviews

Interviewing the teacher. The purpose of the interview is to understand the teacher's ethnic, linguistic, and professional background, teaching experience and philosophy.

Interviewing the non-Mandarin-speaking students. Two non-Mandarin-speaking students were interviewed individually. The interviews lasted between fifteen to thirty minutes. The purpose of interviewing students was to uncover their attitudes towards, and beliefs about the school's management and beliefs concerning their learning.

Interviewing the parents of non-Mandarin-speaking students. The purpose of interviewing the parents of the two non-Mandarin-speaking students was to understand their beliefs about their children's Chinese language learning and how the school accommodates their children.

Interviewing school administrators. The purpose of interviewing school administrators was to understand their background, management practices, school policies and teaching philosophy. In particular, this type of interview explored what language policy, if any, the two schools had adopted in the past (before the 1990's) when there was only a homogenous Mandarin-speaking student body in the schools.

Document Collection

The author collected documents from the school, including school flyers, web pages, examination sheets, textbook pages, and handouts (Bogdan & Biklen, 1992).

Data Analysis

The author analyzed the data following three steps: data description, category aggregation, and pattern establishment (LeCompte, Preissle, & Tesch, 1993; Merriam, 1998).

ANALYSIS AND FINDING: A SEGREGATED CLASS

This section analyzes and describes how the Chinese language school adjusted its management policy for its non-Mandarin-speaking students. Emergent patterns were derived from analysis of data from interview transcriptions and collected documents. When the data was analyzed, the adaptation in school organization emerged: a segregated bilingual class.

Yue Peng's segregated class: A bilingual class

Yue Peng set up a segregated class for its non-Mandarin-speaking students in 2001. By segregated the author means that the school separated the class for non-Mandarin-speaking students from the rest of the school; meanwhile, the school also exclusively allowed this segregated class, including its teacher and students, to use English as well as Mandarin in class. This segregated class was thus named a bilingual class.

The placement test for non-Mandarin-speaking students was explained by one of the administrator:

In the beginning, we use examinations to decide who go to the Mandarin classes and who go to the bilingual class. (Interview with the Vice Principal, Ms. Chu.)

From the start, our bilingual class is established for those whose families don't speak Mandarin at home. (Interview with Vice Principal, Ms. Chu.)

The parents also indicated that they sent their children to the school so that their children will have more opportunities to be exposed to the Chinese language and culture, when facing the rapidly changing Chinese economy development. One parent said that:

...Especially when we are doing business with China...These Chinese customs...this is the problem I worry most (about my children)...This school has what my kids need to know (about the Chinese language and culture). (Interview with one of the two parents, Betty.)

As for the structure of the bilingual class, the principal indicated that there was no moving up along the grade levels:

There is no plan for the bilingual class to move up along the grade level. There is just one bilingual class all the way through.... Once the teacher is done with the current textbook, he continues to use the textbook of the next level. The syllabus must be continued.... So far there are six sets of textbooks. Usually it takes six years for these students to graduate from the bilingual class.] (Interview with the principal, Ms. Dong)

Here the school was faced with the interwoven relationship between the school's language belief in a separate bilingual class and the inevitable linguistic heterogeneity when English as well as Mandarin were needed in this bilingual class. Teaching such a class, Mr. Jiang, the teacher of the bilingual class, had enjoyed much more freedom in choices of languages. He believed in the importance of introducing the Chinese language and culture to his students in English as well as in Chinese, Mr. Jiang said that:

...don't look down on China...China has made a big progress recently and it is absolutely necessary for those in the market to learn Chinese...I will introduce to my students how much progress Shanghai has made...I use English...I use Chinese also (to teach)...so students can understand me both in English and in Chinese...

Meanwhile, the class received less supervision from the school administration because the principal said that "...in the bilingual class...I don't think it is necessary to push them. If they want to learn Chinese, let them learn. If they don't, they can quit." (Interview with the principal, Ms. Dong).

Lastly, the school offered a transfer examination for non-Mandarin-speaking students to transfer back to the regular Mandarin classes if they so chose to. This school management endeavor was held once a year for students from the bilingual class. If they passed, they could transfer to regular classes afterwards.

To sum up the findings, Yue Peng's bilingual class for its non-Mandarin-speaking students was originally a contingency plan, which could be explained from three different angles. First, it was a short-term, segregated class exclusively for non-Mandarin-speaking students, who constituted only a very small percentage of the school's entire student body. Second, the parents of non-Mandarin-speaking students registered their children in the bilingual class with a goal of enhancing their children's proficiency in the Chinese language and culture, knowing that their children were there for advancing in Chinese learning, not for moving up along the grade level, which situation the school made clear in their curriculum design. Lastly, the teacher could teach in English as well as Mandarin without being closely watched and

restricted to a tight Mandarin-only curriculum. More importantly, the students always had the chance to transfer back to a regular Mandarin-only class where they could enjoy more exposure to the Chinese language and culture, a goal that the students' parents originally hoped their children could achieve.

There was a clear relationship between Yue Peng's language belief in the importance of Mandarin and its language management—the linguistically heterogeneous, bilingual class: The school believed in the maintenance of a Mandarin-only instruction environment for most students while managing to offer a segregated Mandarin-English class to non-Mandarin-speaking students. This bilingual class was designed to pay more attention with less pressure to non-Mandarin-speaking students, who came from various linguistic and cultural backgrounds.

DISCUSSION AND CONCLUSION

The Importance of Chinese Language Learning

From the findings, it is obvious that the Chinese language school has a strong belief that learning the Chinese language is most important for non-Mandarin-speaking students. Such a belief was based on the already evident economic benefit of learning Mandarin. The teacher held a belief that his non-Mandarin-speaking students' Chinese language learning at the Chinese language school would eventually pay off when they do business with China. This viewpoint was a reflection of what Ding (2008) says about the Chinese language as “a fast-developing commercial lingua franca in the Pacific basin” (p. 117). Other studies have similar statements about the importance of learning Mandarin by pointing out that a nation's business relationship with China would be greatly enhanced if people in its business circle know Mandarin well (e.g. Agarwal, 2002; Bhasin, 2007; Mathew, Krishnamurti, and Sevic, 2005; Kurlantzick, 2007; Zhang, 2006).

Yue Peng's stance on teaching Mandarin to its non-Mandarin-speaking students was also supported by the government from Taiwan. Yue Peng's principal said that the school received all its teaching materials from the Taiwanese government for free, which greatly reduced the cost of school management and tuition charge. This low tuition in return attracted more non-Mandarin-speaking students, which was precisely the aim of the Taiwanese government's free-teaching-material policy.

Parents of non-Mandarin-speaking students show great enthusiasm in supporting their children's Mandarin language learning by registering their children in Yue Peng. For these parents, their children's learning Mandarin is most important. In return, this parental belief in the importance of knowing Mandarin further strengthens the school's determination and dedication to teach Mandarin to all.

Conclusion

Since the 1990s, the Chinese language schools in the U.S. have witnessed an increasing number of non-Mandarin-speaking students in their classrooms. This influx of new students has been initiated by China's rapid development in the world economy. Under the impact of China's economic growth, the Chinese language school in this study had adapted its language management policy to satisfy these new students' needs. The Chinese language school's adaptations were reflected in the following two aspects.

First, the Chinese language school was enthusiastic to teach non-Mandarin-speaking students and thus came up with a segregated bilingual class for this new student body only. The purpose of this bilingual class was to make sure that these newcomers could receive more attention and practice more, using both Mandarin and English in class.

Second, China's economic development has directly influenced Yue Peng's language management decisions to establish a linguistically heterogeneous classroom environment for its non-Mandarin-speaking students, who were also linguistically heterogeneous. The meaning of this influence is two-fold. On the one hand, as long as China's economy continues to develop steadily, or even rapidly, the number of non-Mandarin-speaking students in the Chinese language schools in the U.S. is expected to grow in the foreseeable future. On the other hand, the linguistic heterogeneity in the Chinese language schools will last as long as the Chinese language schools continue to accommodate more non-Mandarin-speaking students.



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Title of Paper

**Impacts of Western Education in Asia: A Case Study on
International Student Assessment Mechanisms**

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Student Learning, Learner Experiences & Learner Diversity

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Abstract:

International students are the consequence of the whirlwind of changes that characterizes contemporary universities. The trend of globalization and digital revolution is increasingly forcing numerous students and universities to become internationally competitive in an increasingly globalised higher education marketplace. Our focus is on two specific epistemological issues pertaining to international institutions in the Asia Pacific. Globalization has accelerated the movement of universities and their faculty to the market in which assessment of students could be a harbinger of success for an entrepreneurial university intent on attracting international students. We explore the relationship between international students and assessments made on their education at universities. Four aspects are proposed as the core components that formulates the research questions. In this paper, we define assessment models that define the ways in which it affects the learning experiences of students; describe the cultural mores that come into play when international students are assessed by faculty; question the assessments being ameliorated by including the cultural diversity of students; examine the assumptions that are held by academics when international students are assessed. The major points raised in the paper comment on the effects of contingency theory applied to university teaching pertaining to the Asia Pacific region.

Keywords: Contingency theory, Cultural mores, Epistemological models, Globalization, International students.

1. Introduction

International students are the consequence of the whirlwind of changes that characterizes contemporary universities. The trend of globalization and digital revolution is increasingly forcing students and universities to become internationally competitive in an 'increasingly globalised higher education marketplace' (West 1998, p. 63). In a constructivist environment, Information and Communication Technologies (ICT) are currently used in a web centric instructional delivery mechanism (McManus 1996). In relation, higher education can be investigated as a mixed mode method of instruction that could involve web based and face to face teaching mechanisms which emulates constructivist models by learning the effects of student epistemological believes. (Schommer 1990) and (Rhodes 1992) have developed five epistemological models of persuasion which includes four factors:

- Simple Knowledge (knowledge characterized as independent pieces of information contributing to inter-related concepts);
- Certain Knowledge (tentative and evolving knowledge);
- Fixed Ability (innate abilities improve learning);
- Quick Learning (micro-learning perspectives).

In this milieu, assessment of international students is a double-edged sword by which educational institutions (including professors) may be avoided if they are found to be failing them or condemned by university rankings and job markets as being non-educative and easy. Globalization has accelerated the movement of universities and their faculty to the market (Slaughter & Leslie 1997, p. 5) in which assessment of students could be a harbinger of success for an entrepreneurial university intent on attracting international students.

This paper explores the relationship between international students and assessments made of their education at universities in the Asia Pacific. The teaching experiences of the authors focus on four aspects, as proposed in the paper which becomes the major research questions of this research. The first section defines assessment mechanisms and the ways in which it affects the learning experiences of students. The second section describes the cultural mores that come into play when international students are assessed by faculty. The third section relates to the question of assessment being ameliorated by including the cultural diversity of students. The fourth section examines the assumptions that are held by academics when international students are assessed. The concluding section briefly summarizes the major points raised in the paper and comments on what may occur if contingency theory (Morgan 1998) is applied in comprehending the possible scenarios for established off-shore universities as well those established specifically for international students in the Asia Pacific.

2. Student Learning Experiences and Assessments

Assessment of international students plays a vital role in communicating with students of their learning patterns. Student assessments provide an important basis of self esteem and the key measure of their success in a place far from their regional norms and cultural values. International universities in the Asia Pacific have become a place for gathering valued cultural capital for

students from various cultural and demographic backgrounds. The assessment stakes can be very high as most international students and their families have made significant financial and emotional commitments for overseas study. Brown et al. (1997, cited by Brown & Joghhin 2007) have argued that assessment preempts all other pedagogic experiences and may have the greatest impact on student learning experiences:

Assessment defines what students regard as important, how they spend their time and how they come to see themselves as students and then as graduates. Students take their cues from what is assessed rather than from what lecturers assert is important (Brown et al. 1997, p. 7, cited by Brown & Joghhin 2007).

Besides the importance of assessment from the psychological angle of international students, assessment itself differs in different educational systems. While Asian students (especially from the Indian and Chinese cultural norms) are oriented to respect the teacher and what is taught as sacred, western orientations to teaching (with references to British and Western-American norms) and assessments very often takes the extreme position of being profane. A pass grade in the UK can be low as 45 marks, causing bewilderment among international students whose background would urge them to aim for the highest grade. The differing marking conventions may cause disrespect for knowledge itself among international students. In the Japanese tradition of university grading, for instance, class attendance alone is seen by students as entitling them to 'a pass' in any course. Many students have experienced shock when called upon to make presentations as part of the grade assessment. International students also find that their written presentations often do not receive favor among academics in the British influenced educational institutions of Australia and New Zealand. Most international students have to expend enormous energy in learning the assessment culture of the host university which has then lead the students to obtain degrees that are often recognized only in the region where their study were undertaken. As power is asymmetric in most universities with the international students being at the lower stratum, they realize that assessment is highly culture-specific and in order to attain better grades they need to learn the educational culture of the host society. Bearing in mind the asymmetric nature of power in any university, a good starting point would be the mental reform among assessors. It is important for them to recognize that international students are bearers of culture, not bearers of problems (Ryan & Carroll 2005, cited in Brown & Joghhin 2007).

Ryan (2000, p. 11, cited in Brown & Joghhin 2007) has proposed the use of variations of approaches that take into account cultural factors of international students.

- The extent to which historical texts and previously accumulated knowledge are respected;
- How far authority figures, including teachers, are respected (or not);
- How far it is acceptable to be overly critical of authoritative texts or figures;
- Whether a 'correct' answer is sought and the extent to which alternative responses are acceptable;
- Issues about avoidance of making mistakes or losing 'face';
- How far students are expected to speak up or listen quietly;
- How far personal opinions are valued (or whether this implies arrogance);

- The importance of harmony and cooperation within the group over the interests of the individual within it (Brown & Joughin 2007, pp. 59-60, cited in Ryan 2000, p. 11).

Each of the factors has application for how students approach assessment and can help explain the actions of students. Western universities expect students to be demonstrative, challenging and questioning the pedagogical process, whereas in Asian societies, respect for the teacher and the knowledge imparted are unquestionable. Asian students are brought up to view the class as an epitome of harmonious relationships. The class then becomes an arena of compromising with the teacher for survival and social well-being. Thus, international students, even in their written presentations may avoid radical and unfamiliar ideas of lesser known authors and prefer acceptable publications that advance harmony.

3. Effects of Cultural mores and Assessment Pitfalls

Cultural mores affect both international students and the faculty that assess them. Even though most western institutions and many Asian academics now express commitment to the values of cultural diversity, problems arise when faculty and administrators interact with international students. Knight and de Witt (1995), in an overview of the field, argue that internationalization is a meaningless term without a conscious effort to integrate an intercultural dimension into the teaching, research and service of the institution. According to Cope and Kalantzis (1997), a key to internationalization is the recognition and valuing of global diversity and the capacity to understand and respond to cultural differences, with a combination of local and global values, such as openness, tolerance and cosmopolitanism (Rizvi & Walsh 1998, p. 9).

Difference is in the resources that students bring to university. It is something that is constitutive of social relations within the university. It is constructed and enacted through the practices of curriculum. Viewing difference as an external factor in the construction of curriculum is to treat it in an instrumental manner. Such assumptions would posit the practice that student diversity is mainly 'related to interpersonal relations and not to the issues of academic content and pedagogies. As a consequence, those institutions within which the curriculum is being constructed may themselves be culturally biased and exclusionary. What this argument implies is that the relationship between curriculum and cultural difference needs to be reconsidered in a more dynamic, relational way, rather than in purely instrumental terms. The problem is not that, in a global university, students are different but that we find it difficult to 'read' the difference (Rizvi & Walsh 1998, p. 9).

Assessment of international students is closely associated with the issue of impacts on quality when universities have international students. By 1995, it was argued by Marginson (Smyth 1995, p. 51) that the aggressive expansion in overseas markets has occurred with little attention being paid to quality or educational objectives. There are several problems which potentially affect academic work. First, there is the problem of coping with students who are clearly not equipped to undertake university studies. Monash academic Dr. Andy Buffory (1998) has written about his astonishment at being asked to employ lower marking standards leading him to lament the lowering of standards occurring as a result of the quest of universities to make 'a killing in the Asian market'. Similar situations has been dealt with on a regular basis by the authors at various institutions in the name of cooperate governance and emotional harassments of being publicly termed 'academically challenging to the policies of the institution'. Similarly, there have been

public lamentations of accepting students with significant language difficulties into courses which is often the case when the student's native tongue is not English. Students are often allowed to continue for several years before they were being told that their English was inadequate' (Coorey 1996, pp. 43; Maslen 1998, pp. 5).

Problems associated with assessment of international students are not uncommon. Export programs supervised by local institutions generally tend to assess students as having attained a distinction or high-distinction average leading up to final examinations. This has been particularly observed in the Australian styles of teaching where these students face substantial failure rates when the final examinations are Australian-marked, they seek redress. Some 'whistleblowers' at Australian universities have raised ethical concerns of assessment of international students. The following are some examples of the ethical issues related to international students and their assessment.

- Curtin University academic, Dr. John Kelmar, was suspended by the university after appearing on television explaining how he experienced problems after failing nine students, including five international full fee payers, for plagiarism (Johnston 1995, p. 27).
- Former University of Wollongong ethics lecturer, Dr. Gall Graham, who claims she was 'forced' to lower standards in her subject. Dr. Graham claims that problems began after she failed several full fee paying international students, and resulted in her contract not being renewed (Johnston 1995, p. 27).
- University of Sydney academic, Dr. Paul Hopwood, expressed concern that a full fee paying student was admitted to veterinary science in August (the course began in March) with no previous training or background in the field. He was placed on disciplinary charges by the university after expressing this concern. However these were later dropped (Reilly 1998, p. 42).
- A tutor at Metropolitan College in Malaysia, a 'twinning' institution offering the first year of Curtin University degrees, inter alia, alleges that he was sacked after claiming that students were given full marks provided assignments were submitted on time, despite wholesale copying and that students who could hardly speak English were given exam passes and permitted to enroll in degrees (Maslen 1998, p. 3). Some institutions may accept more students than they can comfortably support, while others might make an assumption about the ability of a student to satisfactorily complete a course that goes a little bit too far (Reilly 1998, p. 42). In a similar vein, additional training has been called for in cross-cultural awareness training, cultural sensitivity training, and even 'simple education methods' (Coorey 1998, p. 43). The question of whether opportunities are provided for the inclusion of cultural diversity through assessment programs was examined.
- Research undertaken in the graduate engineering and management faculties of a major United States University consistently revealed high support among faculty for international activities. It is also noted that only two-thirds of faculty disagreed with the statement that foreign students are a nuisance because they are always haggling for higher grades (Lulat 1993, pp. 337-339, cited in Pratt & Poole 2000, p. 20).

4. Assessment of Best Practices

Biggs (1997) explores teacher's orientations when encountering culturally diverse groups by proposing a model of three levels. At the first level, teachers are aware of different learning behaviors among different cultural groups. When difficulties arise in learning activities, however, the teacher attributes the problem to student deficit, possibly culturally determined. Biggs refers this phenomenon as 'conceptual colonialism' whereby the concepts of one's own culture are imposed on another, as if they were universal. At the second level of abstraction, the teacher respects and values cultural differences, accepts learning behaviors and tries to encourage expression of beliefs, values and world views to design appropriate learning activities. The teacher attempts to use a teaching style while corresponding to the observed learning style. In order to respond to the different learning styles, it is quite time-consuming where the teaching techniques result in too little attention being made to the learning outcomes involved in inculcating intellectual and social development. At the third level of orientation, the focus is on cognitive outcomes and cultural similarities. The teacher assumes that universal principles apply across cultures. Thus, the teacher seeks to engage cognitive processes that are common to all students, thereby transcending cultural differences.

Edwards et al. (2003) have suggested a number of solutions to developing international awareness and international competency in assessment.

- Focus of cognitive processes would suggest an approach that differentiates between different levels of development of international and intercultural literacy and the teaching methods and learning activities that support them.
- International awareness may be achieved through teaching strategies that foster an understanding that knowledge and curriculum do not emerge from a single cultural base. Nonetheless, the silencing of diverse cultural literacies in tutorial and written work may still result in students not given clearly articulated 'space' for the inclusion of their cultural diversity. It is equally important that in the discussion students are encouraged to critically reflect on their assumptions and beliefs.

Appropriate teaching and learning strategies embedded with a cross-cultural perspective may therefore lead to rethinking about assessment criteria. However, MacKinnon and Manathunga (2003) argue that assessment is the nexus where intercultural communication skills are developed within the curricula and for students, the crucial communication rests on assessment.

Traditionally, most assessments center on an end product. The process by which that product is researched, constructed and presented is often taken for granted. Socially and culturally responsive assessment recognizes that the student requires not only an understanding of the process of constructing an assignment, but also how different cultural knowledge can be relevant and valued. MacKinnon and Manathunga (2003) suggest a number of practices:

- Linked assessment tasks than provide a series of connecting steps that assist students in identifying the elements necessary in constructing large-scale assessment pieces like essays.

- Peer assessment in class where students mark examples is an appropriate strategy for uncovering and understanding the elements of successful assessment pieces.
- Flexible assessments like written assignments, class presentations, designing websites, writing and performing drama etc. extends inclusivity through greater choice.
- Negotiation of alternative topics that have a cultural value and relevance for the student.

Table 1 provides a summary of assessment practices used in two institutions where students from diverse societies and educational systems study. The studies were conducted in institutions where the authors had previously worked, catering for international students who were external to the prescribed curriculum as some assessment practices used in these institutions were clearly not suited for the cultural background of the students.

**Table 1: Assessment Practices at Institution A and B for a course conducted on ICT
(All values are marks awarded in percentages)**

	Institution A (Vietnam)	Institution B (Japan)
Attendance	NIL	20
Excel Assignment (Individual)	25	30
Access Assignment (Group)	25	30
Final Examination	50	20
Total	100	100

Source: Compiled by the Authors

As shown in Table 1, the assessments at both the institutions were taught by the authors who were trained at British and Western educational institutions. Instead of following and inculcating the practices observed in the British and Western educational systems, the authors had to negotiate the type of students to whom the training was being offered based on region and cultural norms. The final examination ceased to be a criterion of success in the course. Instead, continuous class work became the benchmark at these institutions. Students, even if they were alien to the final examination, could pass the course as long as they answered logically the questions. In comparison, Japanese cultural practices censure any teacher for failing a student who has attended all classes. Thus, attendance alone could guarantee 50 per cent of the marks in some classes. The authors, however, ensured that there was a balance of assessments during the delivery of courses.

5. Critical Reflections based on Assumptions and Beliefs of Academics

Good practice for international students is good practice for all. International students may be useful indicators to the health of the learning organization:

Harkening back to the time when coalminers took canaries into mines to monitor air quality, if the canaries died, they knew that the atmosphere threatened the miners' well-being, too. We are also at a 'coalface'. The international student 'canaries' thankfully show us their difficulties in less dramatic ways but nevertheless point out aspects of our teaching that all students will probably experience as challenges. By paying attention, we can change conditions to make sure that everyone can thrive in the higher education environment. If we improve conditions for international students, we improve them for all learners (Ryan & Carrol 2005, pp. 9-10, cited in Brown & Joughin 2007, pp. 69-70).

If assessment approaches can be made to fit international students in mind, then, home students will also benefit since they often have trouble coming to grips with assessment requirements. Students need to learn about assessments just as they need to learn about subject content. A number of assumptions and beliefs do affect the way assessments are perceived and practiced. Most university settings do not give adequate attention to curriculum and administrative mechanisms through which differences are identified and integrated into teaching and learning mechanisms. Assessment practices as well as other administrative practices may privilege some values and marginalize others. Differences are politicized in antagonistic ways by defining and locating different kinds of people as exotic or even inimical in various realms of everyday life. It needs to be recognized that the discourse structures and ideologies of Australian, British and other Western universities are constructed to normalize and legitimate certain existing patterns of power relations. Favored ways of representing, speaking and acting, as well as favored conceptions of knowledge are the cultural capital of such educational discourse structures which govern and control student engagements with the curriculum. The success of international students depends on the extent to which they can orient themselves to the dominant groups of educational discourse. Those who either do not understand or resist the dominant discourse become the failures of a system unsympathetic to difference. Some become excluded entirely.

The cornerstone of all changes in assessments of international students is the academics (grassroots of the institutions) at universities. It may be argued that teaching, learning and assessment strategies will not be relevant to internationalization if they do not reflect the generic principles of good practice in higher education. This implies the development of inclusive learning, teaching and assessment strategies among teaching staff. They need to develop new skills, knowledge, attitudes and values. In any academic environment, academics may have legitimate concern that there is no space in their subject for a holistic approach to internationalization. Institutions like University of South Australia have responded to such concerns with what is known as the infusion approach. Using its graduate qualities as a framework for curriculum development, a team-based approach to international teaching has been adopted. It provides clarification of what internationalization means in different subjects within a discipline.

6. Conclusion and Future Directions

Perhaps issues related to assessment of international students arise because it is a new industry. This industry may indeed be a 'global market in the early stages of development (Pratt & Poole 2000, p. 20). Still, that does not excuse inadequate responses to problems of assessment of international students.

An alternate explanation can be presented by a two-dimensional explanation. First, Western public policy and institutional approaches to entrepreneurialism encourage the view that students are consumers in a traditional marketing sense. The natural consequence of this view is that customers (students and their parents) demand not just high-quality products and services but also expect a tangible product (degrees) in return for the significant price paid for this service experience. Direct or indirect pressure is then applied to academics to provide this 'product'. If academics feel that such pressure is unwarranted, they have few alternatives to quit their jobs. *'Most academics do not have many employment options'* has become a de-facto model of the education industry as opposed to being a qualitative temple of knowledge. Second, the ongoing expansion in international education market has enabled institutions to sometimes neglect issues of quality assurance and the maintenance of standards. From an institutional perspective, it has historically been possible to take the view that having some dissatisfied students was not a major cause for concern as there would always be more markets and students to pursue. However, the international market is evolving towards maturity with competition from places such as Singapore and Hong Kong. Even non-native English speaking countries such as Japan and South Korea have joined the race for international student customers. In this milieu, issues such as quality, standards, and brand image begin to assume new roles having high importance in Internationalization of these institutions.

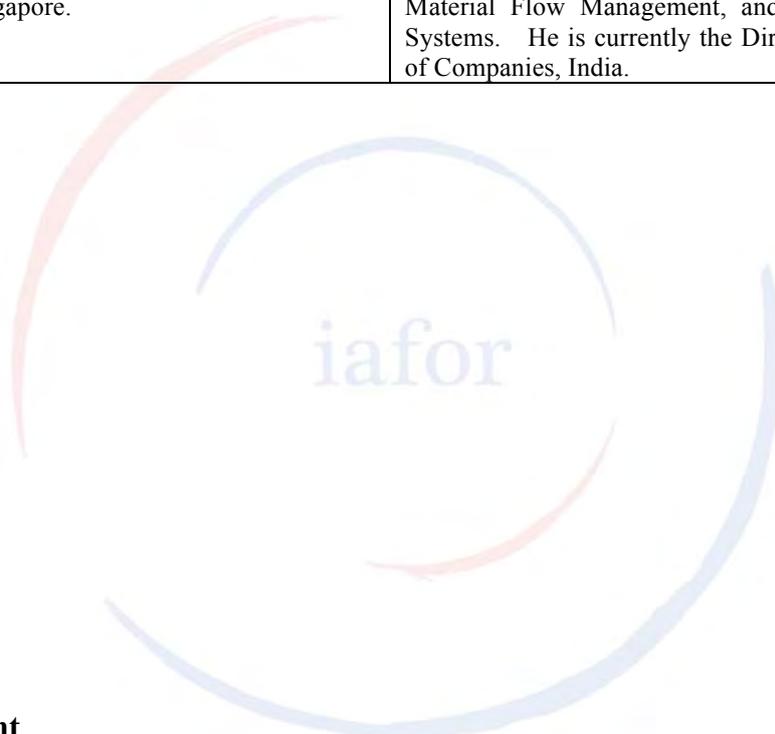
In summary, one can postulate whether the contingency theory may be applied to the problem of international students and assessment in the first place. The contingency theory concerned with the 'fit' of an organization to an environment may raise the issue of whether international institutions can achieve a balance between its academic goals of excellence and assessment practices in a foreign environment. While students in the Asia Pacific may value the cultural capital that is gained by studying at international and foreign institutions, the educational environment is highly volatile. Western influences in Asia is picking by the adoption of foreign capital based educational enterprises that may open shop in Asia, by offering better incentives like migration to countries of host universities and planned career choices. In such a milieu, instead of the individual fitting into the organization, the organization would have to compete with other institutions for the same students. Another potential competitor would be the government itself setting up elite universities that may confer the same prestige that is given by international universities. As market driven universities, these institutions would have to adapt and convince its potential customers (students) that its products are the best that money can buy.



Christine Amaldas has been an active researcher and academic at various international tertiary institutions. She has been the author of several book chapters, Conferences and Journal periodicals spanning the Asia Pacific region. She has chaired and presided over a number of conferences and has given numerous guest talks in Singapore, India, Japan, USA, Mauritius and Australia. She specializes in Asia Pacific Studies, Education, IT Governance, Security and Fraudulence, Ethics and Ethical Governance in ICT, Holistic Medicine and Energy Healing and Governance (Corporate, Public, IT and Dynamic). She is currently working as editor-in-chief and the Director of The Journal, Singapore.



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A Consideration on the Support for Japanese Onomatopoeia Learning in Japanese for Specific Purposes

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-Adult, Vocational, Distance, and Professional Learning

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1. Introduction

The number of foreigners who come to Japan to work or to attend vocational training has increased as a result of the agreement between nations. Although such foreigners do not have enough time to study Japanese before and after coming to Japan, they are required to use advanced and specialized language in each field of work. Therefore, the systematization and support for effective Japanese learning is becoming increasingly important.

Even though onomatopoeia¹ is often used in the various workplaces, it has been left out of the conventional Japanese education. Thus, it is required to think about how to teach onomatopoeias and to support foreigners who work in Japan to learn them.

The difficulty of learning onomatopoeias in JGP: Japanese for General Purpose has been frequently indicated (by Tamamura(1989) and many others). Nowadays studies specializing in lexicon survey are mainly practiced in this field. There is also a study conducted by Ishiguro(2008) concerning about onomatopoeia in the field of nursing, which points out issue of its education system. The study wedded to this region specificity hasn't been implemented yet. However it is essential that the effective teaching method for practical onomatopoeia, for people learning Japanese as a foreign language, be examined anew. Considering such issues, this study will identify the features of the onomatopoeias in JSP, with a special emphasis on the field of nursing and care-work, and indicate a framework that can assist students learning onomatopoeia.

2. Previous Studies

¹ Onomatopoeia is used as a generic term for phenomimes(*giongo*), phemomimses(*gitaigo*), psycomimes(*gijyogo*) in this paper

Most of the studies that have been conducted about Japanese onomatopoeia are comparatively specializing in its linguistic features. Nowadays, the studies are performed from a Japanese language educational perspective as well. In this chapter, we associate previous studies as belonging to one of two groups, linguistic or Japanese language education.

2.1 Linguistic Studies of Onomatopoeia

Tamori and Schourup (1999) and Kadooka (2007) attempted the classification by morphological and phonological systematicity in order to develop the features of the onomatopoeias. Those two demonstrate that onomatopoeia have specific patterns or word forms which are usually adapted “doubled consonant/Q”, “syllabic /N/” or “-ri” in word-final. Moreover, Tamori’s syntactically examination shows that most of Japanese onomatopoeia have functions such as manner adverb it belongs to, in addition, some of them could be used as verbs by incorporating them with the suffixation ‘-suru’

The individualism of Japanese onomatopoeia is discussed by comparing other languages. Tsujimura (2005) showed lexicalization patterns of Japanese onomatopoeia in comparison with those in the English language. For example, manner of walking and pain is lexicalized as being part of a verb in English, on the other hand, it exists as an independent modifier in Japanese. (e.g. waddle = ‘choko-choko’ + *aruku* / throb = ‘zuki-zuki’ + *itamu* / *suru*) Non-motion verbs such as *itami* are often expressed through the use of onomatopoeia. Tsujimura points out that the ability to combine verbs with onomatopoeia creates a diverse Japanese onomatopoeia lexicon.

There have been numerous studies analyzing the relationship between sound and meaning. The various studies have identified many characteristics such as; 1) The repeating word-form which indicates a repeating action. 2) Onomatopoeia, which has a word-final syllabic /N/, indicates a lingering sound resonance. (e.g. ‘*goroN*’)² 3) Onomatopoeia, which have a word-final /Q/, show a sense of speed or a sudden stop. (e.g. ‘*goroQ*’) (Hamano1998; Tamori2002 etc.) Iwasaki, Vinson, and Vigliocco (2007) analyzed the different sense of onomatopoeic sound symbolism between Japanese speakers and English speakers, especially in relation to pain. According to the results, they insist that instruction is necessary for the specific sound symbolism such as the voiceless/voiced consonant system which is peculiar to the Japanese language.

Although they study the features of Japanese onomatopoeia and make recommendations for instruction in Japanese language education from a diversified linguistics viewpoint, including the studies reviewed above, the way in which to adapt their findings into Japanese language

² Description including symbols for onomatopoeia is following Kadooka(2007)

education has not been explored sufficiently yet.

2.2 Studies of Onomatopoeia in Japanese language Education

In this section, we review studies related onomatopoeia in JGP and JSP.

Some studies in JGP discuss the priority sequence of onomatopoeia to be learned. Tamamura(1989) and Mikami(2007) experimented with the selection of the basic Japanese onomatopoeic by surveying several textbooks, dictionaries and other language materials. Among others, Mikami's survey is carried out using information from various sources such as newspapers, magazines, scenarios of TV-dramas and movies. Based on success of Mikami's work, the internet site of *The National Research Institute*, the title of "*Nihongo o tanoshimoo ~Gitaigo tte? Giongo tte?~*" was founded.

Mikami(2003,2004) discusses learning contents and the importance of showing 'contextualization' by providing concrete samples in which to learn the syntax characteristics systematically. In addition, Mikami showed the diagram to illustrate multiple meanings and their usage as one strategy for learning polysemic onomatopoeias (e.g. *goro-goro*). The way of learning plural meanings and usage simultaneously and exhaustively is effective for learners of JGP at the intermediate and advanced level. However, it seems preferable for learners who work in specific fields to learn vocabulary suitable to each field intensively.

Although there is no study focusing on onomatopoeia in JSP, some studies for learning vocabulary make reference to onomatopoeia. In order to develop the teaching materials and to improve the vocabulary knowledge in the care-work field, Ishii (2010) indicated that there is a collection of vocabulary necessary for this field however care workers had an insufficient grasp of vital terms which relate to situations, symptoms, accidents and onomatopoeia. It is also reported that some facilities prohibit care-workers from using onomatopoeia such as '*guchu-guchu-peē*' [sound of rinsing one's mouth] and '*goQkun*' [sound of swallowing food or drink], which could be interpreted as a juvenile term, taking the position of protecting the patient's dignity as an adult. It is important to mention that this stance may not mean they prohibited from using any onomatopoeia, because some onomatopoeia, like '*zuki-zuki*' and '*ira-ira*', which are related to pain and emotion, are exclusive words used to properly describe a situation.

Okada(2010) points out the difficulties of nurses when communicating with patients, colleague and other Japanese people through the use of only technical terminology. Therefore she has practiced exchanging notebooks as one strategy for dealing with their questions. Questions are

not limited to special terms but also include daily use words spoken by patients and onomatopoeia. A query raised about 'gyuQ-to', which is often used, inquired as to whether 'gyuQ-to' has the same meaning as 'zuQ-to'. Ueda (2007) formed a vocabulary database which contains onomatopoeia and is based on research and literature from the field of medical and nursing care. The execution of vocabulary selecting was operated depending on the degree of difficulty and the degree of necessity for job. Regarding this survey, The Japan Foundation Japanese-Language Institute, Kansai, founded a website named "*Nihongo de Care-Navi*" which supports Japanese language learning especially for people working in the fields of nursing and care-work

Considering results of former studies operated in phonology, morphology, syntax and word frequency studies, this study examines JSP onomatopoeia learning and how to make it available to all levels of study from beginner to advanced.

3. Method

The purpose of this study is to discuss Japanese onomatopoeic learning contents with an emphasis on assisting people working in specific fields.

The material specific subjects to be studied follow;

- 1) To discover the feature of onomatopoeia used in specialized fields of medical and nursing care
(with contents comparison of two websites demonstrated in chapter 2)
- 2) To suggest classification as a framework for onomatopoeia learning, specializing in the field of medical and nursing care
(with examination of samples contained from relevant websites in chapter 3)

3.1 Summery of data and method analysis

Object onomatopoeias were selected from two Japanese learning websites and then those were used as a sample list in order to collect data from other websites. Summary for each process is below.

3.1.1. Summary of websites for Japanese learners

One of the websites is (1)"*Nihongo de Care-Navi*", which is for learners working in the fields of nursing and care-work, and the other one is (2)"*Nihongo o tanoshimoo ~Gitaigo tte? Giongo tte?~*", which is for general Japanese learners.

(1)"*Nihongo de Care-Navi*" (<http://www.nihongodecarenavi.jp/>)

Total token165words /159 types

This website is a database for Foreign nurse and care taker's Japanese usage, assumes five topics, (Vocational Communication/ caring / working in hospital/expressing feelings/living in Japan). And a single sample sentence is attached to each word.

(2)“*Nihongo o tanoshimoo ~Gitaigo tte? Giongo tte?~*”

(<http://dbms.ninjal.ac.jp/nknet/Onomatope/index.html>)

Total token160words /89 types ³

Several Sample sentences and dialogues are attached multifactorially according to various meanings of the word. Some of them have a cartoon and illustration as well.

3.1.2. Summary of the Data Sample Collection from Internet Websites

The reasoning behind the decision to collect data from internet sites, which enable customers to provide product evaluation and feedback, is because these options provide a large sample of customer based ideas and opinions which are presented in a natural, near conversational tone. Description through the use of onomatopoeia frequently occurs when people describe their emotions and physical experiences (Nishimura 2009). Websites were selected based on their relation with caretaking services, health food and dietary supplements, and daily necessities. Data submitted to these sites and related to emotional and physical experiences was then collected. Furthermore, websites related to cosmetic products were added due to the prediction that customers commenting on these products would often have experiences related specifically to the feel of their skin in relation to the use of the products. Sentences containing the use of any of the 184 onomatopoeia previously mentioned as well other onomatopoeia identified through their word pattern were collected for analysis.⁴ Detailed information about the websites analyzed in this study is located below.

[1] “*Kaigo110-ban*” (<http://www.kaigo110.co.jp>) : counseling (related care-taking)

[2] “*Kenkomi*” (<http://www.kenkomi.net>) : Health Food /Medical Goods/Care-Taking/Cosmetics

[3] “*Amazon.co.jp*” (<http://www.amazon.co.jp>) : Health & Beauty/Home & Kitchen

[4] “*Rakuten Minna no review*” (<http://review.rakuten.co.jp>) :

Diet & Health/Beauty & cosmetics&perfume/Materia & Contact Lens & Care-taking

[5] “*@cosme*” (<http://www.cosme.net>) : cosmetics

³ Although Takahashi (2007) pronounces the word number as 138 in the article, the word number mentioned above is confirmed on this learning website recently as mentioned above.

⁴ The judgment of whether the collected data qualifies as an onomatopoeia or not is based on Yamaguchi (2003): dictionary of onomatopoeia.

Table 1: Patterns of the Onomatopoeia

Pattern	Example
XYXY	gata-gata
XQYri	gaQkari
XNYri	suNnari
XYQ-to	pakuQ-to
XQYN	doQkaN
XYri-to	hirari-to
XYN-to	sutoN-to
XYriXYri	yurari-yurari
XYNXYN	guruN-guruN
X: Q-to	sooQ-to

We collect onomatopoeic examples in the following procedure:

1. We apply a computer program which is called as Web Crawler Program to browse the WWW (World Wide Web) in an automated manner. In this paper, the genres of WWW documents we focus on to collect are reviews, Blogs and BBSs in [1] - [5].
2. We prepare the patterns of onomatopoeic expression to look for candidate sentences where onomatopoeic expressions occur. These patterns are described in Table1, in which character 'X' and 'Y' in the patterns match arbitrary characters in a certain context. Although extraction of onomatopoeic expression with these patterns does not always succeed in finding suitable ones to our research, it allows us to find broader onomatopoeic expressions than those which we pre-select beforehand.
3. After the candidates of example sentence are selected in the step above, we select example sentences that should be regard as general example (sample) sentence of each onomatopoeic expression. We performed these procedures to the most frequent 347 onomatopoeic expressions in our collected examples.

4. Result/Analysis

4.1 The comparison of two websites for Japanese learners.

Ninety-seven of the onomatopoeias obtained were used exclusively on the former website. Another twenty-six onomatopoeias were used exclusively on the latter website. Sixty-three onomatopoeia, were used by both websites. Table 2 shows samples of onomatopoeia used exclusively on each of the individual sites as well as a collection of onomatopoeia used on both sites.

Table 2: Contents of Two Websites for Japanese Learners

	(1)Care-Navi	(2)Nihongo o tanoshimoo	(3)Both(1)and(2)
word	[Illness/Symptoms/Pain] iga-iga,gaku-gaku, kasa-kasa, gasa-gasa, kachi-kachi, goho-goho, guri-guri, siku-siku, kiri-kiri, muzu-muzu [Feelings] uki-uki uQtori,gaQkuri,gakuQ, kuyo-kuyo, biku-biku,piri-piri [Five Senses] mushi-mushi,sara-sara [Drink/Eat] goku-goku,paku-paku	[Movement and condition of person and animal] gaya-gaya,kiQpari, zoro-zoro,doQ-to,paQ-to bara-bara,peko-peko [Movement and condition of object] giQshiri,kuru-kuru, guru-guru,guQ-to, zuru-zuru,zurari bura-bura [sense and feeling of person] nuru-nuru [sound/ voice]kara-kara	[sense • feeling] aQsari,ira-ira uQkari,saQpari [person] uro-uro,guQsuri, pera-pera,giri-giri [object] kira-kira,gocha-gocha boro-boro,

The onomatopoeias shown in the table above fall under various categories which were selected based on the way the onomatopoeia are contained on each site.

- (1) Evaluation of the first website revealed an overwhelming usage of words related to the physical body such as sickness, symptoms, and pain as well as words associated with the expression of emotions. Conversely, onomatopoeia related to movement and situation were used considerably less and were most commonly related to eating, sleeping, and walking. Most of onomatopoeias showed a tendency towards negative usage while onomatopoeias related to eating showed a tendency toward positive usage
- (2) The second website's most commonly used category is typically associated with the circumstances and situations of people and objects. As oppose to the physical senses. Onomatopoeia typically present either a positive or negative tendency, however onomatopoeias used on this website showed no overwhelming tendency towards positive or negative usage indicating a lack of bias.
- (3) Onomatopoeia used on both sites were found to be common daily use onomatopoeia however the meanings varied expressing differing characteristics for the onomatopoeia on each site. For example, in (1) "*Care-Navi*", "I caught a cold and it feels like my throat is clogged." is shown. Besides, in (2) "*Nihongo o tanoshimoo*", "I sang and my voice got hoarse.", "When opening a window and it rattles" and more are shown.

According to these comparison expressions related to physical sense and emotion are important in fields of nursing and care-work. Both websites selected vocabulary by carefully researching a variety of sources, however, they have different ways of demonstrating their sample sentences. (1) shows only one representative scene and its sample. (2) shows several samples exhaustively for each word. The differences seen between these two websites, also demonstrates that the contents to be studied should be considered carefully and then assigned in order to meet the specific needs of the target audience.

4.2 Date Samples

Token A and types A. in Table 3 below, shows the result of extracting 184 types of onomatopoeias contained in two websites, “*Nihongo de Care-Navi*” and “*Nihongo o tanoshimoo*” which are previously mentioned. Token B and types B, in Table 3, shows the result of extracting the patterns of onomatopoeic expressed in table 1. Each category total is shown in table 3

Table 3: The Number of Collected Samples

	Token:A	Types:A	Token:B	Types:B
[1]Kaigo	3851	140	498	127
[2]Kenkomi	28250	163	7614	284
[3]Amazon	1870	86	494	122
[4]Rakuten ⁵	213656	175	56250	264
[5]Cosme	175542	181	64921	269

“KH Corder”⁶ was used to count types of onomatopoeia.

Procedures are listed below;

- 1) The results of the KH Corder analysis were reviewed and words recorded as onomatopoeia in error were then deleted. Attempts were made to delete the non-onomatopoeia in section 3.1.2, however after reviewing the results, more errors were identified and removed. (e.g. ‘*maQtari*’: *katamaQtari* / ‘*sukaQ-to*’: *masukaQto* / non-onomatopoeia word: ‘*shima-shima*’) Furthermore, words which were double counted, such as ‘*saQ-to*’ and ‘*sasaQ-to*’, were modified to their proper word count by using the wildcard function found in the Microsoft Excel software package.
- 2) In order to fix errors for parts of speech classification, Onomatopoeias in collected samples were analyzed by using” KH Coder” and the result were compared with the original sample. As a result, several data were modified as in the following examples.

⁵ In spite of sincere attempts to identify onomatopoeias located within [4], there were very few results found in relation to health, medical and care-taking supply.

⁶ KH Coder is a free software for content analysis and text mining

Higuchi Kouichi (2009) <http://khc.sourceforge.net/> (Retrieved August, 2010)

(e.g. 'shibashi' → 'bashi-bashi' / 'sarau' → 'saraQto' / 'komoru' → 'moko-moko')

4.2.1 Analysis of Frequently Found Onomatopoeia

The major tendency identified from samples found on sites [2]-[5] included words used to express individual sense, due to the fact writers were commenting or evaluating products. On the other hand the data found on site [1] encompasses more words which can be used to express one's feelings due to the fact that the style is along the lines of a counseling dialogue. Table 4-A and 4-B present the 10 most commonly used onomatopoeia identified on each website.

Table 4-A: Ranking of Frequency: For 184 Types Onomatopoeia

Ranking	[1]Kaigo:A		[2]Kenkomi:A		[3]Amazon:A		[4]Rakuten:A		[5]Cosme:A	
	word	freq	word	freq	word	freq	word	freq	word	freq
1	siQkari	549	siQkari	4565	siQtori	320	siQtori	31693	siQtori	20778
2	kichiN	312	suQkiri	2732	saQpari	184	sara-sara	17621	sara-sara	16910
3	haQkiri	304	siQtori	2057	taQpuri	117	siQkari	16906	siQkari	14151
4	chaN-to	277	taQpuri	1893	siQkari	108	biQuri	12235	kira-kira	10118
5	yuQkuri	274	saQpari	1739	suQkiri	103	saQpari	11414	biQkuri	7269
6	ira-ira	207	piQtari	1305	tsuru-tsuru	96	taQpuri	10571	saQpari	7092
7	don-don	189	sara-sara	1029	sara-sara	72	tsuru-tsuru	9905	chaN-to	6894
8	biQuri	146	biQkuri	981	biQuri	69	suQkiri	9062	piQtari	6246
9	hoQ	113	Saku-saku	919	sube-sube	68	piQtari	6192	suQkiri	6218
10	suQkiri	72	chaN-to	823	Kasa-kasa	67	koro-koro	5759	taQpuri	6036

Table 4-B: Ranking of Frequency: For Onomatopoeic Patterns (except 184 Types Onomatopoeia)

Ranking	[1]Kaigo:B		[2]Kenkomi:B		[3]Amazon:B		[4]Rakuten:B		[5]Cosme: B	
	word	freq	word	freq	word	freq	word	freq	word	freq
1	yuQtari	25	honnori	845	saraQ	63	saraQ	7814	saraQ	4101
2	boro-boro	22	saraQ	695	puru-puru	20	hoNnori	2804	fuNwari	3676
3	bochi-bochi	21	fuNwari	684	beto-beto	19	pasa-pasa	2110	gira-gira	2736
4	kuta-kuta	17	suuQ	350	hoNnori	18	suuQ	1889	hoNnori	2538
5	suNnari	17	hiNyari	194	boro-boro	17	puru-puru	1838	pasa-pasa	2532
6	yaNwari	15	fuwaQ	158	toroQ	15	fuNwari	1837	fuwaQ	1819
7	saraQ	14	sakuQ	158	poro-poro	13	poro-poro	1737	kishi-kishi	1793
8	ban-ban	14	jiNwari	151	suuQ	13	boro-boro	1589	suru-suru	1713
9	kichiQ	13	piriQ	147	Beta-bata	11	kishi-kishi	1546	suuQ	1568

10	hiya-hiya	13	moko-moko	130	moko-moko	11	suru-suru	1089	poro-poro	1456
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The first thing stated about table 4-A deals with the similarities found within the table in regard to the categories established by the various word forms that were found. The typical word-form of onomatopoeia is repetition style, 'XYXY' (e.g. 'sara-sara'), and more than half of the onomatopoeias which were chosen as target for this research are repetition style. However, many 'XQYri' form onomatopoeias (e.g. 'shiQkari') which appear in higher ranks, 'shiQkari' 'suQkiri' 'biQkuri', were found in all categories and this tendency shows those which are used stably, regardless of the conditions of usage, such as writing(consultation / evaluation), contents / object or sentence style (polite style of speech • plain style of speech)

'shiQtori'/'saQpari'/'taQpuri' appeared in all website except [1], and were used to evaluate various types of object. This tendency implies that those onomatopoeias are common expressions associated with household goods such as food, cosmetics and other daily products.

Comparing 'suQkiri' and 'saQpari', 'suQkiri', which are mentioned previously and appeared in categories [1]-[5], and 'suQkiri' which appeared in categories [2]-[5]. Although both words could describe a situation, physical condition, or emotion, 'squire' is used to describe the physical and emotional expression (e.g. *touhi ga suQkiri suru* (one's scalp is cleaned and refreshed) / *kimochi ga suQkiri suru* (Feeling refreshed)) ,and 'saQpari' is primarily used to describe physical sense. This may cause the the differences in tendency such as 'saQpari' which is used more in [2]-[5]

Although onomatopoeias having 'XQYri' form in the result, are not widely varied, 'XYXY' formed onomatopoeias are varied. Furthermore, each category's contents contain different onomatopoeias. Only 'Sara-sara' appeared in all categories except [1]. Usage frequency for several onomatopoeias, like [1]ira-ira / don-don [2]saku-saku [3]sube-sube / kasa-kasa [4]koro-koro [5]kira-kira, seem to change significantly depending on each categories features. 'Sara-sara', which are used through categories 2-5, are typically words which describe a sense of feeling and the sense itself seems to express the most, compared to other senses.

'XQYri' formed onomatopoeias are roughly determined and they are used through all categories. 'XYXY' formed onomatopoeias may have specific uses which rely on each category. That is to say, learning typical onomatopoeias formed 'XQYri' could be useful even for learners at beginner's level. However, they will have to learn varied 'XYXY' formed onomatopoeias depending on their needs.

The second statement, made about table 4-B, is in regards to the differences identified when comparing table 4-B to 4-A and, only one 'XQYri' formed is present. It implies representative

types of 'XQYri' formed onomatopoeias, which are regularly used, are limited and are likely covered in the contents of the formentioned learning websites. On the other hand, types of 'XYXY' formed onomatopoeias are varied and have various usages. Onomatopoeias containing 'sara' base such as 'saraQ', which appeared in all categories, were found most often. 'Sara-sara' appeared frequently in table 4-A. And others having 'sara'base are commonly used to express one's sense of feeling. In regard to category [1], 'saraQ' appeared in table 4-B, in spite of the fact that 'sara-sara' did not appear in table 4-A. It is due to samples, like 'saraQ-to kikinagasu' (listening without paying attention) which do not express a sense of feeling directly, and imply different meanings.

Other samples using the same base are 'fuwa-fuwa', 'fuNwari', 'fuwaQ' and 'fuwāQ' etc. When comparing 'fuwa-fuwa', 'fuNwari', 'fuwaQ' from categories [2], [4] and [5], where those onomatopoeias frequently appeared, 'fuNwari' is obviously used more than 'fuwa-fuwa' in all three categories.⁷

Table 5: Onomatopoeia with 'fuwa' Word-base

	fuwa-fuwa	fuNwari	fuwaQ
[2]	362	684	158
[4]	1013	1837	974
[5]	1540	3676	1802

One of the reasons 'fuNwari' appeared frequently is that the word is used to describe expressions related to not only a sense of feeling but also of scent and appearance.(e.g. for sense of feeling: 'hada ga fuNwari suru'[skin becoming fluffy] / for sense of smell: 'fuNwari kaoru'[Smelling faintly] / for sense of view: 'fuNwari sita yasashii iro'[vague tender color]). 'fuwa-fuwa' is typically used for a sense of feeling. 'fuwaQ' is for sense of feeling and smell but is rarely used for view. In comparing 'fuwa-fuwa' and 'fuwaQ', 'fuwa-fuwa' appeared more often in category [2], which is primarily for evaluating food, but there was no noticeable difference in categories [4] and[5], which were evaluating daily use products and cosmetics. This tendency may imply the possibility that 'fuwa-fuwa' is used more than 'fuwaQ' in relation to food.

Considering the sample, usage variation of these onomatopoeias, which have the same-word form, they appear to be complicated. However, the important point to be discussed is how to make good use of the results which show that non-XYXY formed onomatopoeias are frequently used, for Japanese onomatopoeias learning. The author suggests that learning more than one type of onomatopoeias which share the same word-base, will allow the student to guess the meaning as a synonym group.

⁷ Categories [1] and [3] are not examined here because of their small number of samples(0-8)

5. Suggestion for JSP : Classification for Onomatopoeia Learning

Regulation of onomatopoeia such as phonology, morphology, syntactic, semantic and sound symbolism have been declared in previous studies and the writers insist that those regulations of onomatopoeia should be required in Japanese language education. However, specific strategies have not been discussed thoroughly yet. The author attempts to classify onomatopoeia into four groups which are decided to be appropriate by considering regulations and the important onomatopoeias to learn. They will be discussed with the samples collected. 1) based on syntactic distinction, 2) through 4) are based on the distinction of expression for emotion, pain or sense of feeling, which are a necessity for medical and nursing care fields.

- 1) Adverb usages: word-form / temporal meaning
- 2) Emotion: sound / sound symbolism
- 3) Pain: syntactic pattern
- 4) Sense of feeling: synonym of other part of speech

1) Adverb usages: word-form / temporal meaning)

Words being classified into group 1) have a 'XQ' or 'XXQ' word-form such as 'saQ'/'sasaQ'/'paQ'/'papaQ'/'zaQ'. Those onomatopoeias are used adverbially by following concrete verbs. Those meanings are easy to replace to "in a hurry" or "quickly" and meaning can be understood roughly even if people have no idea about the meaning of onomatopoeias. Much onomatopoeia could have "temporal meanings." Therefore, a word-form like 'saQ' 'paQ' reflects the shortness of time. (e.g. 'paQ': *paQ-to miru*[look something in a matter of seconds]/ *kaioiro ga paQ-to akaruku naru*[Complexion became good instantly], 'papaQ': '*papaQ-to dekiru*'[being able to do quickly]/'*papaQ-to taberareru*'[Being able to eat quickly])' 'paQ' could be learned by connecting them with a verb like watch but by understanding the core meaning of words such as "in a short time," it becomes easy to understand other variations like '*papaQ*'. In case they do not know the tendency of a collocation verb or the difference of the meanings, it may not really affect communication if they can determine a rough idea of its meaning by correlating with 'saQ' which has the same word-form.

'paQ' 'saQ' and their variations, which tend to be missed when learning onomatopoeias, are used often in samples associated with this survey and practical discourse. Therefore, it appears to be effective for learning to organize these words by relying on their temporal meaning.

Onomatopoeias containing 'ga-row(g)', rouse specific movement, which have the same word-form, a point in common with 'gaQ', 'gyuQ' and 'guQ', are related to power such as pushing or gripping something strongly. Based on this feature, it may prove useful to understand

that onomatopoeias with ga-row(g) have a power related core meaning.

2) Emotion: sound / sound symbolism

This section focuses on the use of onomatopoeias to express feeling related to Sound and sound symbolism. It may be a simple task to learn onomatopoeias which express “pleasure” because those words, and variations using the same words, have a limited base. (e.g. ‘*uki-uki*’ / ‘*waku-waku*’) Besides, negative expressions such as anger and sadness are ramified and have plenty of varieties. We could only identify some regulations. Many onomatopoeias expressing anger contain ‘*mu*’, ‘*ka*’ or both sounds. Word samples are arranged below depending on their levels of anger, from weak to strong.

mukaQ-to suru / muka-muka suru << kaQ-to naru < k̄aQ-to naru / kaN-kaN ni naru

The symbol ”<<” shows the boundary of syntac and semantic regulation. The former two have a usage to express negative physical condition as well as emotion. Tamoti(2002) and others have pointed out that Japanese vowels can be arranged in an order such as /a/,/o/,/e/,/u/,/i/ depending on the measure of mouths opening size. The /a/ vowel implies extensive and /u/ vowel implies intensive. Following those sound symbolic distinctions, it might be possible to guess the meaning of an onomatopoeia using the ‘ka’ sound. Those which use the /u/ vowel, show anger staying inside. Onomatopoeia which use the ‘mu’ sound, which has/a/vowel, show anger flooding to outside as appearance.

Onomatopoeias such as ‘*gakuQ*’ ‘*gaQkuri*’ ‘*gaQkari*’ which share a common likeness, such as ‘*gaku*’ or ‘*gaQYri*’, might be able to indicate that they imply “mortification or an uncheerful situation.” Although it is not necessary to learn about ‘*muka*’ and ‘*gaku*’ exhaustively at the beginner’s level, grouping words which have similar sounds and meanings may enable individuals to guess meanings easily, no matter which variation it is.

3) Pain: syntactic pattern

The syntactic patterns for expressing pain through the use of onomatopoeias are focused on here. Four types of sample, such as ‘*zuki-zuki*’, ‘*iga-iga*’, ‘*kiri-kiri*’ and ‘*gan-gan*’, were found to describe physical pain. None of the formentioned examples has a word-form variation. ‘*zuki-zuki*’ shows pain in several parts of body. And, others have specific usage. (‘*iga-iga*’: for throat / ‘*kiri-kiri*’: for stomach / ‘*gan-gan*’: for head) Then, common feature for these is that they are mostly used in phrase, ‘(some part of body) *ga* XYXY *suru*.’ Therefore, it is easily understandable which part is aching, even if they have no idea how it is aching. It is the priority in communication to understand a patient’s appeals, like the existence of pain.

Samples to express pain on the skin were ‘*hiri-hiri*’, ‘*piri-piri*’, ‘*biri-biri*’, ‘*hiriQ*’ and ‘*piriQ*’,

which have ‘hiri’, ‘piri’ and ‘biri’ word-bases. They are used with suffixations such as ‘(to) suru’/’(to)itamu[hurt]’-*toshita shigeki*’[irritation]. If they recognize that those onomatopoeias show pain, it is easy to understand that patients are experiencing pain or irritation to one or more of their body parts such as skin or tongue. Some of the onomatopoeias such as ‘piri-piri’ and ‘biri-biri’ are used differently. For example, ‘*piri-piri shita hito*’[a nervous person], ‘*kami o biri-biri ni suru*’[Tearing paper into pieces]. In case they only know the meaning of these onomatopoeias as pain, they could suppose the negative aspect of meaning as their diversion.

4) Sense of feeling: Synonym of other parts of speech

Since expressions of pain or emotion are ramified by using onomatopoeias, it is hard to paraphrase them in other ways. The use of adjectives to describe sense of feeling (e.g. softness, hardness, degree of dry and humidity, coldness, warmth) is a common practice. Thus, it is possible to paraphrase with adjectives that share a similar meaning. There are many samples that use onomatopoeias paralleled with similar expressions. (e.g. *funwari yawarakai* / *poka-poka atatakai*) This allows learners to acquire the use of *funwari*, which appeared frequently in the research, and ‘*yawarakai*’ [soft], which are basic Japanese words, as simple phrases, and use them as active vocabulary.⁸ Other examples of basic Japanese words having onomatopoeic synonym are hard – ‘*kori-kori*’, cold – ‘*hinyari*’, wet-‘*bisho-bisho*’ and so on. Meanwhile, some onomatopoeia which express the feeling of touch such as *sara-sara*, which is often used in the sample, is an exception. One of the clues to manage this issue might be the contrast of voiceless and voiced consonant. For example, voiced consonant in word-beginning simplifies negative aspects. Accordingly, learners can attempt to judge the rough meaning if it is positive or negative, when encountering unfamiliar onomatopoeia.

6. Conclusion

In order to discuss Japanese onomatopoeic learning contents for JSP, we first demonstrated the features, and then samples were collected from relevant websites and were analyzed based on those features. According to quantitative analysis, some specific onomatopoeia with ‘XQYri’ form (e.g. ‘*shiQkari*’ / ‘*suQkiri*’) is used repeatedly. Meanwhile, various onomatopoeia with ‘XYXY’ form is used depending on the contents they intend to express. Since those particular onomatopoeia with ‘XQYri’ form are useful for a wide range of purposes, the author suggests

⁸ Needless to say, *funwari* and *yawarakai* can be used in parallel because they have different domains of expression. Onomatopoeia has a function to express two aspects of meaning at once. Therefore, expression through the use of onomatopoeia is chosen even if it can be omitted or replaced with another word. However this topic will be discussed later.

that learners should start learning them at their beginners level.

In regard to the four groups; 1) Adverb usages: word-form / temporal meaning 2) Emotion: sound/ sound symbolism 3) Pain: syntactic pattern 4) Sense of feeling: synonyms and other parts, appropriate examples were determined through consideration of onomatopoeic regulations and onomatopoeias with necessity, and were suggested as a framework for onomatopoeia learning. It is important to utilize supportive onomatopoeic regulations for onomatopoeia learning and to present exclusive tendencies and features for each specific field. By means of these features of the framework, it might be possible for learners to speculate the meaning of an expression when they encounter unfamiliar onomatopoeia in their vocational field.

Incidentally, the classification showed that specializing for learners of JSP at the beginners level, is extremely crude. This must be studied further. Yet, onomatopoeia that express movement of a person, object, or sound were not mentioned in this paper. It will be discussed in a future study.

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**A Critical Reflection on the Integration of Informational Technology into EFL Curriculum:
An EFL Teacher's Inquiry**

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Abstract

This paper examines the reflective practices of integrating informational technology into English curriculum of an EFL teacher in Taiwan over a decade. The teaching experiences have been reconstructed and represented through first person narrative inquiry, highlighting the conflicts the teacher encountered, the resolutions she came up with, and the ways she repositioned herself and her teaching practices. The transformational processes of her teaching are roughly divided up into three developmental stages. She calls the first stage as The Transplanting Operation Stag. During this period, the computer technology served as visual aids and information resources for both learning and teaching in her English curriculum and she evaluated her teaching via pedagogical reflections mainly on technical and practical level. The second stage, the Reflective Practicing Stage, appears to be the transitional period, during which the teacher experienced tremendous changes in academic lives. In addition to regular course instruction, from year to year she was assigned to develop a series of campus-wide projects for extra-curricular learning enhancement, including the establishment of an online English forum and the construction of a college blog for the promotion of autonomous learning communities. Moving into the third stage, The Expansive Learning Stage, she is learning to re-examine English learning and teaching from a different perspective with multiple levels, with particular emphasis on the uniqueness of EFL context and its inevitable influences on the English learning and teaching activities, and the necessity of crossing the regional, ethical, cultural, and language boundaries of EFL learning through informational technology. This paper represents an EFL teacher's inquiry into the insights of computer- and/or web-enhanced language learning and teaching in EFL context. Examples and critical evaluation of the productions and works the teacher are provided.

Keyword: Narrative Inquiry, Teacher's Inquiry, Computer-Assisted Language Learning, Integration of Informational Technology into Curriculum

Narrative Inquiry in Education

Narrative inquiry has emerged in qualitative research across disciplines in social science as a research approach to describe and understand human actions or social phenomena through telling and studying stories and narratives over the past two decades (Crossley, 2000; Hatch & Wisniewski, 1995; Lieblich, Tuval-Mashiach & Zilber, 1998; Polkinghorne, 1995; Riessman, 1993). Following this "narrative turn" (Pinnegar & Daynes, 2007), a substantial body of second

and foreign language teacher research has used narrative inquiry in exploring a wide range of themes, such as teacher training (Dallmer, 2004; Dufficy, 1993), teacher professional development (Chen, 2007; Conle, 2001; Gimbert, 2001; Tsui, 1996), teacher identity (Moran, 1996; Ritchie & Wilson, 2000; Tsui, 2007), teachers' knowledge (Almarza, 1996; Elbaz-Luwisch, 2007; Nespor & Baylske, 1991; Zhao & Poulson, 2006), learning to teach (Knezevic & Scholl, 1996; Rust, 1999), teacher education (Bailey, 1996; Freidus, 2002), and others. Specifically, two significant books, *Teachers' Narrative Inquiry as Professional Development* edited by Johnson and Golombek (2002) and *Narrative Inquiry in Practice: Advancing the Knowledge of Teaching* edited by Lyons and LaBoskey (2002), collected highly personal, contextualized stories of teachers inquiring into their own experiences advocating teachers' narratives as a valuable resource for language teachers and teacher educators to understand teaching and learning (Beattie, 2000).

Although the term narrative has been defined in various ways in the literature with different focuses in social science, in general, narrative refers to “a discourse form in which events and happenings are configured into a temporal unity by means of plot” (Polkinghorne, 1995, p. 5). As a research approach, narrative inquiry provides valuable insights into the personal experiences and meaning, namely how active agents have constructed events (Reissman, 1993), how people have configured their lived experiences through story telling (Polkinghorne, 1995), and how human beings make sense of themselves in narrative ways of thinking (Bell, 2002; Crossley, 2000). In short, narrative inquiry is “a way of understanding experience, a collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus” (Clandinin & Connelly, 2000, p. 20). Narrative inquiry as a mode of knowing and meaning construction in teaching bears several distinguishing characteristics. First, it contains intentional reflective human actions. Second, it is socially and contextually situated. Third, it engages participants in interrogating aspects of teaching and learning by storying the experience. Fourth, it implicates the identities of those involved. Fifth, it is toward constructing meaning and knowledge (Lyons & LaBoskey, 2002).

Being an EFL (English as a foreign language) teacher over a decade, I have been launching into critical inquiry into my practices of integrating informational technology into curriculum. In this paper, my teaching experiences with informational technology in EFL curriculum have been reconstructed and represented through first person narratives, highlighting the conflicts I encountered, the resolutions I came up with, and the ways I repositioned myself and my teaching practices. This paper represents an EFL teacher's inquiry into the insights of computer- and/or web-enhanced language learning and teaching in EFL context. Examples and critical evaluation of the productions and works the teacher are provided.

Attending to the Scenario: The College

As an EFL country, Taiwan has been influenced by the waves of globalization and the transformation in international communications. In recent years, the Ministry of Education in Taiwan has made a series of policies to encourage and require universities and colleges to enhance students' foreign language learning, especially English, through diverse campus-wide language learning programs and remedial education (Chao, 2005).

The educational institute where this research was carried out is a vocational college located in a metropolis where Taipei County Government resides. One of the most influential factors in its geographic advantages is the availability of all types of public transport including numerous bus lines, a Mass Rapid Transit station, and the joint station of Taiwan Railway and Taiwan High Speed Rail. For years such ease in transportation and the reputation of the college amongst industries have helped to lessen the pressure of student recruitment which most private vocational colleges or universities have to encounter. Because public transport infrastructure has made the college accessible to students who live far away, a certain number of students commute for an hour or two to the college by train every day. These students join another group of students, who live in the metropolitan areas, and they form a quite heterogeneous student community, within which the lived experiences and financial support from families of the students vary in a great deal.

While the "quantity" of students has never been a critical issue for discussion among faculties and staff, what most teachers are concerned is about the "quality" of the students. The denotation of so-called "quality" implies various types of worries of English teachers, concerning students' learning attitude, motivation, and their level of proficiency in English. There are always some teachers complaining about the poor performance of new students, and a lack of positive attitude and motivation on the campus. Some teachers even claim that things are getting worse year by year. Nevertheless, the real challenge that the teachers encounter is, in fact, the great diversity among students. As mentioned earlier, the students come to the college bearing quite different lived experiences, value systems and expectations about college life. Some of them are from well-to-do backgrounds, some of them need to apply for tuition loans, and some of them have to apply for part-time jobs to make money for paying their own living expenses and even share family expenses. In addition, the differences in the students' educational backgrounds also increase the degree of the diversity of the students. The correlation of students' previous academic experiences and their performance in the college may be roughly depicted in the shape of a pyramid.

On the top of the pyramid system stand the superior groups of English learners, who usually graduated from high schools and who had better training in academic skills and usually have

higher motivation and positive attitude toward school life. In the middle of the pyramid structure are the groups of students who graduated from higher ranking vocational high schools, and whose previous major subjects were either about English or business. And at the bottom of the pyramid are the other groups of learners who graduated from lower-ranking private vocational high school, and whose previous major subjects were in science and technology. The groups of students' affective and cognitive capabilities of the lowest group in dealing with academic English learning seem relatively insufficient comparing to the other upper levels of students.

As a matter of fact, due to certain complex internal and external factors with which the college has been confronted, the population of the students at the bottom of the pyramid has been growing rapidly. This also leads to conflict and tension between teachers and students. As most English teachers believe in more traditional ways of thinking and instructional approaches, how to deal with the increasing diversity of students, and especially how to ensure effective learning and teaching in English curriculum appear to be big challenges.

Telling the Stories: Computers in My Teaching

I have been teaching in a vocational college in northern Taiwan over a decade. Throughout this period of time, I have been witnessing and participating in the complex organizational changes of an educational institute, moving from a vocational junior college to a college of technology, and now approaching to transforming itself into a university of technology. The teaching experiences I have gained at the college are fruitful, precious and unique. In particular, working with students from various divisions, including five-year, and two-year junior college, four-year and two-year college, has led me to notice the multiplicities of learner characteristics, which, in turn, have constantly reminded myself about the necessity of 'delay judgment' of students' performance and learning, as well as the importance of learner training. Depicting my teaching practices of all the years, I can roughly divide them up into three developmental stages – the transplanting operation stage, the reflective practice stage, and the expanding learning stage.

The Transplanting Operation Stage

The first stage started in 1997, when I just returned to Taiwan from the United States with a Master's degree in TESOL. I would like to call this stage "The Transplanting Operation Stage". During this period, I was eagerly applying or transplanting whatever I had been taught in the USA in my teaching and to share my lived experiences abroad with students. The course assigned to me at that time were mainly about sub-skill training, including *Basics of English Listening and Speaking*, *English Conversation*, *Vocabulary and Reading*, *English Writing* and *Junior College English*. My curriculum designs and lesson activities were mostly developed under the big umbrella term of Communicative Language Teaching (CLT), covering the notions of functional/notional syllabus, process-oriented instruction, cooperative learning, task-based and participatory approach, with particular emphasis on key concepts such as meaningful learning,

learners' motivation, student-centeredness, and strategy training. Classroom observations and some pedagogical research (as listed under Publication In my Curriculum Vitae) indicated overall positive results of my teaching: students were willing to come to the classes; they enjoyed the in-class activities, felt more confident in English learning, and made some progress as well. My teaching skills progressed in multiple ways with a sufficient amount of opportunities to teach various types of classes and to fully engage in curriculum/syllabus/lesson development, activity design, assessment/evaluation, and classroom management.

During this stage, the informational technology, with the power of accessibility, availability, and diversities, served as a resource in my curriculum to enhance students' self-regulated learning. I have developed a variety of WebQuests projects (March, 2003) since then. The advantages and strengths the Internet could offer to EFL learning and teaching are apparent. The characteristics of the cyberspace, such as sufficient amount of information, language inputs from a great range of variation, cross-disciplinary and content-based orientation, the sense of authenticity, are contributable to EFL learning and teaching. However, I encountered difficulties while I tried to monitor students' learning processes.

The Reflective Practicing Stage

The second stage, which can be called, "The Reflective Practicing Stage," began in the early 2000 around the time when the college transformed itself into an institute of technology. It was also about the same time, I started my doctoral study in TESOL at a national university in Taiwan. Influenced by the continuous waves of changes within the CIT, I was led to teach professional courses, such as *Theories of Language Acquisition*, *Methods and Materials in TESOL*, *Computer-Assisted Language Learning*, as well as the usual language courses like *English Public Speaking* and *English Reading and Writing*. As I was receiving substantial academic training in the PhD program, it became necessary to examine my teaching with more reflective and critical lenses from various perspectives – structural linguistics, cognitive psychology, and social cultural factors. In addition to regular course instruction, from year to year, I was assigned by the CIT to develop a series of campus-wide projects for extra-curricular learning enhancement, including the establishment of an online English forum (E-Dimension), the implementation of remedial English programs, and the construction of a campus blog platform (HeartVJ) for the promotion of General Education (as listed under MOE Grant Project and College Grant Project In my Curriculum Vitae).

The concepts of language learning communities and the integration of innovative information technology, which I learned from the graduate programs in the United States and Taiwan respectively, governed my teaching practices and project implementations across disciplines, especially in English education and General Education. The rewards to my hard work for these years were substantial and precious: newer and richer understandings of learning and teaching,

deeper insights of how human functions and interacts within and across social groups. The iterative critical reflections which I have been engaged in as a habit now have given me insights into the uniqueness of our educational context and its inevitable influences on the learning and teaching activities as well as the necessity of integrating web technology into curriculum to cross the regional, ethical, cultural, and language boundaries of learning and development.

The Expanding Learning Stage

Bearing these new understandings, I moved into the current stage which I call, “The Expanding Learning Stage.” Theoretically, I am learning to re-examine learning and teaching from a different perspective with a macro-level analysis, concerning social cultural influences on learning and development. In practice, I am searching for opportunities for students to directly participate in the social activities of international knowledge/professional communities via the Internet as well as ways to facilitate autonomous learning across disciplines and professional domains. Informational technology functions as a means for EFL learners and teachers to link to worldwide communities of practice, where English is used. I further explore the concept of Web 2.0 and its possible implications in EFL educational context. In particular, how to help students empower themselves through the Internet as a platform to generate knowledge in a collaborative way has been the focus of my inquiry during this stage. Though there remains much to be done, I am confident that, in so doing, students and I will soon be experiencing another stage of transformation, turning myself and my students into really autonomous learners through the collaborative construction of various types of learning communities.

Reflections

Narrative allows researchers to understand experience, let researchers get the information that people do not consciously know. In education research, narrative inquiry empowers teachers by giving voice to what they know, enabling them to articulate how they know, and to recognize the connections among their lived experience, practical knowledge, and beliefs about teaching (Freeman, 1996). Reviewing my teaching experiences over the years helps me to get a deeper insight of my own beliefs and practices and possible hidden gaps between these two in EFL learning and teaching. After launching into this personal narrative reflection, I found an emerging theme throughout my teaching inquiry – transformation. I moved from teacher-centered to student-centered, instruction-oriented to learning-oriented, top-down to bottom-up, implications of theories to generation of theories in my teaching practices and classroom research. More importantly, as a teacher researcher, I have transformed my research perspectives from technical reflection to critical reflection and from descriptive to interpretive discussions.

According to Johnson and Golombeck (2002), “teachers’ stories of inquiry are not only *about* professional development; they *are* professional development.” Along with the journey of my

own teaching reflection, I found myself experiencing the process of ‘thinking and learning with doing inquiry.’ With this experience, I believe that narrative practices would help teachers to construct and reconstruct their personal practical knowledge (Clandinin & Connelly, 1996), and generate new theories to fit in specific social contexts.

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The Social and Interpersonal Network Analysis of Class in The Primary School

LI Wei Pin

Abstract

Peer interactions and group experiences exert a profound influence on the future of children (Gifford-Smith & Brownell, 2003). The peer relation and the cliques formed among the groups of children begin in the middle period (9-11 years old) (Crockett, Losoff, & Petersen, 1984). This research has the following purposes. First, it intends to explore the interactions of elementary students' interpersonal social network. Next, it examines the relationships between the teacher and the children's social network. Generally speaking, this study not only discusses the network structure, cliques, and the mediating role in each class, but also explores the peer relationships among children on the basis of "academic index", "social index", and "appearance index".

The framework of this research is Social Network Analysis (SNA). Questionnaire results are collected from five teachers and 152 students from five classes to probe into several psychological effects of peer relations in the class, including "the attraction law", "halo effect", "Birds of a feather flock together", "unlike charges attract". Moreover, it examines the following relations: "appearance vs. social network", "academic performance vs. social network", and "gender vs. social network". Finally, it intends to find out if there is a significant difference between the teacher and common students in respect of their preferred student. After the collected data are cross analyzed by Pajek and SPSS, this study has the following finding: children's popularity is closely related to their appearance, academic performance and gender. Elementary students tend to make friends with students in the same gender. On the other hand, the teachers have the preference for the students who are good-looking and have great academic performance, but these students may not be popular in the peer. This result generally supports the research hypothesis. Finally, on the basis of the findings, the theoretical implications, topics for future research, and the limitations of this study will be discussed.

Keywords: social network analysis, peer relationship, elementary school student

Pupil's interpersonal relationships and peer group

Children's interpersonal relationships are developed in any time. The relationships have influence on social development in the future. Children owe good social skills can get benign feedback, is satisfied with psychological need with it of the profit. And it set up positive concepts more, contribute to good peer friendship and better academic performances. (Caims, Leung, Gest, & Caims, 1995; Lease, Musgrove, & Axelrod, 2002; Magnussen & Statin, 1998; Rubin, Bukowski, Parker, 1998), In a sentence, high quality interpersonal relationships and social skill is good for children.

In early development of children, they can distinguish the friend and not the friend's difference (Newcomb & Bagwell, 1995) . Children begin to establish the relation of the peer group and form the Cliques to start in middle period to children (9-11 years old). It is quite complicated for the child enters course of the Cliques of the peer group and social development (Cairns, Xie, & Leung, 1998; Kindermann, 1998; Ryan, 2001) .

But on the stage later stage of primary school, most children will have one's own important interpersonal context and relation group of the peer group (Crockett et al., 1984). Children's relation of the peer group will be very natural to take shape in the class (Gifford-Smith & Brownell, 2003) .

Appearance , ability vs relation of peer group

The good one of appearance is asserted that the ability of various fields is relatively good, and easy to receive help (Benson, Karabenick & Lerner, 1976) . The person with good appearance is considered to be the interesting , hospitable , export-oriented one in the group , and have social ability even more (Eagly & Makhijani, 1991; Feingold, 1992) . Children like friends with having creativity , problem to solve the strong , spoken well and high ability (Azmitia & Montgomery,

1993; Zajac & Hartup, 1997) .

Gender vs relationship

Gender plays an important role in children's interpersonal society, and different to some extent (Feeney & Noller, 1996) . Children inclines to choose the friends like myself (Newcomb et al., 1999) . Because of the difference of the game, children like carrying on the activity with the other people of same sex (Hartup, 1983; Thorne, 1986) .

Birds of a feather flock together

In the social psychology, person-to-person appeal has several characteristics, include: Situation factor, personal characteristic, demand complementation, personality character, ability, feedback with each other ,etc.... Past study shows, the person of same group will be quite close in peraonality (Caims et al.,1988; Estell, Farmer, Cairns, and Cairns,2002; Gifford-Smith & Brownell, 2003; Newcomb et al., 1999) , the same with the 'Birds of a feather flock together'.

Teacher vs children's social network

The characteristic in the class classroom will also influence the child choice to the friend, and form the relation of the friendship network naturally (Pellegrini & Blatchford, 2000) . Having more contact chances with class children and teacher, the mutual influence power and degree of the relation are relative and great (Wentzel and Asher,1995) .

Social network analysis in the class

' Social network analysis ' can describe the organization in a group out , relation of one that is member link , among a small circle , faction , group key figure (Freeman conspicuously ,2004). Social network analysis has structural orientations, different from there was a linear concept only in the pasting, and could analyse from every angles of the network (Cairns et al., 1998; Sauer & Coward, 1985; Whittaker &

Garbarino, 1983) .

Children's cliques are classified by cluster analysis in other research. (Estell, et al.,2002; Kwon & Lease,2007; Ryan,2001) . Bearman et al. (2004) research the sex network in high school students. So, social network analysis used to many sections.

Purpose

- 1.Understand the situation of the interpersonal social network relation of primary school students.
- 2.Understand pupil's interpersonal social relation instead of congenital and acquired terms of network relation of primary school students.
- 3.Understand the relation of class' teacher and interpersonal social network relation of class students.

Question and assumption

According purpose , list the question and assumption :

- 1.The maps of Social network in the primary class
 - (1)The academic, social, appearance of brokerage roles in class
 - (2)Cliques will add by grade
 - (3)Gender will influence more by grade
- 2.Assumption of the acquired condition and congenital condition
 - (1) Assumption of the acquired condition :
 - 1-1 Assumption of academic : The students of good academic will popular in the class
 - 1-2 Assumption of social relationship : The popular students like to be friends with popular students
 - (2) Assumption of the congenital condition :
 - 1-1 Assumption of gender : The students like to be friends with the same gender

1-2 Assumption of appearance : The students of good appearance will be popular in the class network

3.About Teacher

(1)Assumption of teacher :

1-1 The student of teacher like more will popular in class.

1-2 The teacher like students of academic performance

1-3 The teacher like students of good appearance

Method

The research is studied for the exploring type. The research described interpersonal network relation in the primary class. Understand the relation of congenital and acquired condition and children's popularity. The research probe into the students that teacher likes situation in class' interpersonal network relation.

Participant

The research is the method of Questionnaire. The sample comes from class student and class' teacher in the primary school. Students from 5 different grade class, 152 ones. Teachers are 5 ones.

Table 1 Participant

	total	gender	Gender of teacher
Grade 2	29	16 : 13	Female
Grade 3	28	14 : 14	Female
Grade 4	32	16 : 16	Female
Grade 5	32	16 : 16	Female
Grade 6	35	18 : 17	Male
Average	31.2	16.0 : 15.2	

Tools

1. Questionnaire of social network analysis in the class
2. Questionnaire of class teacher

Procedure

Researcher got Questionnaires of students and teachers. Data coded and analysis by pajek and spss software.

Analysis

This research carries on the analysis at three stages. SNA(Social network analysis) 、 Co-relation analysis 、 T-test 、 ANOVA, ...etc.

Result

1. Interpersonal network overview

Table 2 Class network data

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
size	29	28	32	32	35
Inclusiveness	82.76%	96.43%	78.13%	81.25%	85.71%
Connectivity	0.53/5.19 =0.10	0.58/5.55 =0.10	0.51/4.18 =0.12	0.48/5.95 =0.08	0.45/6.29 =0.07
Connectedness	42.12%	51.06%	39.52%	36.49%	33.45%
Density	0.21	0.26	0.20	0.18	0.17
Symmetry	58/113= 51.33	74/119= 62.18	64/132= 48.48	68/113= 60.18	78/121= 64.46
No. of Cliques three persons	7	8	10	11	12
No. of Isolation persons	5	1	7	6	5

Interpersonal co-opt network chart

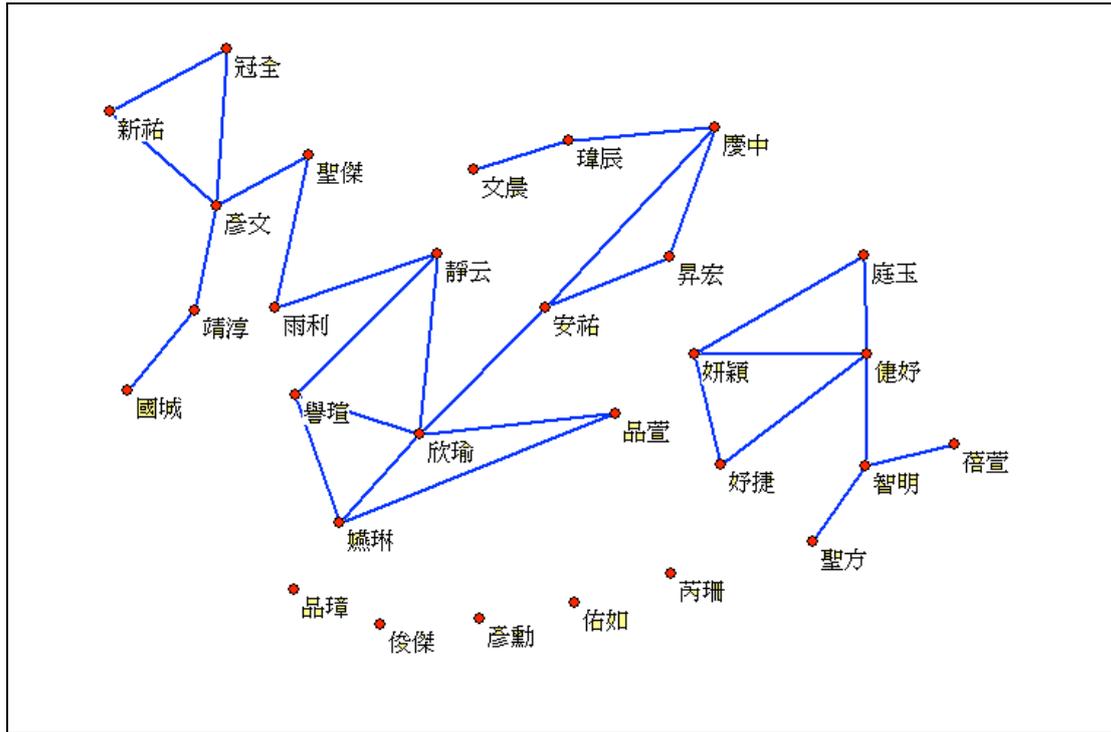


Figure 1 Interpersonal co-opt network of Grade 2

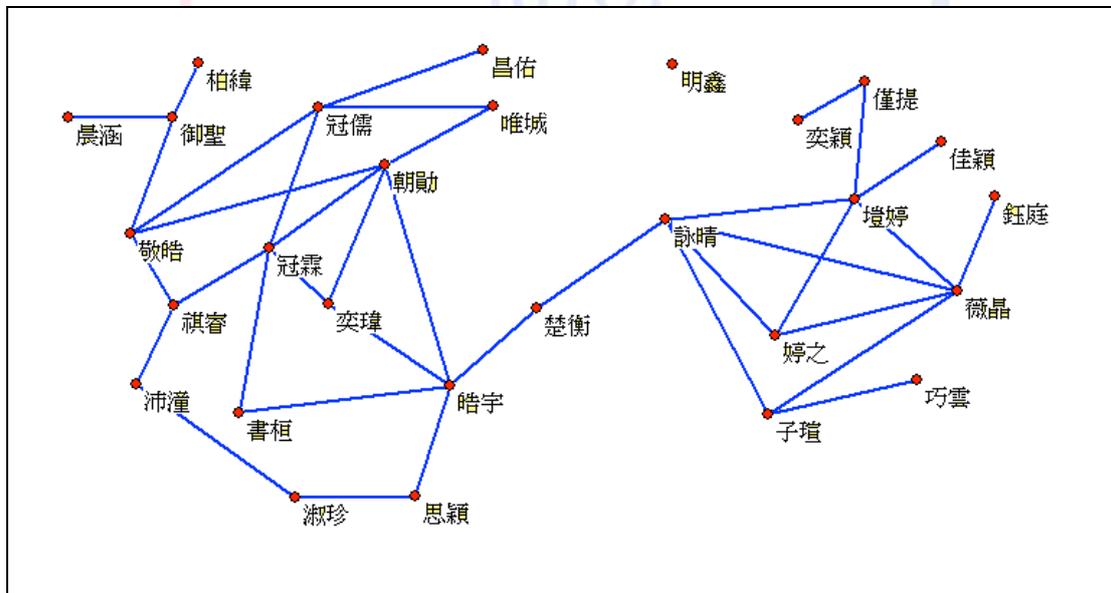


Figure 2 Interpersonal co-opt network of Grade 3

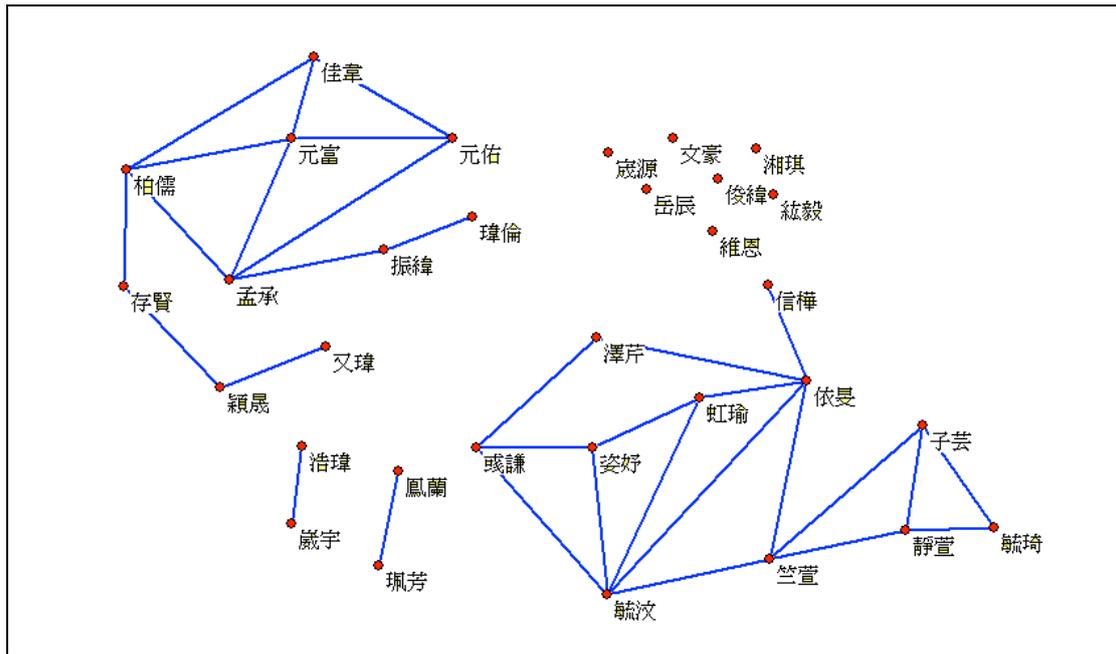


Figure 3 Interpersonal co-opt network of Grade 4

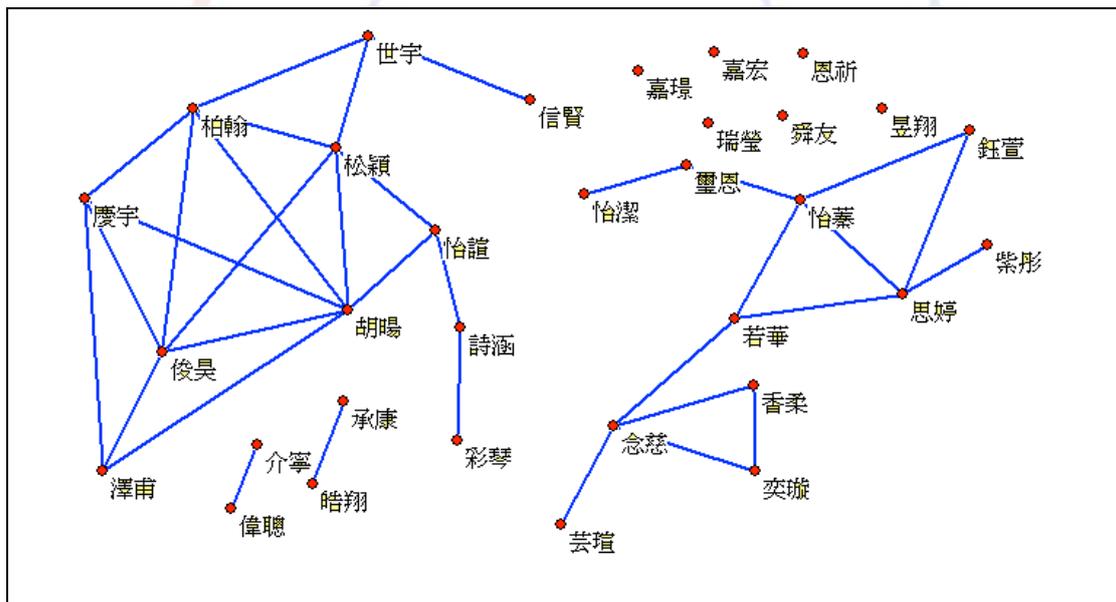


Figure 4 Interpersonal co-opt network of Grade 5

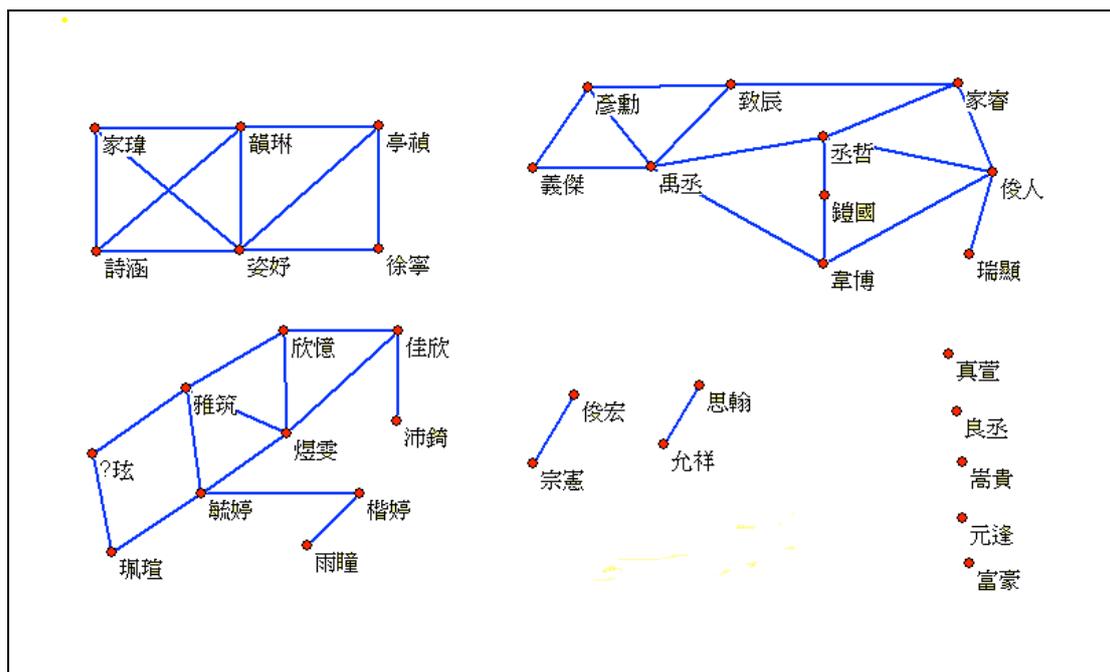


Figure 5 Interpersonal co-opt network of Grade 6

Table 3 「 Academic index 」、 「 Social index 」、 「 Appearance index 」

	個數	最小值	最大值	平均數
Academic T-score	152	18.48	67.09	50.00
Indgree(social index)	152	0	15	4.97
average of indgree by others	152	2.33	10.80	6.86
Appearance index	152	0.17	8.54	4.86

Borkerge roles are including: coordinator、itinerant broker、representative、gatekeeper、liaison, as Figure 6.

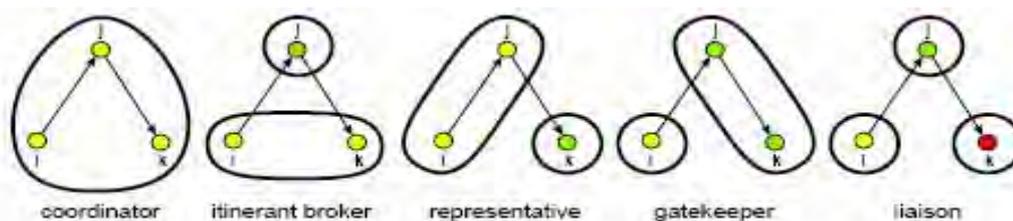


Figure6 Borkerge roles

Table 4 One-sample T-test

	No.	Academic index	Social index	Appearance index
Coordinator	12	51.45 .64	4.58 .50	3.85 .14
itinerant broker	20	49.26 .77	7.00 .01*	5.57 .04*
Representative	22	50.88 .73	4.05 .46	4.51 .51
Gatekeeper	20	53.31 .04*	7.95 .00*	5.25 .40
Liaison	15	52.34 .44	10.67 .00*	6.04 .02*
Average	152	50	4.97	4.86

1. Acquired condition

Table 5 The co-relation of acquired condition

	Coefficient correlation	
Academic index vs Social index	.223	.006***
Social index vs choice index	.298	.000***

2. Congenital condition

Table 6 Ratio of gender and choose persons

Grade	2	3	4	5	6	average						
The gender of Choose person	M F	M F	M F	M F	M F	M F						
Gender M	81	19	76	24	92	8	94	6	91	9	87%	13%
F	29	71	17	83	6	94	27	73	17	83	19%	81%

Table 7 ANOVA of Gender and Grade

	T-test and F-test	DF	
Gender	17.72	150	.000***
Grade	.482	4	.75

Table 8 The co-relation of Appearance index vs Social index

	Coefficient of co-relation	
Appearance index vs Social index	.470	.000***

Table 9 The T-test of Students of Teacher like vs total

	Persons of teacher choose	average	T-value	
Academic Index	55.47	50.00	3.30	.00**
Social Index	6.04	4.97	1.60	.12
Appearance index	5.66	4.86	2.24	.03*

Discussion and Suggestion

1. Ideal and reality of interpersonal networks of children

The children with high-quality interpersonal relationships and social skill are good development and positive. The cliques will increase with the growth of the age gradually, the same with Crockett et al. (1984).

2. The advantage and inferior position of Children's interpersonal

The appeal of 'appearance' really has positive correlation ($r=.47$) with social relationship. Appearance still related to ones that have one large capital on social activity. Appearance in really act an important role on being interpersonal. But causality still waits to distinguish.

Find while studying, Borkerage roles are not all the higher one on the study index of appearances. There are some popular ones in the case of the study and appearance on the low side.

3. Teacher in the class network

Popular students are also like to be friend with popular students. So, " Birds of a feather flock together" is correct. But teacher should make something for this. The teacher has characteristic of judging people solely by appearance, too(Clifford,1975). Increase as age, sex district through phenomenon become more and more obvious.

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Cover page

Title

Using a specialized corpus and Google custom search engine (CSE) for enhancing L2 teaching and learning

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Abstract

This study explores how teachers can enhance L2 instruction using a specialized corpus with a popular custom search engine from Google. With a focus on the learners' lexico-grammatical performance, a corpus-based system consisting of a database of genre- and discipline-specific texts and a companion search engine are developed for an undergraduate L2 writing course. Using digital video technology, this study documents the learners' interactions with the corpus system over the course of one semester. The findings show that the learners engage in cognitive collaboration with the system and address their lexico-grammatical issues in moment-by-moment development of their linguistic competence rather than simply borrow the text from the corpus. The learners engage in intense hypothesis-testing in order to appropriate the language items from the corpus and in this endeavor, they interact with the system in a highly interactive and multi-layered way. The findings suggest the potential impact of the custom search engine on technology-enhance language learning, i.e., as a teachers' tool to facilitate the learner's development. This study concludes by discussing implications of custom search engine as a powerful tool for corpus-enhanced language learning.

Introduction

Over the past two decades, there has been an increasing recognition of corpus linguistics and its role in language learning and teaching (Conrad 2000; Granger *et al.* 2002; Hunston 2002; Sinclair 2004; Flowerdew 2005). Despite the recent burgeoning of studies on corpus-assisted pedagogy, research has primarily focused on the outcomes of learning (e.g., higher test scores and a positive attitude). Learning processes (i.e., learners' interactions with corpora) remain almost entirely unexplored.

Using a corpus system, the goal of this study is to enhance and document L2 learners' performance in academic writing with a focus on the lexicogrammar. Lexicogrammatical performance refers to the extent to which a learner makes socially appropriate choices of vocabulary and syntax in accordance with the expectations of discourse communities. To be proficient in this area, learners must advance beyond the mere production of formally accurate sentences toward an awareness of, and the ability to cope with, the socio-cultural practices of discourse communities. As such, developing lexicogrammatical performance presents a major challenge to learners.

To date, writing research has been only modestly successful in meeting this challenge. While it has been effective in delivering lexicogrammatical knowledge through explicit instructions (e.g., Swales & Feak, 1994), it has not been as effective in helping learners to use that knowledge in their performance. This study explores how teachers can enhance the instruction and facilitate the learners' performance in academic writing using a corpus-based system. It aims to offer a means for teachers to facilitate learning in the classroom at the same time as L2 writers are engaging in independent writing work outside the classroom.

Lexicogrammar in Academic Writing

A socio-semiotic system that interfaces meaning and expressions (Halliday, 1978), lexicogrammar realizes meaning (semantics) through using basic building blocks (lexicon) and the rules for sequencing them (syntax). Lexicogrammar, thus, has two aspects: one representing the structural sequences, the other, the lexical realizations of those sequences. Lexicogrammatical performance, then, refers to an ability to make choices among myriads of potential intersections between the lexical and syntactic planes.

In academic writing, while lexicogrammar serves as a linguistic resource for these advanced writers, it presents a daunting challenge to novice writers, who are new to the discourse. Unlike simpler, non-academic genres (e.g., greetings and invitations), some academic genres reflect great variability in their triangular interplay of the author's intentions, the discourse community's expectations, and the lexicogrammar. Teaching the lexicogrammar of academic writing, thus, is not so much about simply knowing lexicogrammatical rules as it is about using them appropriately and resiliently in accordance with the particular genre and rhetorical situation.

Corpus-based approach to writing pedagogy

In academic writing, corpus technology holds considerable promise to provide support for teacher's instruction. Generally, the contribution of corpus technology to academic writing pedagogy is recognized in areas such as language description, textual analysis, and teaching material development (Hyland, 2002; Upton, 2002; Upton & Connor, 2001). In classroom practice, however, the role of corpus is yet to be robustly established (Flowerdew, 2005). Currently, the role of a corpus in genre pedagogy is limited to providing exemplar texts (Lee & Swales, 2006).

Regarding the contribution of a corpus to learners' writer's development, there is only anecdotal evidence (Cobb, 1997; Johns, 1986). These studies have not examined the learners' experiences while they used the corpus. Some studies attempted to examine the use of the corpus through the learners' reflections (Chambers, 2005; Yoon, 2008; Yoon & Hirvela, 2004). These studies found that the learners built some confidence in vocabulary and writing skills through their use of concordance programs. The studies, however, did not make first-hand observations of the learners' experiences. Instead, the studies relied on retrospective perceptions as recounted by learners in surveys, questionnaires, written reflections, and interviews.

Only a few studies provided more concrete evidences of learning in corpus-assisted activities. Gaskell and Cobb (2004) used hyperlinked, concordance-feedback to the learners'

revisions in the lieu of traditional written feedback. Then, by comparing the hyperlink records and the learners' texts, some relations between the access to the concordance lines and the revisions were established. Although the hyperlink approach shows some benefits of using the concordances, the benefits are largely limited to correcting (rather simple) errors, rather than creating contextually appropriate texts. Hafner and Candlin (2007) is the only study that examined the learners' corpus use based on the data collected as they used the corpus – rather than their reflective accounts - and without imposing the corpus-based assignments. The data in their study, however, consists of only the searches that the learners entered into the corpus, while missing the actual interactions. To date, no study has examined learners' interactions with corpora through the real-time, direct observations. The role of a corpus-assisted instruction in enhancing lexicogrammatical performance, thus, remains largely unexplored.

In addressing the lack of research on the interaction between learners and a corpus, this study uses screen recordings, a computer-aided technique that records the learners' activities on their computer screens real-time, i.e., as they are using the corpus. The screen recording technique creates digital video clips, the primary data source of this study. In addition to the issue of lacking data, the obvious problem in the corpus studies is the lack of an effective corpus-based system. In developing such a system, this study employs a custom search engine (Google CSE) rather than the traditional concordance program. In fact, the choice of the search engine is not in accordance with the research literature, which generally recommends concordance software. This study chooses a search engine over both desktop and online concordancer programs because learners need to access representative exemplars of the target academic genres. This rules out many online concordance services, as they do not allow users to modify the database or point the concordancer to a new database (but see Lu, 2009).

This study is a new attempt to use a search engine and a specialized corpus for L2-writing instruction. The proposed corpus-based system offers broad benefits to learners: the system can serve as an extensive store of representative texts that facilitate textual analysis *in situ*. As for lexicogrammar, the benefits of the system go beyond a simple accuracy check. The system is designed to engage students in interactive refinement of the searches, which eventually leads to the development as more competent L2 users. For teachers, this approach's strength resides in its ability to build efficiently specialized corpora for their courses. The system allows teachers with minimum experience of a corpus to replicate the system for their own use.

Methods

Context

The context of this study is an upper-intermediate ESL writing course at a large American university. The course aimed to prepare first-year international students for university-level academic writing. This study analyzes the interactions of three focal learners with the corpus system. They are two females (Learner 1 and 3) and one male (Learner 2). All of them came from China, spoke Mandarin as their first language, and were business majors.

The corpus system

This study developed a corpus-based system equipped with a database of topic-specific texts as well as a companion search engine offered by Google to search the database. Chosen based on their relevance to the course readings and discussion topics, the texts in the database focus on communication and language learning. The database consists of approximately 350,000 words of academic text from online academic journals. As a companion tool for the corpus, a search interface was developed to provide access to the database. The interface in this article refers to a website linked to a custom search engine that runs in the background.

As the corpus system allowed multiple-word search, students could simply type in multiple words and phrases in order to consult the corpus. The search engine enabled users to zero in on appropriate sentences by taking multiple search words as input and allowing the users to revise the searches easily. Search results were contextualized as they were displayed in whole sentences, which were linked to the full-text documents. In order to record the searches, a program was written and connected to the system. The program saves the learner's search terms in a database and creates a log of searches.

Data-collection procedures

This study collected screen recordings as well as the learners' (oral and written) reflections. In the classroom, students recorded their computer screens while they were composing using a screen-capture program (iShowU), a program that runs in the background without interfering in writing processes. The program created video clips of the computer screen, which were saved for analysis. When the clips had been collected, the learners attended individual interview sessions, which were audio-recorded. In these sessions, the student watched the screen video clips and commented why and how they used the corpus.

During the period of six weeks, screen video clips were collected each week totaling six clips and the total length of the screen recordings was 424 minutes. In addition, six stimulated recall sessions (two sessions for each student) and nine written reflections (three reflections for each student) were collected.

Results

Description of learners' corpus searches

The corpus search log shows that the learners used the system frequently. The three focal learners performed 329 searches in six weeks. In those searches, they searched for 772 tokens (257 token queries per student) and 342 types (114 type queries per student). The type, token, and their ratio, serve as a basic descriptor of the learner's corpus access. Table 1 presents the descriptive statistics of the searches and the type/token ratio (TTR) of the corpus searches.

Table 1. Descriptive statistics of the corpus searches

	Searches	Token	Type	TTR
Learner 1	48	92 (Mean: 1.92)	57 (Mean: 1.12)	62.0
Learner 2	87	203 (Mean: 2.34)	93 (Mean: 1.06)	45.8
Learner 3	194	477 (Mean: 3.84)	192 (Mean: 0.98)	40.3
Sum	329	722 (Mean: 2.7)	342 (Mean: 1.05)	

Table 1 shows that the learners' queries are relatively short - averaging about 2.7 words (tokens) per exchange. Learner 3 consulted the corpus most often (194 times) and her query words were longer (Mean = 3.84) than the other two learners (Mean = 2.34 and 1.92). The general impression is that the length of the query increases in proportion to the number of searches. That is, the more often learners consult the corpus, the more search words they tend to enter per query. On the other hand, the frequency of unique words (types) shows that the learners used (at least) one new word for each exchange (Mean = 1.05). It implies that the more the learners used the corpus, the fewer new words they seemed to introduce in the refined searches. This finding indicates that learners were refining searches by making a small change each time, i.e., by substituting one word with another, rather than revising the entire phrases or sentences.

The relationship between the types and tokens of the searches (TTR) offer a useful insight into the learners' corpus use: TTR can serve as an index that reflects the learners' searching behavior. The ratio is inversely proportional to the frequency of search term refinement. If the learners recycle more words in order to refine their searches, TTR decreases. For example, Learner 3 looked up the corpus 194 times and there were 192 new words, indicating that she refined her query by substituting approximately only one word of the previous queries. Learner 3 did this partial replacement in order to zero in on the target item. Due to the refinement, her TTR goes down to 40.3%. On the other extreme, Learner 1 did not refine her query in most cases. She consulted the corpus in 48 searches, and there were 57 new search terms. As a result, TTR goes up to 62.0%, which implies that Learner 1 did not refine her queries as often as Learner 3 did.

The search terms can be broadly divided into either content words or function words according to the learner's search purposes. The corpus searches of the learners contain 227 function words (31.4%) out of all 722 words. The breakdown of the function words search is presented in Table 2.

Table 2. Function-word searches

Part of Speech	Frequency	Examples (N)
Preposition	107	in (29), of (18), on (15), with (12), as (9)
Determiner	46	the (19), a (13), no (5), some (3), this (2)
To (infinitive)	30	
Pronoun	9	them (4), it (3), one (2)
Possessive pronoun	8	its (6), their (1), my (1)
Modal	7	will (7)
Subordinate conjunction	5	while (3), whereas (1), whether (1)
Coordinate conjunction	6	but (4), or (2)
Wh-Adverb	5	how (4), however (1)
Particle adverb	2	up (1), on (1)
Wh-determiner	2	which (2)
	227	

Table 2 shows that Preposition is the most frequent item followed by Determiner and To-infinitive. When compared with the learners' reflections, the finding indicates that learners are more aware of the uses of particular prepositions such as 'in' and 'of', than cohesive devices such as deixes and conjunctions.

The distinction is important as it reveals challenges to L2 learners in concrete details. In fact, the searches for function words seems to represent a distinct characteristic of the language learners, as the function-word searches contrast with the common understanding that the log of the general-purpose search engines largely consist of nouns and adjectives, while they rarely contain function words (Eiron & McCurley, 2003). Although the content words still outnumber the function words in the learners' log, it still shows a remarkable difference from the general-purpose search engine queries.

Enhancing Lexicogrammatical Performance

In addressing their lexicogrammatical issues, the learners focused on two aspects of academic writing: lexicogrammatical accuracy (e.g., verb conjugation) and rhetorical appropriateness (e.g., formality). Accuracy was the first and foremost concern in the learners' use of the corpus. Syntactic, lexical, and morphological issues appeared to be the major areas of concern - with syntactic concerns more frequent than lexical and morphological concerns. These concerns motivate and shape their interaction with the corpus. Students' syntactic motivations frequently revolved around choice of part-of-speech items (e.g., preposition) and grammatical form (e.g., adverbial). Figure 2 shows an example of syntactic motivation that revolves around preposition:

Original text	<i>Oppositely</i> , the author suggested
	Corpus search 1 'opposite'
	Corpus search 2 'oppositely'
Revised text	<i>In opposition</i> , the author suggested

Figure 2. Corpus-assisted revision for accuracy

Regarding the corpus searches and the following revision, Learner 1 commented that she was looking for an adverbial connective in the sentence-initial position (e.g., however). She queried for ‘opposite,’ and then its adverbial form, ‘oppositely.’ As the corpus results did not show ‘oppositely’ as an adverbial connective, she discarded it and chose to revise her original sentence using another expression, ‘In opposition.’ The screen recordings show that her revision is based on the results that the system displayed during her corpus consultation.

Appropriateness was a less frequent but more difficult issue for the learners. As it is not an issue of correctness, addressing the appropriateness issue requires more proactive evaluation of the corpus-search results. For example, Learner 3 entered three related searches and all of them revolve around the key search word, “task” (see Figure 3):

Original text	Writing an essay in English is a <i>tough</i> task
Corpus search 1	tough task
Corpus search 2	hard task
Corpus search 3	difficult task
Revised text	Writing an essay in English is a <i>difficult</i> task

Figure 3. Corpus-assisted revision for appropriateness.

The goal of corpus search in Figure 3 is not to produce an error-free text but a more appropriate text. Three adjectives, ‘tough’, ‘hard’, and ‘difficult’, are interchangeable without resulting in any lexicogrammatical error. The challenge in this task is that it is not always possible to decide which one is more appropriate than the others, as the evaluation of choice depends on the learners’ intention as well as the target audience. The evaluation, thus, relies heavily on the learner’s rhetorical awareness. Learner 3 stated in her reflection that she was trying to find a better adjective for ‘task,’ and that she revised the searches because ‘the revised one shows that the sentences become more academic-like.’ Yet, what is more ‘academic-like’ than the other is still difficult to decide and the corpus system alone is not sufficient to address the issue.

Despite the effectiveness of the system, some challenges still remain. According to the focal learners, for example, the most difficult challenge is to ‘build a sentence,’ i.e., to produce a sentence with limited linguistic repertoire. Regarding the production of sentences, the screen recordings show a clear benefit of a search-based corpus system, beyond less interactive concordance software (see Figure 4).

Original text	Lately, as <i>technology is developing in a fast speed</i> , there are more tools for L2 users
Corpus search 1	technology is developing in a fast speed
Corpus search 2	society develop fast
Corpus search 3	in a fast developing society
Corpus search 4	technology develops fast
Revised text	Lately, <i>as technology is developing in a fast speed</i> , more tools are invented for L2 users

Figure 4. Interactive revision for sentence production.

In Figure 4, the challenge is not limited to lexical concern, i.e., word choice, but it involves broader aspects of the lexicogrammar touching upon syntax, semantics, and rhetorical structure. Syntactically, Corpus search 1 (“technology is developing in a fast speed”) and Corpus search 2 (“society develop fast”) involve at least two kinds of choices: a choice between the progressive and simple aspect of the verbs (“developing,” and “develop”) and another choice between the adverbial and adverb (“in a fast speed” and “fast”). Semantically, Corpus search 2 (“society develop fast”) and Corpus search 4 (“technology develops fast”) involve a choice between two agents, technology and society, for the verb, “develop.” On the other hand, “society” serves as a circumstance and becomes a background in Corpus search 3 (“in a fast developing society”). We also notice that these choices are connected with the learners’ rhetorical decision with regard to structuring the sentence. She has an option to begin her sentence with either “society” or “technology,” depending on which she decides to highlight. Based on her searches, she made a decision to keep her original sentence.

The series of the searches and the query refinement suggest that the enhanced performance is a result of the negotiated performance. The learner does not copy the texts from the corpus verbatim but actively refine the queries and make choices according to her communicative purposes.

Learners’ evaluation of the corpus system

The analysis of the data in the previous section showed a clear pragmatic value of the corpus system. Then, how do the learners describe their experiences and what are their evaluations of the system? The learners have idiosyncratic difficulties and used the corpus system in different ways according to their divergent needs. The idiosyncrasy has a visible influence on their evaluation of the corpus system, which varies according to the extent to which the system addresses their issues.

Learner 1 commented that she was using the system simply as an ‘error checker.’ Comparing the corpus search engine with electronic dictionary, she reflected: ‘But in some cases, electronic dictionary does not help. . . Because of this kind of problem [of the dictionary], *I always made wording mistakes, and I could not receive a high mark for my paper.* . . After I knew this tool [the corpus system], I used it every time when I write. As I know, all of my classmates use this tool as well. *They all feel this tool helped them a lot when they write their paper.*’ In her response, the learner clearly indicated that her use of the corpus was motivated by a realistic evaluation of the corpus in terms of its effectiveness in helping her ‘receive a high mark.’

Learner 2, unlike Learner 1, described the system as ‘as advanced linguistic reference.’ He wrote that he chose to use the system in addition to a bilingual translation website because ‘*It [the system] really helps me a lot when I am not sure about the usages. . . But if I don’t know the meaning of the words at all, the searching engine [of the corpus system] won’t help me very much.*’ The use of it is based on abundant knowledge of English.’ Learner 2, thus, presented his critical evaluation of the corpus by pointing out that the corpus is effective only when he had

some previous knowledge of the target vocabulary. Thus, his evaluation is that the corpus system works for advanced users or those with ‘abundant knowledge,’ and for him, linguistic awareness is the key to an effective corpus use. Based on this evaluation, he established his own tool-use policy: the corpus system for ‘usage’ and dictionary for definition.

Learner 3 was the most proactive use of the system. She found that the corpus system addressed her needs in academic writing and used it as her primary reference: ‘Before my teacher introduced [the corpus system] to our class, I did not know how to revise my essay by using a language tool except looking up vocabulary in certain website which was not quite helpful in terms of writing. *As long as I know Corpus [system], I started searching word in the Corpus [system]. It gave me amounts of references that I can check that whether the scholar[s] use the word in the same way as I did.*’

She used the corpus system to look for scholarly use of language, i.e., the way advanced writers use language in academic writing. She paid a lot of attention to the appropriateness of her writing and used the corpus to achieve the appropriateness. She was also concerned with stylistic issues such as formality, clarity, as well as word and grammar choice. Addressing these issues requires sensitivity to the lexicogrammar of the academic writing and she found that the corpus system was the only tool that gave her access to the lexicogrammar of the target discourse.

Discussion and Conclusion

This study sought answers to the following questions: How can we enhance learners’ lexicogrammatical performance in L2 academic writing? What is the role of the corpus-assisted instruction in enhancing the performance? The previous corpus-based research focused on either the final outcome or on the perceptive responses based on the learners’ reflections. The alternative, as posited by the present study, is to improve the performance through a corpus-based system equipped with a topic-specific corpus and a companion search engine. The results show that the system was effective and efficient in helping the learners meet their lexicogrammatical challenges and thereby improve their performance in this regard.

A pedagogical implication of the results is that teachers can incorporate a corpus with a search engine in their writing instruction for the practical benefit of students. Considering the time constraints on teachers, it is a demanding task to prepare example texts manually and provide individualized feedback on lexical/grammatical issues. For students, too, even concerted attempts with much time invested can still result in only modest improvements in lexicogrammatical performance. In trying to mitigate this difficulty, a corpus system can be introduced to learners as a supplementary resources as well as self-directed corpus-based assignments.

Future research on corpus-enhanced language learning should focus on providing a more efficient system than traditional concordance software. Despite its usefulness in form-focusing activities and error correction (Gaskell & Cobb, 2004), concordance software is less effective in addressing global issues in academic writing such as formality, tense and aspect choices, and sentence production.

The data showed that interactivity of a system is important, as learners enhance their performance through a negotiation with the corpus system (see Figure 4): they interactively review the search results, compare the results against their authorial intentions, and make revisions. Therefore, it is necessary to examine the potential contributions of the search-engine interface to corpus-enhanced academic writing instruction. Future implementation of a corpus system should address the limitations of the search engine as well by exploring the teachers' role in offering the learners further help with a corpus system to address the lexicogrammatical issues as linguistic and social choices.

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**An academic and an adventurer walk into the jungle:
the challenges and benefits of accrediting learning beyond the classroom**

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Accrediting learning beyond the classroom

An academic and an adventurer walk into the jungle: the challenges and benefits of accrediting learning beyond the classroom.

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Abstract

The accreditation of experiential learning by a higher education institution is a challenging proposition. The challenges are extended further by learners being volunteers on overseas charitable expeditions. However, the benefits brought from a successful collaboration contribute towards the debates and definition of informal learning and part-time study.

Introduction

This paper outlines a case study of a recent collaborative partnership between a UK higher education institution (HEI) and a UK 'not-for-profit' youth and education charity, detailing the challenges and benefits brought whilst developing an innovative approach to accrediting experiential learning. In doing so, it addresses key issues in experiential learning and work-based learning, exploring new definitions of work-based learning and part-time education.

Over the past 2 years, Birkbeck University of London and Raleigh have been engaged in a knowledge transfer partnership (KTP) that sought to enhance the work of both partners through developing Raleigh's pedagogical framework, and accrediting the experiential learning experience of its overseas expeditions.

Raleigh is a leading UK youth and education charity that runs community development, environmental protection and adventure projects in Borneo, Costa Rica & Nicaragua, and India with the aim of inspiring young adult volunteers (17-24 years old – referred to as 'venturers') to be all they can be while making a genuine difference to the communities and environments they work in. Founded in 1984, Raleigh has run 250 expeditions, in 43 countries with 30,000 volunteers (Raleigh, 2010). The expedition context is a unique combination of elements and processes that provides informal learning opportunities. Volunteer managers (25 years old plus) travel overseas to a new country and join a new team. Induction training is intensive and challenging and once complete, the venturers arrive for their induction. Then all are organised into teams and dispatched across the region/ country to work on projects that involve hard work, challenge, less comfortable living conditions, and intercultural immersion.

Birkbeck, University of London, founded in 1823, is world-class research and teaching institution and London's only specialist provider of evening education. Birkbeck explicitly encourages students from traditional and non-traditional academic backgrounds to a wide range of courses; aims to meet the changing educational, cultural, personal and career needs of adults; and contribute to the civic and public debates about widening participation (Birkbeck, 2010). In particular, Birkbeck specialises in working with mature students studying part-time. However, many higher education institutions struggle to provide adequate access or provision to part-time students, who commonly have issues of balancing work and life with the additional demands of study. Part-time students may have different motivations, lifestyles, obligations and attitudes and are older and have more professional and life experiences than younger full-time students (Callender *et al.*, 2006). This leads to new challenges for non-specialist institutions in providing different access routes, pastoral and learning support, flexible programmes and of assuring quality.

Knowledge Transfer Partnerships are part of a leading European programme funding a range of organisations, from large business to small charities to improve their competitiveness and productivity through the better access and use of knowledge, technology and skills that reside within the UK knowledge base (Higher and Further Education institutions and Research and Technology organisations). Over 3,000 partnerships have benefited from up to 3 years funding and support for such collaborative projects (KTP, 2010).

This KTP sought to better understand the unique experiential learning experience that Raleigh expeditions offer its participants, including both venturers and volunteer managers.

This case fell within the scope of a number of educational concepts - formal and informal learning, experiential learning, work-based learning, outdoor adventure education, learning beyond the classroom and lifelong learning. While there is considerable overlap and debate within and between each of these terms, and these are outside the scope of this paper, reference to them does help place the challenges this partnership faced as all were relevant to the case. How could such traditions, with their inherent beliefs and values about knowledge and learning meet? For when the academic and adventurer came together, all and none of these educational concepts were applicable. So, they entered both a real jungle with physical challenges, and a metaphorical one, with pedagogic challenges.

Formal learning generally refers to the process in which students learn specific knowledge, skills, or abilities through teaching and instruction typically in a classroom setting and without the necessity for direct experience. Learning is constructive, reproductive and more abstract (Stavenga, 2006), and is sometimes referred to as 'Mode 1 knowledge'. While, informal learning refers to the process by which we learn through personal or work-related activities. This is usually outside the classroom but not exclusively so.

Experiential learning is when new knowledge is instilled by a process of learning actively through concrete experience (Stavenga, 2006). It involves direct experience, reflection, review, analysis, experimentation and re-application of new ideas gained through the process (Merriam, 2006). Martin (2006) outlined key elements of experiential learning. It is active, unfamiliar, out of comfort zone, puts the learner in a state of dissonance (two different and conflicting thoughts); and encompasses emotions, imagination, physical being and intellect. Indeed, the participant gains experience of self, others, and the world. This experiential process then leads to mastery, the reorganisation of meaning, and transfer of learning to the future (Martin, 2006). Clearly, experiential learning has a wide scope of settings.

A sub category of experiential learning is 'work-based learning' (WBL). This is a term derived for courses that incorporate into their programme of study work experience and roles (Little, 2006). Such experience may be organised or ad hoc; an optional or compulsory component; part of a sandwich course; a professional placement; long or short; specific to the course or unconnected; and may provide credit for term time or vacation work placements, and also paid, unpaid or voluntary work (Little *et al.*, 2002). Costley and Armsby (2007) also distinguish between WBL as a mode of study, in a university subject, or as a field of study, based in practice. In short, Nikolou-Walker and Garnett (2004, p305) define WBL as "*learning in, from, through, to and at work*".

Walsh (2008) states that WBL creates a 'new' knowledge or 'Mode 2 knowledge', and is knowledge gained beyond the classroom and produced in the context in which it will be used:

"Such knowledge cannot be judged using the criteria applied by the academic disciplines, because integral to such criteria is a distinction between 'pure' and 'applied' knowledge. Arguing that established terms based on this distinction between theory and application are not appropriate for knowledge produced outside the university, Gibbons et al. point out that, 'when knowledge is actually produced in the context of application, it is not applied science, because discovery and applications cannot be separated' (1994, p33). In the process of production, such knowledge has become 'a mixture of theory and practice, abstraction and aggregation, ideas and data. The bounds of the intellectual world and its environment have become blurred' (Gibbons et al., 1994, p37). In addition, Mode 2 knowledge is transdisciplinary – it does not fit into the disciplinary categories used by the university – and therefore established higher education structures can have difficulty in accommodating it"(p11-12).

A further sub-category of experiential learning is outdoor education. This is a form of learning that takes anywhere from outward bound obstacle courses to remote mountain sides and is seen as an alternative or complement to traditional education. Learning outcomes are generally learner led and typically based around core themes of leadership, teamwork, personal development, as well as nature and the environment. As a type of experiential learning it is its more active and challenging form. There is often a wide range of learning opportunities, of a 'buffet table' so that the learner chooses the ones they wish to engage with (Beames, 2006).

Finally, it can be seen that informal, experiential, work-based and outdoor learning take place beyond the classroom and often take place outside of formal educational objectives. In this way, they are also areas valued by proponents of lifelong learning. Although, as Coffield (2000, p1) notes, *"for all the talk of lifelong learning and the learning society the focus remains on formal provision, qualifications and accountability"*.

This paper then, explores the challenges of, and the benefits reaped, from a partnership between formal and informal education providers. Where the objective was to accredit learning that was, work-based but voluntary; emphatically informal; for a diverse part-time cohort; and not just beyond the classroom, but far beyond it, on overseas expeditions.

Understanding stakeholders thoughts and concerns

The initial stage of the partnership sought to better understand the context of Raleigh and its methodology. This was done through focus groups in London and India, and workshops and interviews, with a variety of stakeholders from country directors to venturers as well as head office staff. A key theme of questions presented regarded thoughts and concerns about the concept of accrediting the Raleigh experience in general terms.

This work brought out into the open a collection of beliefs, values and insights about the Raleigh experience and about the organisational history. These summarised with respondent quotes were: a sense that Raleigh provides an informal experiential learning experience that provides many young people relief and respite from their prior formal education and assessment, it was felt that volunteers join Raleigh for the adventure, challenge and life experience, not an 'education', though it was acknowledged that they understood and valued the learning they had gained afterwards, *"Participants don't come for education, that would be a turn off – but they get it anyway, then understand and value it towards the end"*;

expeditions are a place for young people to experiment, that they provide a 'menu' of learning opportunities from which the participants are free to choose those most relevant to them, however consciously or unconsciously, *"Expeditions are a playground where participants can experiment"*, there was concern that any formal assessment would fundamentally change the nature of the Raleigh experience and question about whether the drivers for this accreditation initiative were participant or organisation centred, *"If you are assessing and judging you change Raleigh"*, *"Formal assessment rings alarm bells"*. Indeed, such concern mirrors worries in mainstream education about 'over-testing' of school children, and within the charity sector about the growing evidence base demands of funders, and within higher education, as Burke and Jackson (2007, p177) put it *"contemporary emphasis on outcome-based instruments, and exclusive assessment frameworks"*.

It also come to light that on two previous occasions over the past 15 years some form of participant assessment, leading to vocational qualifications had been piloted. These either did not continue when related initiatives/ funding ended and/or because they were *"paperwork intensive"* and thus got in the way of the experience.

At this stage various participants' needs were mapped in more depth. In the venturer (17-24 age group) it was found that some felt they did not want or need a qualification, that they would have little utility to them, while others, particularly those with few or no formal qualifications were far more positive about gaining more from them their experience.

It can be seen that the findings so far outlined deep pedagogical concerns about assessing experiential learning, with a strong call to 'leave the expedition alone'. The venturer's differing desires and need for formal qualifications and the variance and number of options to explore, further complicated issues.

Working through the options

A second challenge was to work through the stakeholders views and explore the various accreditation options. While, resistance has so far been detailed, suggestions were also put forward as how to progress. It was recommended that any award could be part of a post-expedition programme; that different pathways could be developed for different groups; and that rather than accreditation, efforts should be put towards improving processes, practices and therefore the experience itself.

Therefore, at this stage of developing an accreditation, every element was under review. In summary, these were: -

- Topics – what subjects are relevant to the experience and would participants want to learn about them?
- Topic options – would all or some topics be compulsory or optional?
- Who – should it be for every volunteer, venturer and/ or project manager (a leaders' level); and/or include/ exclude certain sub-categories?
- When and how – should study be during expedition and/or after expedition; and should the content be light or heavy?
- Assessment – what to assess, how to assess and by whom?
- Level – ranging from foundation to graduate levels?
- Outcome – would the successful student gain a university qualification, or simply completion of module towards a qualification?

- Who gets it – should all participants gain the award for participating or should it be based on merit and/or by leader recommendation?
- What to call it – the challenge of finding a programme name all partners are happy with, in terms of policy, marketing and clarity of offer?

What was developed and why?

The major outcome of the partnerships will now be outlined so that its challenges and benefits can be best understood. This has been the development, approval and commencement of an innovative new Birkbeck postgraduate certificate in International Field Leadership. The qualification was designed for the volunteer managers who lead and facilitate the venturers through the experiential learning experience.

This group of volunteers have a broad range of professional experience and often have an undergraduate degree or higher. These individuals are often at a 'crossroads' in their lives - taking career breaks, considering new directions and opportunities, and are attracted by the adventure and challenge of an expedition, and they are interested in helping Raleigh achieve their charitable objectives. It has been recognised by Raleigh and this research that although this group facilitate the learning of the venturers, they themselves often gain as much or more from the experience because of their higher level of responsibilities.

Two newly developed modules enable participants to develop a deeper understanding of leadership, intercultural learning and global citizenship in a dynamic real-world setting; Module 1 is Field Leadership, and Module 2 Reflective & Experiential Learning, and these, respectively, align with Costley *et al.* WBL 'mode of study' and 'field of study' mentioned earlier.

In essence, the course design places great credit on the quality and intensity of the leader's experiential experience out in the field. Students are made more aware of its learning potential and given guidance on what Schon (1983) would refer to as 'reflecting in' and 'on' experience. They are encouraged to more deeply and systematically construct, deconstruct and reconstruct their experience and the learning they take from it.

In practice, a significant part of the programme has been embedded into the expedition experience. The two modules run concurrently from the beginning of the expedition as work-based learning or reflective practice. Students are guided to keep a professional learning journal to help them reflect 'in' practice. They then refer to the journal after their expedition to more deeply reflect 'on' practice and are asked, through assessment requirements to reflect between practice and theory. This design respects, as Burns and Costley (2003) note, that mature students often already have intellectual capital, so they seek support to research and develop knowledge, reflect and evaluate situations and think autonomously, rather than to simply gain factual knowledge. Therefore, the role of the HEI in work-based learning is to help the learner 'translate' their prior and current achievements, beyond the classroom into a discourse whereby they can be recognised by the academic community (Walsh, 2008).

The final programme design was also pragmatic in a number of ways. First, each partner did what they were good at - Raleigh providing safe but challenging overseas experiences; and Birkbeck providing structure, depth and well regarded accreditation for the students learning, as well as working with an age group and academic level that Birkbeck were most familiar with and geared towards. Second, it was felt that focussing efforts of this audience would be

easier because they are more definable, in terms of prior qualifications, need and desire to learn and gain a qualification, and ability to afford to. Third, it has been designed with specific learners in mind, in terms of - multiple cohorts per year, workshop timing, completion deadlines, distance learning and e-resources, and reduced fees and bursary fund (in the first year at least). In addition, the design allows applications from volunteers who have completed expeditions up to 5 years ago, to enrol and study partly from their retrospective experience. This approach aligns to a great extent with the Hughes *et al.* (2006, quoting Burke and Quinn *et al.*) who argue for more flexible entry, breaks, re-entry points into higher education and the widening participation agenda in particular. In addition, as recommended in the OECD Policy Brief (2007), by combining study with work experience, students are developing knowledge and skills, and therefore their career potential efficiently.

On completion of the design, it was felt that there would be the right balance between: educational purposes and the fun/ adventure/ informal learning of expedition's contexts; the integrity of both partner's traditions and values; course and qualification marketability; study requirements and time commitments; and cost and affordability.

The award has also been designed to hold a unique place in the qualifications offered by HEI and experiential learning providers/ associations. This is because offers already exist to accredit and/or train - adventure/ expedition leaders; general leadership and management skills and knowledge; academic study in related topic areas. But none, that we were aware of in the UK, offered generic learning outcomes and transferable knowledge and skills based on a specific, overseas expedition leadership context. Certainly, for the breadth of professionals Raleigh attract, a generic and transferable qualification was deemed more useful to their academic and career development.

The programme design also complies with the characteristics of good quality WBL set out by Blackwell *et al.* (2001) which are that - all stakeholders understand the underlying intentions; it is meaningful and learning is the goal; there is prior induction and briefing; facilitation of ongoing reflection; low-stakes or formative assessment is used to support the process of learning; students build up evidence and can say what they have learned; and to be taken seriously, it leads to accreditation. In addition, an ongoing memorandum of agreement has been set up so that, as Little (2006) and Walsh (2008) recommend, planning, support and responsibility for success are shared, by both partners.

Challenges – finding a fit

However straightforward the design outcome seemed in hindsight, the reality was a little more difficult. The project faced key challenges in bringing opposing and complimentary worlds together. These included understanding disparate stakeholder viewpoints, including those of the organisations involved but also the different learners. The broad remit brought a plethora of options and ways to progress, and each had to be considered in terms of its fit with the stakeholders' needs, and the purpose of the collaboration.

It's a jungle out there – putting educational traditions together

As outlined earlier, the Raleigh expedition falls within many educational traditions. These overlap, complement and conflict with one another. Add to these, the topic areas of leadership, intercultural learning and global citizenship also had their own their pedagogies, beliefs and practices, and one can be forgiven for feeling confused and a little paralysed.

However, the partners in the collaboration brought to the table their particular strengths and biases, that led to certain challenges.

Birkbeck - Strengths, bias and challenges

Birkbeck had a great track record in high quality provision of part-time education, and therefore the infrastructure, flexibility and mindset required to serve this group. They also brought topic expertise, their excellent reputation as an HEI, and had the ability to accredit programmes of study.

However, Birkbeck is a HEI, so the focus and expertise lay in the foundation to higher degree levels of the education system. So while relatively flexible when compared to other traditional universities, procedures and processes of programme development, design and approval, as well as its cost and fee structure, seemed at times, frustratingly slow to navigate through. Birkbeck was also restructuring and reviewing its new course approval process. As Banim (2008) notes, the culture and language of HEIs does not always match that of business so time, effort and resources are required. Patience and perseverance should be added to these requirements. Fortunately, this collaboration was well supported at a senior level of both organisations, was tied together and funded through the KTP, therefore the time and commitment was embedded to allow issues to be worked through.

However, the long and rigorous approval process did lead to a conservative approach towards assessment design. Throughout the project, it was hoped that methods of assessment would entail a 'portfolio of evidence'- including essays, photographs, video, drawings and presentations. This was in appreciation, as outlined earlier, of the variable academic experience of a significant proportion of prospective part-time learners. However, when the assessment methods had to be defined and stated on proposals, a lower risk strategy of more traditional essay assessments were put forward to help assure approval for an already innovative design. As Burke and Jackson (2007) point out, HEIs are often inherently biased 'essay literaturists' that disadvantage those students from non-traditional educational backgrounds. However, it is hoped that as the programme becomes established, amendments can be made to the design and more flexible assessment methods can be made available to students.

Raleigh - Strengths, bias and challenges

Raleigh also brought to the partnership a strong brand, reputation and history in its respective field. However, though it aims to be accessible to all that fulfil certain entry criteria, it does, like many others, inherently attract certain types of participants to their expeditions more than others. This is due to the cost of its programmes and fundraising targets; its place in the sector and market; and the type and duration of activities it undertakes.

In terms of supporting this new initiative, the challenge will be for Raleigh to continue to systematise its training practices. This is to assure quality and consistency of delivery across the three country locations, so that all students have a similar experience.

Partnership and programme design challenges

As outlined earlier, a key challenge was to develop a solution that did not devalue the informal learning context. This was achieved by developing the optional, work-based or reflective practice design for the volunteer manager cohort. However, at an earlier stage in development, the proposal put forward equated to only half the credits towards a qualification. Members of the educational advisory board gave expert guidance on moving this forward. First, they brought to attention that, for the offer to be viable in the

marketplace, it had to equate a whole qualification, whatever that whole was. Second, they proposed that there was already enough content and learning experience in an expedition to create a full qualification. This guidance was a key moment in the final design.

There was also the challenge of deciding the course fees and financial arrangements within the partnership. The agreed fee entailed negotiating between HEI cost and fee structures, the cost to the student of the expedition itself, student affordability, and the market value of such qualifications. This was resolved by some flexibility by both parties in deciding price, and an agreement whereby each, to keep the ongoing agreement simple, would keep their respective costs and fees separate.

A further strength in the partnership was that the research associate had prior Raleigh expedition experience, as a volunteer and researcher (see Charleston, 2008). This track record within the organisation that endeared a certain degree of trust, gave an understanding of its nuances, and serve as a champion of its 'sacred' values. However, at the same time the associate had less experience of HEIs, so lacked some experience of how they operate, educational policy and academic course design.

Assessing and accrediting the 'sacred' learning

A key challenge in the programme design was finding the appropriate assessment methods to fit the context. This path was muddied by a number of assumptions and beliefs. As outlined earlier, there was resistance within the organisation regarding the principal accrediting the Raleigh learning experience.

Indeed, within the field of outdoor experiential learning, which Raleigh align strongly with, Priest and Gass (2005) note that the Association of Experiential Education (AEE) support accrediting programmes rather than certifying individuals. Where accreditation recognises that a program or institution has met certain predetermined standards of operation; and certification is a process guaranteeing that certain minimum standards of competency had been met or exceeded by an outdoor practitioner, evaluated independently.

The key obstructing assumptions, held by many at Raleigh, and for a time by the researcher was that accreditation 'equals' defining competence, which means observing behaviour 'in the field' to assess competence. Thus, there is a need for set standards, assessors and potential to pass or fail. These assumptions, based on previous Raleigh accreditation efforts, led to a feeling that no-one could envisage an expedition, without significant negative changes to it, being run with staff formally assessing performance with clipboard and checklist in hand. Indeed, how could one committed and hard-working volunteer pass, and another fail? Such ideas were counter to the Raleigh ethos. Such concerns seem to mirror, as Smith (2001) noted, an strong emphasis in the 1990s, on the acquisition of competencies for employee development

A breakthrough came when the researcher realised, and communicated to respondents, that academic study worked differently to these assumptions. Such study was not necessarily about accrediting vocational competence, or fulfilling performance attainment 'criterion' based. Rather it could be about accrediting the knowledge attainment, or 'normative'. Indeed, as Garnett (2008) notes, often the idea of integrating assessment, or credit for placement experience can seem alien and challenging, especially when credits are awarded for learning that arises from it, rather than the experience itself.

In the end, the assessment framework used follows a WBL process outlined by Willis (year) and fits very well with the specific Raleigh context. This framework has an emphasis on individual process and reflection as the primary means of capturing and awarding credit for experiential learning. This individual engagement can be seen as an enactment of a higher level academic process, helping to articulate the questions that learners need to put to themselves and facilitating their demonstration of learning outcomes recognised at HE level.

The benefits of the partnership – greater than the sum of its parts?

First and foremost, it was intended that this collaboration, between the worlds of academia and an international volunteering charity, would benefit the volunteers that give their time, energy and commitment towards worthy aims. In recognition of what they do and learn on expedition they can now put this experience towards a formal qualification to enhance their knowledge as leaders, their careers prospects and their capability to continue to learn through reflective practice throughout their lives. This will then contribute towards developing the labour market in the UK and beyond.

Birkbeck has engaged in a successful KTP partnership (the first for the college) with an expedition provider and gained new knowledge of informal learning contexts that will help influence debate and policy in this area. It is hoped this success will demonstrate a good track record and lead to further KTP funding for other projects within the college. The new programme also helps the college to continue to attract mature graduates back to, and non-traditional students into higher education, which it already specialises in. It is also anticipated that following evaluation of the programme, a postgraduate diploma and a Masters will be developed as progression routes for students, and thus extend these benefits further.

The primary benefit for Raleigh has been the improvement of the educational experiences the venturers, the charities main client group. It made rational sense that the implementation of the accreditation for leaders, will necessitate, by default, improvements for those whose learning they facilitate. This is because the leaders will have a greater focus and structure to their own learning opportunity and therefore more aware of the same for the venturers. In addition, the research process led to the clarification of access and continuation routes for the venturers and the development of clear non-academic award pathways offered to young people in the UK by complementary organisations, i.e. the Duke of Edinburgh Award Scheme.

The partnership has developed Raleigh's pedagogical framework, improved practice and educational outcomes, and has enhanced awareness and credibility of the Raleigh brand, helping to maintain its position as a leading experiential, adventure and service learning provider. The initiative contributed to the broader strategic goal of developing its vision and mission, better understanding itself and a repositioning within some of the sectors it is part of. It is also anticipated that this will help directly attract more and new highly capable recruits to its volunteer leader roles.

A final benefit has been the contribution to the field of education. As Burke and Jackson (2007, p214) comment, *"Formal, nonformal and informal learning are all interwoven"*, and this collaboration has demonstrated that they can be coherently brought together to enhance the experiential learning experience and what can be formally gained from it. This supports the arguments for the value and practice of learning beyond the classroom.

Conclusions

This paper has demonstrated that, with the wind in your favour, or with sound collaboration, innovation, in this case through Knowledge Transfer Partnerships - the formal and informal can be brought together for the benefit of the learner and the institutions. Part-time education then, can extend beyond the boundaries of evening and weekend classes, or traditional work-place settings, and those students those of relevant for, new contexts and situations, in this case experiential learning on international volunteering expeditions. As Burke and Jackson (2007) note, the lifelong learning agenda, within the UK and further, is synonymous with skills-based vocational learning for full-time 18-30 year olds. This initiative then, has made a small step towards reclaiming and reconceptualising the social purpose of adult education and lifelong learning, by presenting a pathway whereby due credit for experiential learning fits into the needs of adults. Indeed, this award gives new structure, support and incentives to a cohort of learners *"To engage in citizenship"*, said Friere, we must develop *"the ability to observe, to compare, and to evaluate, in order to choose, through deciding, how one is to intervene in the life of the city"* (quoted by Jackson, 2007, p212).

Moving beyond the knowledge transfer partnership, ongoing collaboration hopes to support further research to investigate the learning and impact gained by those that undertook the new award, and those that did the expedition but not the award. Furthermore, based on the current programme design - lower level, foundation to graduate courses may be developed to expand the opportunity both to the younger adult group, and those volunteer managers without or with low formal qualifications or relevant experience.

To close, when the informal learning voices spoke of concern for the sacred, it is fitting to review the etymology of the word 'education'. Derived from *educare* (Latin) *"bring up"*, which is related to *educere* *"bring out"*, *"bring forth what is within"*, *"bring out potential"* and *ducere*, *"to lead"* (Etymonline, 2010), the exact reason the academic and adventurer walked into the jungle together.

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Automatic Cloze Generation based on Cross-document Information Extraction

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Abstract

Most of the previous work on cloze prediction focused on grammar testing such as preposition generation. In this paper we explore a different problem on knowledge testing by designing a system to automatically generate blanks for cloze test. We present a cross-document Information Extraction (IE) driven approach, and compare its performance on two different tasks with and without background documents respectively. Experimental results show that compared to traditional approaches, our method can significantly save time for educators in designing high-quality cloze tests.

Keywords— *cloze generation, cross-document information extraction*

1 Introduction

A cloze test is a traditional exercise consisting of a portion of text with certain words removed, where the student is asked to replace the missing words (Taylor, 1953). Cloze exercises have a variety of uses in e-learning, including testing and developing reading, vocabulary, grammar, or listening skills. Cloze generation has been an effective educational instrument for the following two purposes: (1) measuring language proficiency for a second/foreign language learner (Oller, 1973); (2) measuring reading comprehension (e.g., Fotos, 1991; Jonz, 1991). Cloze test scores were proven to correlate highly with other language test scores. However, it's time consuming for the teachers to manually make blanks and evaluate answers.

Automatic cloze prediction methods could greatly help the students to capture and organize the main content (what/who/when/where/how/why questions), and also provide baselines for the teachers to design questions. It has been widely assumed by language professionals that cloze tests are testing an underlying "grammar of expectancy", the capability of individuals to synthesize and analyze sequential linguistic elements in realistic contexts of use. Therefore most of the previous research on automatic cloze generation focused on the above purpose (1), namely on evaluating grammatical blanks based on simple techniques, such as every n-th word (e.g. 6th or 7th word) or part-of-speech tagging. In this paper we focus on a more chal-

lenging task in order to address the purpose (2), namely to generate semantically informative and salient blanks. We apply state-of-the-art cross-document Information Extraction (IE) techniques (Ji et al., 2009) to detect important facts from each learning article, and incorporate additional features including background knowledge for cloze generation. The novel contributions of this paper are as follows:

- the first attempt to generate cloze based on IE techniques;
- imitate human learning by exploiting background knowledge in cloze generation;
- investigate the impact of our approach on different learning levels;
- propose a new evaluation metric of cloze prediction based on browsing cost.

2 Task Definition and Baseline Systems

The subjects for cloze test are usually chosen based on the target learning groups. For example, the cloze test articles for high school students focus a lot on the biography facts of historical figures and scientific facts, while elementary school materials focus on basic world knowledge such as geographical facts. Two examples are presented as follows.

[Cloze Test for Elementary School Students]

There are 12 months in a year.

The months are January, February, March, April, May, June, July, August, September, October, November, and December.

There are about four weeks in each month and 52 weeks in a year.

There are seven days in a week.

The days are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

New Year's Day is January 1st.

[Cloze Test for High School Students]

John Adams (1735 - 1826) was the second President of the United States of America.

He was President from 1797 until 1801. His Vice-President was Thomas Jefferson.

John Adams was born in Quincy, Massachusetts. His father was a farmer.

Adams was a delegate to both the First and Second Continental Congresses, and helped write the Declaration of Independence. In 1789, Adams was elected the first Vice-President of the US, serving two terms under President George Washington.

Adams was elected President in 1797, barely beating Thomas Jefferson, who became his Vice-President. John Adams was the first President to live in the White House; his family moved there in 1800.

John Adams died on July 4, 1826, the 50th anniversary of the signing of the Declaration of Independence. Thomas Jefferson had died earlier that same day. They were the only two signers of the Declaration of Independence that were elected President of the USA.

Usually a collection of candidate words, called “word bank” is provided to the students to fill in the blanks.

Many blanks can be covered by IE output. The goal of our task is to generate the word bank automatically using IE approach. There are generally two different types of cloze tests: (1)

using background documents; and (2) not using background documents. The mode (1) aims to imitate the procedure of human learning – a student learns a long article from the book and is asked to take a quiz on a shorter summary after the class. In this paper we will conduct experiments in both settings and compare the results.

For comparison we will apply the following baseline approaches for cloze generation.

- Extract all content words as blanks; in this paper we apply the Stanford English part-of-speech tagger (Toutanova and Manning, 2000) to extract all nouns, verbs and adjectives;
- Extract all prepositions as blanks using the part-of-speech tagger;
- Extract words randomly;
- Extract every-seventh words;
- Extract top N most frequent words.

3 IE based Cloze Generation

As we can see most of the baseline approaches are based on shallow processing, so we need deeper understanding on the texts in order to generate cloze in a more reliable way. Although the candidate blanks generated by teachers vary a lot based on different topics and learning levels, most of them involve facts (entities, time expressions, relations, events, etc.) which can be detected by IE techniques.

3.1 IE Approach Overview

We apply our English cross-document IE system (Ji et al., 2009) to extract facts from texts. They were developed for the NIST Automatic Content Extraction Program (ACE2005). ACE defined 7 types of entities (persons(PER), geo-political entities(GPE), organization(ORG), facilities(FAC), weapons(WEA) and vehicles(VEH)), 18 types of relations (e.g. “a town some 50 miles south of Salzburg” indicates a located relation.), and 33 distinct types of relatively ‘dynamic’ events (e.g. “Barry Diller on Wednesday quit as chief of Vivendi Universal Entertainment.” indicates a “personnel-start” event). The IE pipeline includes name tagging, nominal mention tagging, coreference resolution, time expression extraction and normalization, relation extraction and event extraction. Most of these components are learned based on Maximum Entropy Models incorporating diverse features from lexical processing, part-of-speech tagging, syntactic parsing, dependency parsing, semantic role labeling and domain knowledge. We produce the head words of entity mentions, relation and event arguments, context words in relation mentions, time and value expressions, and event trigger words as the blank candidates.

3.2 Inference Constraints

It’s noteworthy that there are other characteristics about cloze generation that need to be taken into account. Ideally the answer of a blank cannot be inferred easily from the words in the same article. For example, if “John Adams” appears as the central topic of an article, then it’s not appropriate to remove one instance of “Adams” as the blank. Therefore, selecting informative words themselves is not sufficient. After we extract candidates from IE output, we apply the following filtering steps in order to match this constraint.

- If the number of mentions (other name strings, noun phrases or pronouns) referring to a name is larger than 8, delete this candidate name;
- Delete all pronouns, stop words and suffix words from the candidate set;

- If an event trigger has a lot of synonyms in the same article, delete it from the candidate set;
- For any event mention, only keep the trigger word and head words of event arguments;
- For any relation mention: only keep head words of arguments and intervening words;
- If there are background documents, remove any candidate blanks that appear fewer than 6 times in the collection of the target document and background documents.

4 Experimental Results

4.1 Data and Evaluation Metric

We derive our test data from the following two sources:

- Online data set: 59 documents from the e-learning website (<http://www.enchantedlearning.com/>), including 894 tokens in the word bank and 14618 tokens in the corpus. The word bank was provided by the website.
- Offline data set: 12 summary documents, with each document associated with 10 background documents from the NIST TAC2009 Summarization task (Dang and Owczarzak, 2009). The summary documents include 5175 tokens, and the word bank includes 155 tokens. Each word bank was annotated by two annotators in parallel and adjudicated at the end.

For each document our system will generate the same number of blanks as the word bank. We apply the Browsing Cost measure in (Ji et al., 2009) to evaluate our approach of cloze generation:

- *Browsing Cost* (i) = the number of incorrect blanks that a user must examine before finding i correct blanks (which match the word bank).

4.2 Overall Results

Figure 1 summarizes the browsing cost results for cloze prediction on the online data set. Figure 1 indicates that among all the baselines, the content word based approach achieved the best results. It's not surprising that the preposition based approach performs poorly because our cloze test does not specifically target at grammar checking. The baselines based random selection and every-seven-word performed almost equally.

23 correct answers are extracted by IE but not by the content word based method, including 18 numbers, 3 prepositions, 1 adverb and 1 pronoun. Since the content words only include nouns, verbs and adjectives, all of the other words that have different part-of-speech tags are missed by the content word deletion baseline. But some important pronouns and prepositions are part of entity mentions, and some numbers are part of time expressions or values. Therefore our IE-driven approach can successfully cover all of them. For example, 13 numbers indicate years which are considered as important facts by the teachers during cloze design. For example, in the following text, two numbers are chosen as blanks:

In 1947, Robinson played his first major league baseball game (he played for the Brooklyn Dodgers in an exhibition game against the New York Yankees).

...
Robinson was born in the year 1919 in Cairo, Georgia.

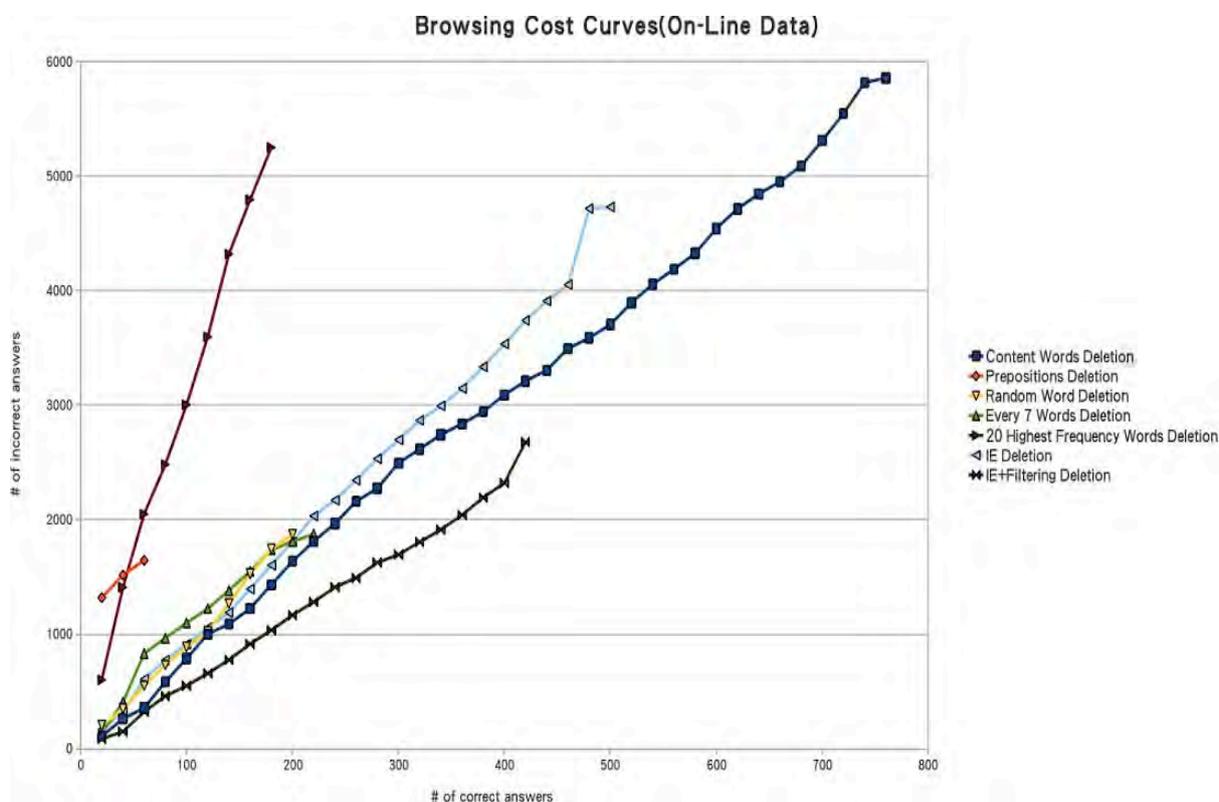


Figure 1. Browsing Cost of Cloze Prediction for Online Data

The IE approach itself did not perform better than the content word based approach in terms of browsing cost. However, after applying the filtering steps described in section 3.2, our method achieved much better results than any baseline – a user needs to browse much fewer incorrect blanks before seeing any number of correct blanks. In total IE with filtering can cover 53% of the correct answers. Each filtering step can filter many incorrect answers. Especially the frequency based filtering steps successfully removed 321 frequent but incorrect candidates. For example, in the following text, obviously “George Washington Carver” is the central topic of the article and IE approach can identify all instances. But they cannot be selected as blank candidates because the students are expected to learn other facts about this person. Our frequency based filtering steps can remove these candidates, because the name “Carver” appears 8 times and there are 7 pronouns referring to it.

***George Washington Carver** (1865?- 1943) was an American scientist, educator, humanitarian, and former slave.*

Carver developed hundreds of products from peanuts, sweet potatoes, pecans, and soybeans.

His discoveries greatly improved the agricultural output and the health of Southern farmers .

Before this, the only main crop in the South was cotton.

*The products that **Carver** invented included a rubber substitute, adhesives, foodstuffs, dyes, pigments, and many other products.*

***Carver** was born in the state of Missouri and was sickly as a child .*

*He was orphaned when **he** was young, and was brought up by Moses and Susan **Carver** on their farm .*

*He began school at age 12 and later attended Simpson College in Indianola, Iowa, where **he** was the first black student.*

He transferred to Iowa Agricultural College to study science, earning a Bachelor of Science degree (in 1894) and a Master of Science degree in bacterial botany and agriculture (in 1897).

He then became the first black faculty member at that college .

*Booker T. Washington convinced **Carver** to teach at the Tuskegee Normal and Industrial Institute for Negroes (now called Tuskegee University) in Alabama, USA, where **Carver** headed the agricultural department for 50 years.*

***Carver** donated his life savings to a fund designed to encourage agricultural research.*

4.3 Impact of Using Background Documents

In Figure 2 we show the impact of using background documents in the IE driven cloze prediction approach. We can see in general the background documents provided positive gains in improving the quality of cloze generation. In order to check the robustness of using background document, we conducted the Wilcoxon Matched-Pairs Signed-Ranks Test to compare these two curves in Figure 2 for all the points. The results show that we can reject the hypothesis that the improvements using background documents were random at a 98.4% confidence level. To conclude it is important to imitate the procedure of student learning in automatic cloze prediction. If a word is salient and informative in the background documents, it's likely to appear as a blank in the cloze test because it may be some knowledge that the teachers expect the students to learn and memorize. For example, after we remove all the event trigger candidates that appear fewer than 6 times in the collection of the target document and background documents, we can remove 69 incorrect answers while only lose 2 correct blanks.

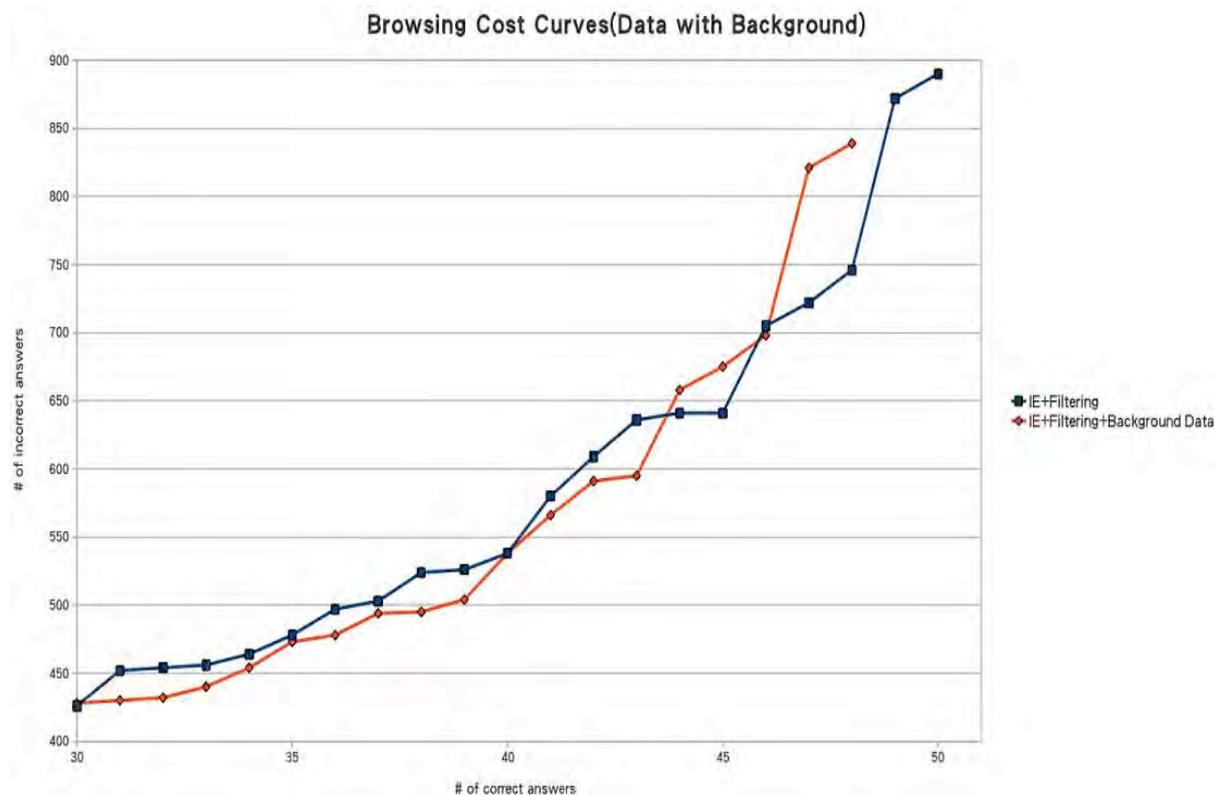


Figure 2. Impact of Using Background Documents in IE-driven Cloze Prediction

4.4 Impact of Learning Levels

The IE-driven approach generally performed better than all the baselines on all the learning materials we have collected. But we have noticed that our approach is more advantageous on materials from advanced levels such as high schools. Figure 3 shows the results on learning materials from elemental schools. It indicates that although IE-driven approach can save a lot of browsing costs for the top 20 correct blanks, it tends to reach an upper-bound on recall. In contrast, the content word based approach is able to generate much more correct blank candidates. The main reason is that the learning materials from low levels don't involve sophisticated knowledge that can be covered by entities, relations and events. For example, in the following article for elementary school students, IE does not produce any facts while the content word based approach can cover all the blank candidates:

*Apples are a type of widely-cultivated fruit that grows on trees.
 An apple tree can grow to over 35 feet tall.
 Each spring, an apple tree produces pink and white flowers.
 After a blossom has been pollinated (fertilized), an apple develops.
 Inside each apple are small, brown seeds, which can grow into new apple trees.
 Each fall, apple trees lose their leaves - they are deciduous.*

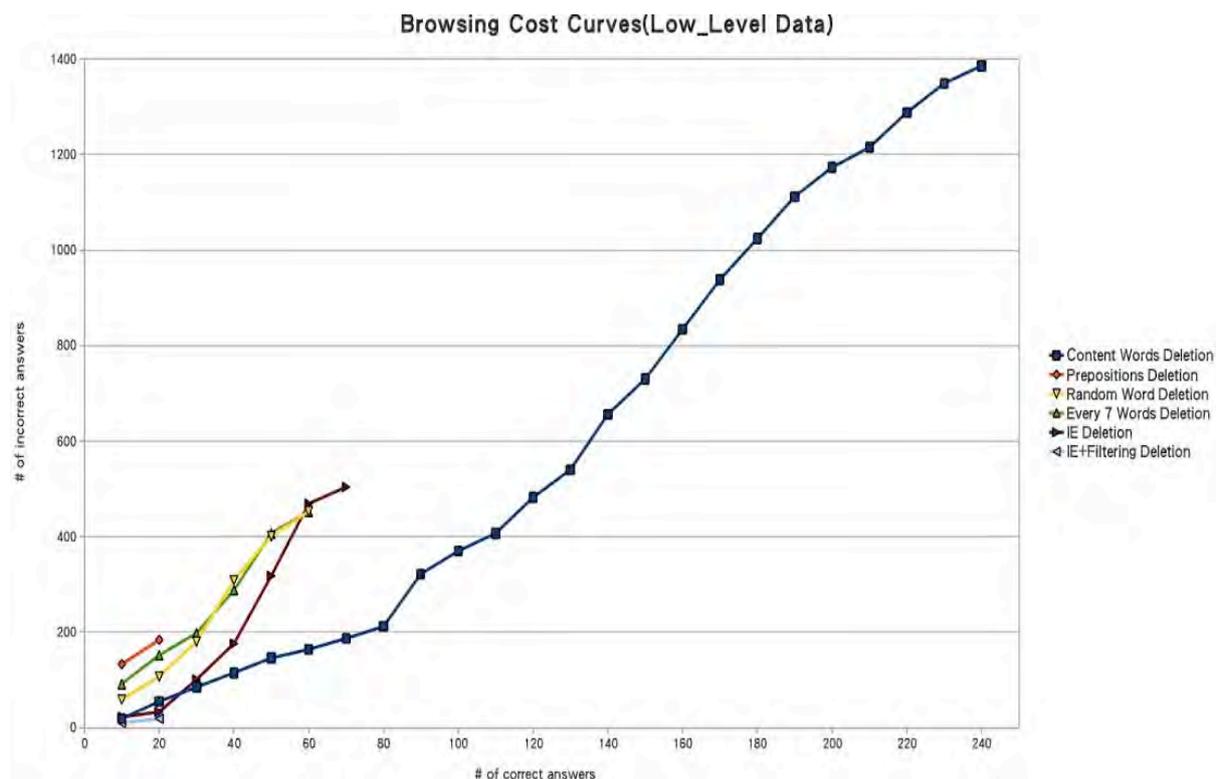


Figure 3. Browsing Cost on Low Level Learning Materials

5 Related Work

Lam et al. (1992) concluded that the random word deletion and preposition deletion methods are suited to measuring the perceptual process of English language use. Sachs et al. (1997) further proved that content word and preposition word deletion methods can produce more reliable tests than the random approaches. (Chen et al., 2006) used manually-designed patterns to generate testing questions. In this paper we took a further step and proposed an IE-driven approach that can achieve much better results than these traditional cloze generation methods. Coniam (1997) also proved that if a word appears very frequently in an article, it's likely to indicate the central topic and thus not likely to be chosen as a blank candidate. In our previous work (Ji and Grishman, 2008) we demonstrated background documents can be exploited to improve IE performance.

A lot of other work focused on using cloze tests for grammar checking. Most of the features used for these previous methods were derived from part-of-speech tagging and parsing. For example, (Lee and Seneff, 2007) proposed two methods, based on collocations and on non-native English corpora, to generate distractors for prepositions. (Sumita et al., 2005) used part-of-speech tagging based cloze generation as the first step for question generation. Some systems (e.g. Mitkov and Ha, 2003; Goto et al., 2009) can generate multiple choices to test the students' abilities at filling in the blanks.

6 Conclusion and Future Work

We described a novel approach of using cross-document IE techniques to predict blanks in cloze tests, and demonstrated how filtering methods and background documents can be exploited to enhance the performance. This approach is able to capture the semantic content embedded in learning materials, especially those for high school students, and produce high quality blanks. Most of the previous work on cloze generation focused on grammar testing, we hope our work can provide a shared task definition and a new evaluation metric for other researchers who are interested in studying the cloze tests for evaluating reading comprehension. In the future we intend to extend our work to automatic answer generation and scoring for cloze tests. We will also gather more labeled data so that we can adapt our IE system to cover broader types of domain-specific facts (e.g. extended named entity types such as “Dinosaurs” in the biology domain).

Acknowledgement

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Appraisal Computer Programming Language based on Visualization

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Abstract

Writing computer programs needs understanding the problem to be solved, then knowledge for one of the computer languages to use it in implementation; writing the code required, understanding how each statement or instruction works while running the program. Novices' learner need more information to easiest the imagination of coding steps and then improvement of their skills. Visualization procedure helps them to achieve this goal.

A novel approach of visualization program algorithm learning (VISPAL) is discussed in this paper by implementing program tool that gives the user the full explanation of how the computer works internally, and how the input(s), processes and output(s) are taken over by the computer, as well as providing the proper algorithm that can help in writing the code in any computer language. This approach is done through an interactive interface according to the user needs.

1- Introduction

The programming languages are developed to provide the necessary tools appropriate to the need of the new technology in the computer science. Earliest programming languages were unstructured and had so many jump statements. Later on, languages became structured and new versions of earliest languages were appeared. Finally, the languages were developed from object oriented concepts to visual languages.

Teaching the programming languages to the computer science students pursue these development. Most of the teachers realized that novice students have difficulty in understanding programming concepts. So teachers always try to find the proper method of teaching to easiest the understanding which leads to write programs easily.

Visualization had proven as useful and helpful tools to the novice programmers [1]. One of the visualization available language is "VILLE" it's an independent program visualization tool providing an abstract view of programming. This tool can be used in lectures and for independent learning. It can also be used to create and edit programming examples, and to observe events in the example during their execution. It has a built-in syntax editor with which teacher can add new programming examples to the tool or modify the syntax of built-in languages [2].

Laakso et al have developed VILLE tool with the addition of a built-in pseudo language where user can add programming examples written in Java and translate them to other languages. The user can as well define his own pseudo languages and modify the existing syntaxes [3]. The methods to enhance the development of accurate mental model include: designing the interface so that users can interact actively with it; using metaphors and analogies to explain concepts, and using spatial relationships so that users can develop

capabilities for mental simulations [4]. J-C. J. Jehng et al results of their study indicated that schematic-based pictorial notations helped students to form a better conceptual framework for learning the concept of recursion [5].

2- New approach - VISPAL tool

A novel approach is discussed in this paper which concentrates on the concepts of programming language through an interactive method between these tools and the learner.

Visualization Program Algorithm Learning (VISPAL) is a visualization program tool, which can interact with the learners to follow the input, process and output steps, and according to that the VISPAL execute, visualize the intermediate and final results to the learner, and supply him/her with the necessary algorithm. The main purpose of VISPAL is to support the learning process to novice programmers.

2-1 VISPAL features

The VISPAL has the following features:-

2-1-1 level of abstraction

One of the most important aspects of VISPAL is the ability to view the different stages of program execution observing these stages give the user the basic functionalities of the programming. It is most important for novice programmer to learn, what are the different programming concepts? Usually VISPAL works independently of any syntax for any programming languages.

The role of information of variable is integrated into the code line explanation according to Sajaniemi and Kuittinen (2003), the role information of variables help learning and improve understanding of the program [2].

2-1-2 User Interface

VISPAL user interface consists of the following separate windows:-

1- Main Window

Once VISPAL starts, the main menu is loaded with following options as shown in Figure 1:

- a-** Start Visualization
- b-** Exit: Used to end the session.

2- Dialog Window

Based on learner selection, a dialog window is displayed which request more information according to the selected option.

3- Visualization Windows

Different visualization windows are available with the VISPAL; each window contains many visualized boxes or texts helping the learner to understand the actual steps followed in executing the program, in each executing step VISPAL waits to get the user command to move to the next step.

2-2 VISPAL Example

- Main Menu

- Selection of start visualization option , a submenu is displayed:

- Arithmetic expression
- IF statement
- LOOP



Figure -1 Main Window and Start visualization is selected

- **Arithmetic Expression**

The user will learn the operators' priority and the actual steps and tasks taking place inside the memory during the execution of the expression. The following example explains the steps followed by the VISPAL tools for the arithmetic expression: “X1- X2 * X3 + X4 * X5”
The execution of the operators will follow the sequence *, - then +
Assume the values for X1, X2, ...X5 are 7,2,5,4,1 respectively, then the expression is = 7 – 2 * 5 + 4 * 1 , based on the above operator precedence the result is = 1.

1. VISPAL asks the user about the number of values to be calculated then based on his/her answer a number of empty boxes will be displayed. See figure 2 below

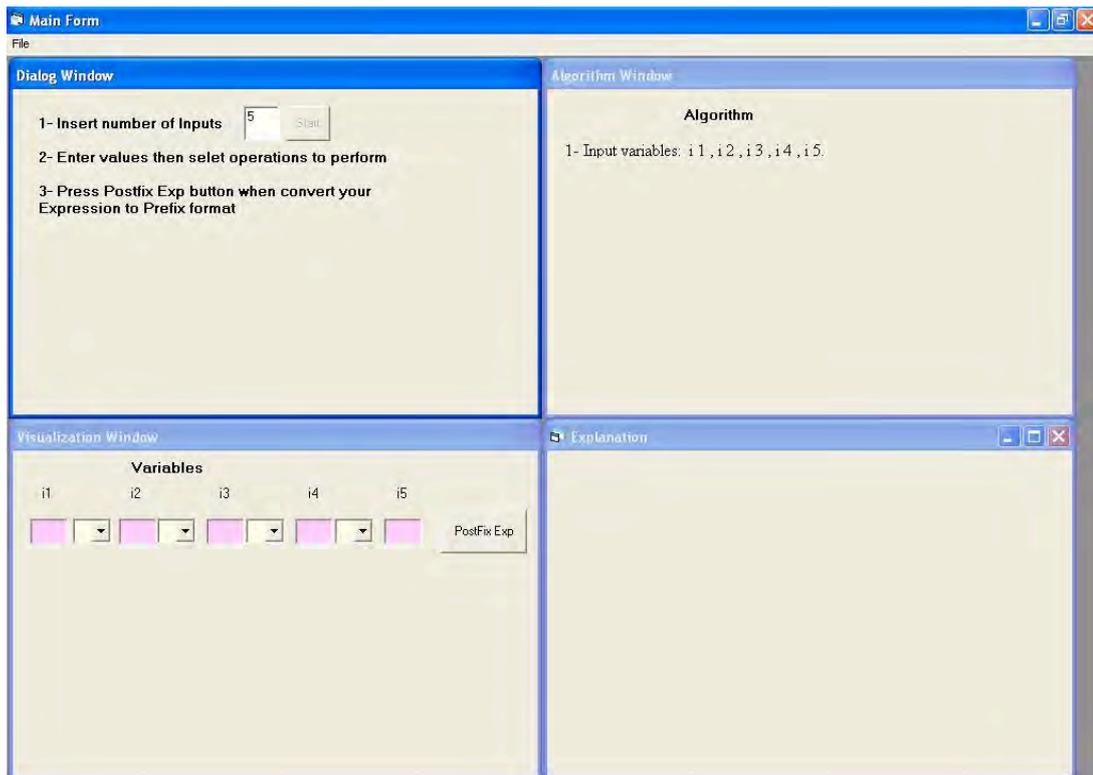


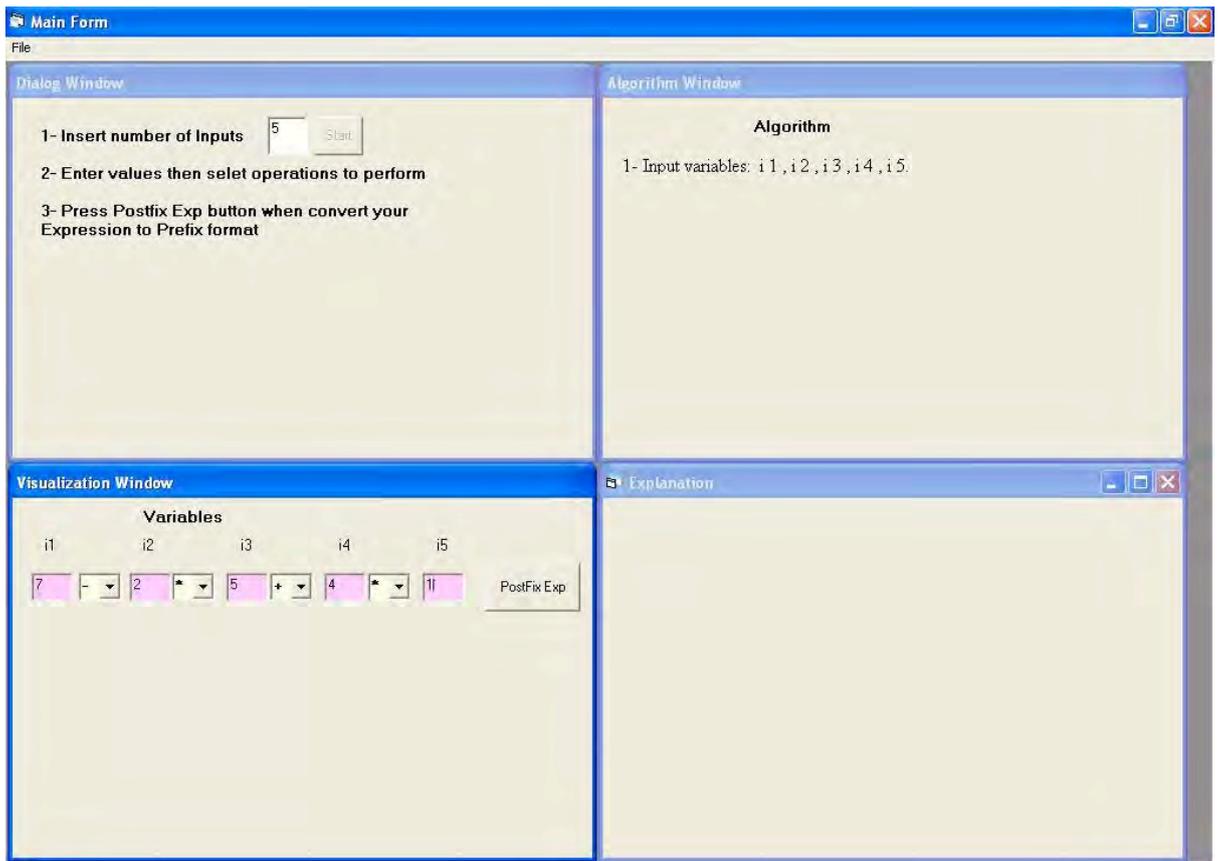
Figure -2 Arithmetic expression windows

Dialog Window – number of inputs = 5

Algorithm Window – 5 input variables are required

Visualization Window – 5 empty boxes are displayed

2. The arithmetic operators and brackets are displayed as list between the boxes. After that the user can enter values, and choose the brackets and the appropriate operators. The role of VISPAL is to display the expression in postfix format and show the user how the execution done by the computer step by step.



- Figure -3 Visualization window contains the user values and selected math. operators
3. VISPAL displays the first priority operator to be executed

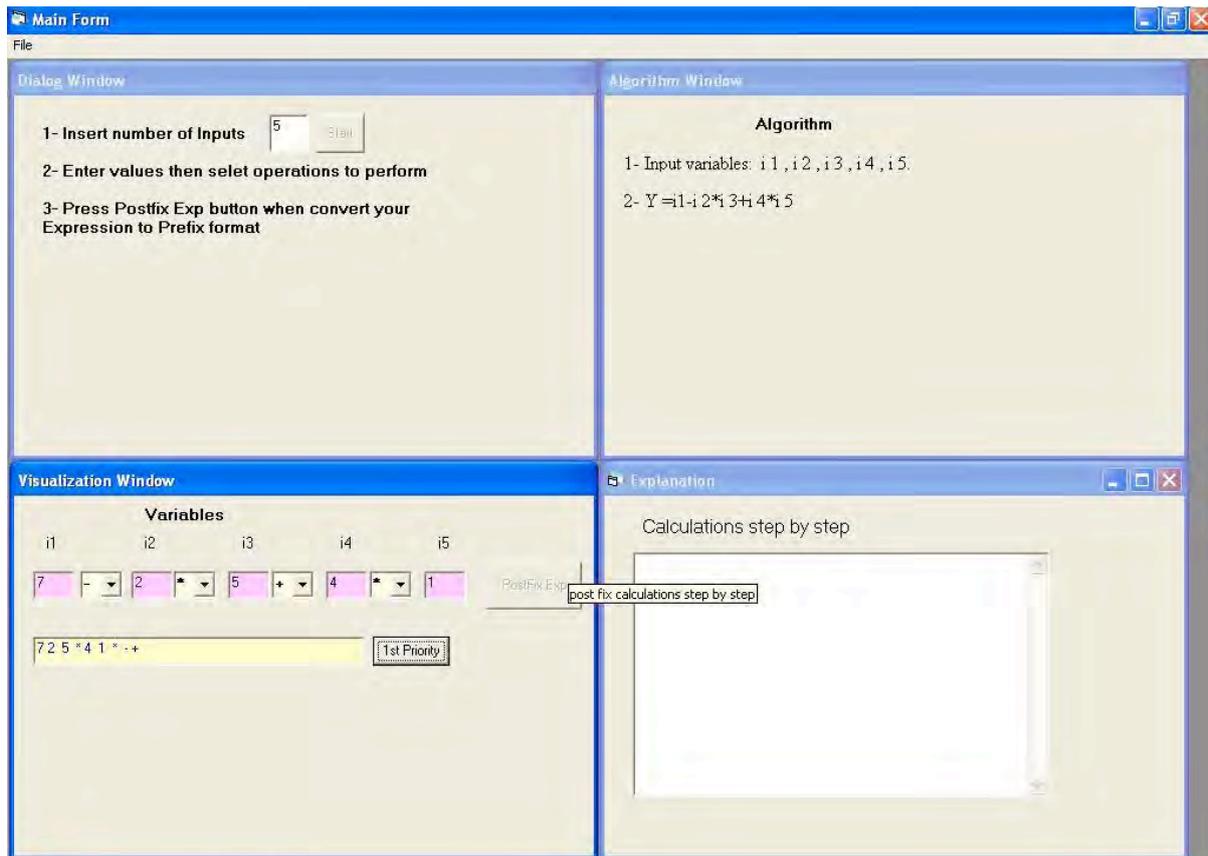


Figure – 4 displays the postfix arithmetic expression of the learner request.

Visualization window - displays operators precedence

4. VISPAL explains the execution of each step accompanied with intermediate results until getting the final result, and the execution of steps is forwarded according to the interest of the user. Finally, VISPAL provides the user with the necessary written algorithm.

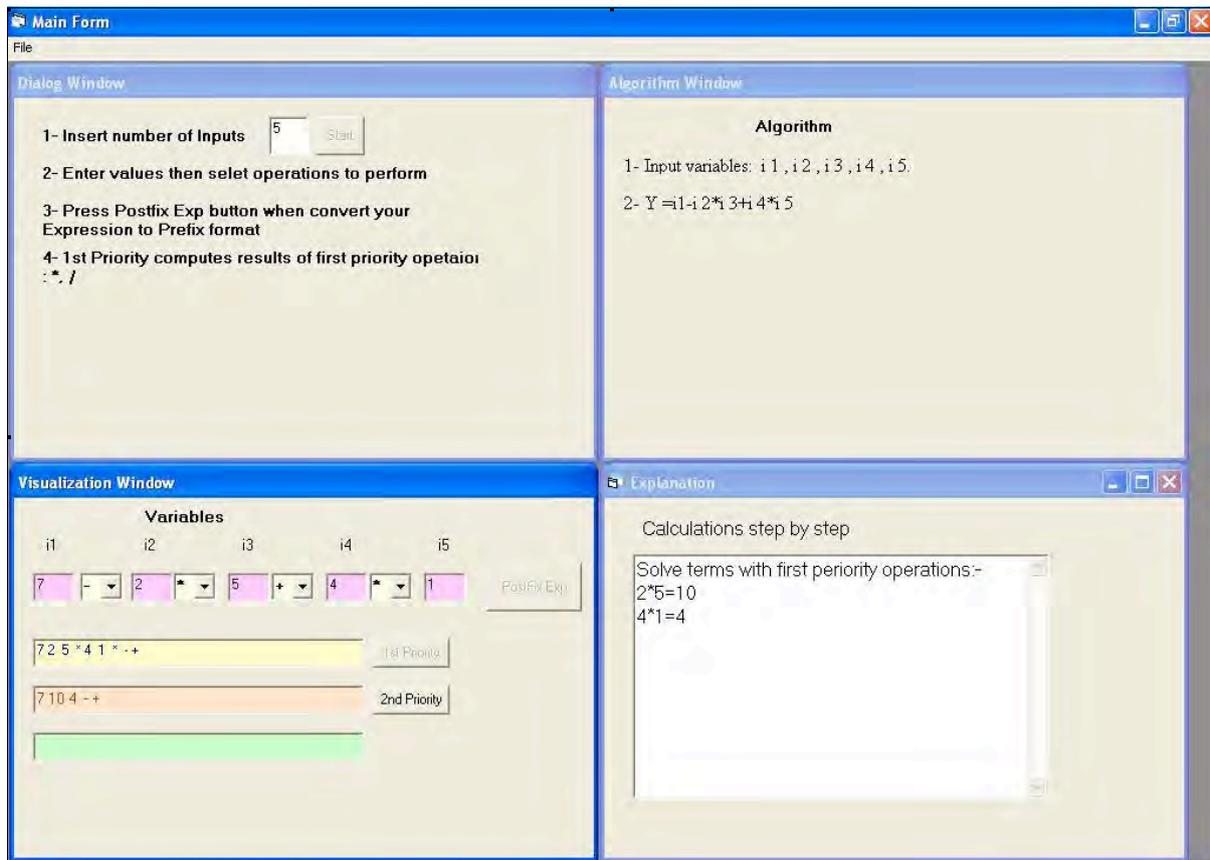


Figure – 5
 Dialog Window – display explanation of the order of arithmetic steps
 Visualization Window - displays intermediate result of calculated terms according to the operators' priorities

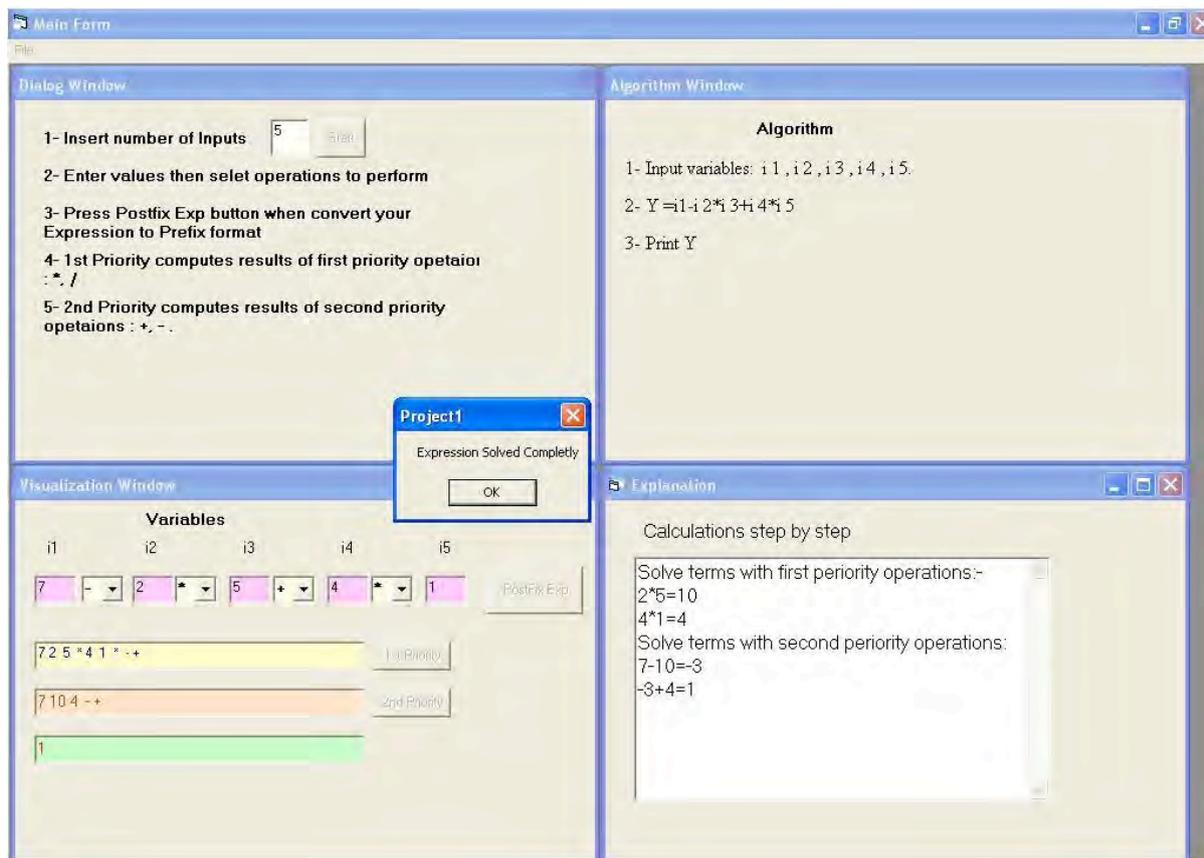


Figure – 6
 Dialog Window – display explanation of the next arithmetic steps
 Visualization window - displays final result

- **IF statement**

VISPAL asks the user to fill the condition after displaying two empty boxes and list of Boolean operators between them; the user will be asked about the statements to be executed when the condition is true or false.

VISPAL will give an explanation for each executed step and how the decision is taken in case of true or false condition. Based on the former decision, VISPAL will proceed to the proper direction for the next statement to be executed.

- **LOOP**

The explanation of looping requires input from the user to enter the constraint on a counter or specifying a condition. The VISPAL displays the value of a variable in each step and this loop is applied to accumulate the numbers so the VISPAL in each step displays the actual value of the counter and the accumulated value. The process continues until the given condition becomes false.

This can be improved in future by implementing the instructions upon learner request that constitute the loop body.

Finally, VISPAL displays the algorithm in case using **FOR or WHILE** statements.

3. VISPAL facilities:

VISPAL has the following facilities which support the user understanding:

1- Forwards and backwards control

The user can move one step at a time in both directions, forward and backward, through the execution of a program. With each step the events occurred internally becomes visible to the user.

2- Tracing execution

VISPAL can explain the execution of each statement to the user. and visualize the intermediate values while running the program , VISPAL supplies the user with the required explanation in the visualization window .

4. VISPAL vs VILLE

VISPAL and VILLE are applications that can trace step by step a program execution and that helps the students to interpret events in the executed code line, but there are some differences between them summarized as follows:-

1- From the language perspective, VILLE support Java, and a user definable pseudo-language. VISPAL is written in VB and the user doesn't need to be familiar with any programming languages.

2- VISPAL uses graphical symbols to visualize changes in variables states and the execution of a single statement is presented with more details than VILLE, which presents variable states in textual form.

3- VISPAL support user interface to get user requirements where it's not possible in VILLE. However, with VILLE questions are asked during program execution, which is not possible in VISPAL.

5. Conclusion

Visualization had proven to be a useful tool for novice programmers. It helps them to configure a mental image for each step and hence makes it easier to understand the algorithm. In this paper, a prototype tool VISPAL is developed to help programming learners understand the basic programming algorithms regardless of the used programming language. It provides visualization for arithmetic expressions, If statement, loops and arrays. The learner selects the required algorithm, feeds VISPAL with inputs and follow the steps that are shown in details

until the final result is obtained. VISPAL also displays the algorithm written in a natural language that can be easily converted to any programming language.

As a future work, a proposition for the use of brackets in the arithmetic expression, the left bracket will be displayed on the left of the first box and right bracket to the right of the last box, and can be used many times whenever there is a need to open or close brackets.

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The junior Minimal English Test (jMET) for the 8th and 9th Graders

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1. Introduction

Various tests have been created in order to measure learners' English as a Second Language (ESL) proficiency. However, it takes at least 60 to 180 minutes to administer the majority of them, and it causes a great amount of exhaustion for test takers. At the same time, from the viewpoint of examiners, it is not easy to create these kinds of tests, as each question must be carefully examined with respect to exactly what language proficiency it actually measures. Therefore, more convenient ESL tests are necessary for both the learners and the examiners. In response to this demand, Maki, Wasada, and Hashimoto (2003) developed the Minimal English Test (MET), which is a 5-minute ESL test. The MET was designed to measure ESL proficiency by college students. Then, Maki, Hamatani, Hasebe, Kasai, Goto, and Jessica (2009) created a junior high school version of the MET (jMET 3) for 9th graders.

However, no researcher has developed a version of the MET for 8th graders, and we created the junior Minimal English Test 2 (jMET 2) for 8th graders. In this paper, we investigated correlations between the scores on the jMETs 2 and 3 and the scores on the English part of the second term tests (Term Tests 2 and 3), and found strong correlations between the scores on the jMET and the scores on the Term Test on each grader. Therefore, these findings suggest that the jMETs will enable Second Language Acquisition (SLA) researchers to test hypotheses in SLA by junior high school students in a time-saving manner.

The organization of this paper is as follows. Section 2 shows previous studies, Section 3 provides purpose and research questions, and Section 4 gives an overview of the materials used in this study. Section 5 analyzes the data, and Section 6 provides the results of the analysis. Finally, Section 7 concludes this paper.

2. Previous Researches

In this section, we will introduce the Minimal English Test (MET) and a junior high school version of the MET for 9th graders (jMET 3) based on previous studies. Section 2.1 gives an overview of the MET based on Maki et al. (2003), and Section 2.2 an overview of the jMET 3 based on Maki et al. (2009).

2.1. The Minimal English Test (MET)

The Minimal English Test (MET) was developed Maki et al. (2003). The MET is a five-minute test to measure one's English proficiency, and requires the test taker to fill a correct English word into each blank space of the given sentences written on one piece of A4 paper, while listening to the CD which produces the sentences. The MET contains 36 lines,

each of which has two blank spaces. Therefore, there are 72 blank spaces on the MET, and the full score is 72 points. The MET is based on Lessons 1 and 2 of the textbook for college freshmen by Kawana and Walker (2002) and the CD that accompanies it. Lesson 1 and 2 contains 18 lines each, and between Line 18 (the last line of Lesson 1) and Line 19 (the first line of Lesson 2), there is a three-second interval in the CD. The CD reads out the sentences at a speed of 125 words per minute. Part of the MET is shown in (1).

(1) Part of the Minimal English Test (MET)

Name: _____	Date: <u>Month</u> <u>Day</u> <u>Year</u>	Score: ____/72
<p>Please fill an English word with 4 letters or less into each blank spot, while listening to the CD.</p> <p>1. The majority of people have at least one pet at () time in their ().</p> <p>2. Sometimes the relationship between a pet () or cat and its owner is () close</p> <p>3. that () begin to resemble () other in their appearance and behavior.</p> <p>...</p> <p>35. As for the () young aspirants who do () succeed,</p> <p>36. one wonders if they () regret having () their childhood.</p> <p style="text-align: right;">MET 1</p>		

The Maki Group has found statistically significant correlations between the scores on the Minimal English Test (MET), a 5-minute English test, and the total scores on the English Section of the University Entrance Examinations (UEE) in Japan from 2002 to 2009 (.59<r<.72). Table 1 shows the correlation coefficients between the two scores (See Goto et al. (2010) for the details of the MET).

Table 1: The Correlations Between the Scores on the MET and the Total Scores on the UEE

	UEE							
	2002	2003	2004	2005	2006	2007	2008	2009
Correlation Coefficient	.68	.72	.72	.61	.62	.66	.65	.59
R Square	.46	.52	.51	.37	.38	.44	.43	.35
Observations	154	629	657	600	610	895	563	877

2.2. The junior Minimal English Test (jMET)

Maki et al. (2009) developed a junior high school version of the MET for 9th graders (jMET 3) based on one of the most widely used textbooks used in Japanese junior high schools, that is, *New Horizon English Course 3* by Kasashima et al (2006). The jMET 3 was designed along the rules in (2).

(2) Rules

- a. Every 6th word is left blank in the jMET 3.
- b. Japanese words, years, and unpronounced words in parentheses are ignored.

Rule (2a) guarantees that the jMET 3 has the form of a cloze test, where every 6th word is left blank, no matter how many letters the word may consist of. Part of the jMET 3 is shown in (3).

(3) Part of the junior Minimal English Test (jMET)

Name: _____	Date: <u>Month</u> <u>Day</u> <u>Year</u>	Score: ____/65
<p>Please fill an English word into each blank space, while listening to the CD.</p> <p>1. When you want to () in Japanese restaurants, you usually (),</p> <p>2. “Sumimasen,” in a loud voice. But () America, we just make eye ()</p> <p>3. or raise our hand. So () still have a hard time ()</p> <p>4. Japanese restaurants. I always say, “Sumi ... uh, uh, sumimasen,” () quietly.</p> <p>...</p> <p>36. But she worked () hard and finished it. Some () books that</p> <p>37. she wrote are () Sea Around Us and The () of Wonder. jMET 3</p>		

The jMET 3 contains 7 independent dialogues, which are written in 37 lines. There are 65 blank spaces in the jMET 3, and it takes about 5 minutes to complete it. Subjects are required to write an English word into each blank space of the given sentences, while listening to the CD, which accompanies the textbook. The CD reads out the sentences at a speed of 120 words per minute.

Maki et al. (2009) investigated whether there would be a correlation between the scores on the jMET 3 and the scores on the Second Term Test (STT) which consists of reading comprehension and listening comprehension. They found a strong correlation between the scores on the two tests. Table 2 shows the correlation coefficients.

Table 2: The Correlations Between the Scores on the jMET 3 and the Scores on the STT

	STT		
	Total Scores	Reading Part	Listening Part
Correlation Coefficient	.87	.87	.56
R Square	.76	.75	.31
Observations	171		

3. Purpose and Research Questions

This paper is a further extension of Maki et al. (2009), and examines whether the same tendency will be observed in other junior high school students in Japan. First, in order to verify Maki et al's (2009) result, we used the jMET 3 and investigated whether there would be a correlation between the scores on the jMET 3 and the scores on the English part of the Second Term Tests administered to 9th graders (STT 3). Second, we created a junior high school version of the MET for 8th graders (jMET 2) based on *New Horizon English Course 2*, and investigated the correlation between the scores on the jMET 2 and the scores on the English part of the Second Term Tests administered to 8th graders (STT 2). If the same tendency is observed for a different set of participants, it will provide strong support for their finding. Our hypotheses are shown in (4).

(4) Hypotheses

- a. There will be a strong correlation between the scores on the jMET 2 and the total scores on the STT 2, because both tests are based on the same text book *New Horizon English Course 2*.
- b. There will be a strong correlation between the scores on the jMET 3 and the total scores on STT 3, because both tests are based on the same text book *New Horizon English Course 3*.

4. Materials

This study used four materials: (a) the junior Minimal English Test for 8th graders (jMET 2), (b) the junior Minimal Test for 9th graders (jMET 3), (c) the Second Term Test for 8th graders (STT 2), and (d) the Second Term Test for 9th graders (STT 3), which will be briefly reviewed in turn below.

4.1. The junior Minimal English Test for 8th Graders (jMET 2)

In this study, we created the junior high school version of the MET for 8th graders (jMET 2) based on one of the most widely used textbooks used in Japanese junior high schools, that is, *New Horizon English Course 2* by Kasashima et al (2006). The jMET 2 was designed along the rules in (2) repeated as (5).

(5) Rules

- a. Every 6th word is left blank in the jMET 2.
- b. Japanese words, years, and unpronounced words in parentheses are ignored.

Rule (5a) guarantees that the jMET 2 has the form of a cloze test, where every 6th word is left blank, no matter how many letters the word may consist of. The jMET 2 is shown in (6).

*(6) The junior Minimal English Test for 8th Graders (jMET 2)*Name: _____ Date: Month Day Year Score: _____/63

Please fill an English word into each blank space, while listening to the CD.

1. My name is Cool. I'm fourteen () I live in Korea. I () comics.
2. In Korea they're very (). Are they popular in your (), too?
3. Write me soon. Hi, Cool! () Lucky. I'm in the fifth grade () Thailand.
4. We also like to () comics. We have a manga club () school.
5. Do you know the () manga? I'm Sea. I'm seventeen and I () in China.
6. I know the () manga. It comes from the Japanese ().
7. In 2000 Hong Kong hosted the () Asian Manga Summit.
8. Many people got () to talk about manga culture. I () manga.
9. It can tell us about () cultures. I hope to hear () you soon.
10. Communication is important. () have to speak English.
11. But () don't have to speak perfect ().
12. You're a member of the (). You have to help with () housework.
13. Everyone in my host () is nice to me.
14. But () host mother always gives me () much food.
15. Do I have () eat everything? It's too much () me.
16. You must tell your () mother. Say, "I'm sorry. It's () good,
17. but I can't eat () much." She'll understand.
18. I'm sad. () host family is so busy. () don't take me anywhere.
19. Nana's host () always takes her to interesting ().
20. Carlo, you mustn't compare host families.
21. () can find interesting things around () home.
22. Look around and make () friends.
23. Mike, Kumi broke her arm! She's () the hospital.
24. Let's visit her () you have time.
25. If you () go with me to the (), please call me.
26. A New () Area for Bikes. Midori Park will () a parking area
27. for bikes. () complained when a bike fell ()
28. a little girl (Ishii Kumi) near the ().
29. They asked the city for () new parking area.

30. But some () are against the plan. They () we should keep the park.
31. () park or a parking area – () is the question.
32. I read () the new parking area plan. () is bad news.
33. I am () the plan because we need () parks.
34. I know we have () problem with bikes. But we () keep our parks
35. if we () our habits. Remember that the () taught us
36. an important thing. () can do two things: (1) Walk () we don't
37. have to ride () bikes. (2) Be careful when we () our bikes. jMET 2

The jMET 2 contains 6 independent dialogues, which are written in 37 lines. There are 63 blank spaces in the jMET 2, and it takes about 5 minutes to complete it. Subjects are required to write an English word into each blank space of the given sentences, while listening to the CD, which accompanies the textbook. The CD reads out the sentences at a speed of 118 words per minute.

4.2. The junior Minimal English Test for 9th Graders (jMET 3)

We used the jMET 3 developed by Maki et al. (2009). The details of the jMET 3 were shown in Section 2.2. The full version of the jMET 3 is shown in (7).

(7) *The junior Minimal English Test for 9th Graders (jMET 3)*

Name: _____ Date: Month Day Year Score: _____/65

Please fill an English word into each blank space, while listening to the CD.

1. When you want to () in Japanese restaurants, you usually (),
2. “Sumimasen,” in a loud voice. But () America, we just make eye ()
3. or raise our hand. So () still have a hard time ()
4. Japanese restaurants. I always say, “Sumi ... uh, uh, sumimasen,” () quietly.
5. It's not easy for () to get food. So I () very hungry.
6. My Japanese friend () a different problem. One day () family
7. took him to an () American restaurant. He ate a () and
8. became thirsty. He wanted () water, so he shouted, “I'm ()!
9. I'm sorry!” Everyone in the () stopped eating and looked at ().
10. This is one of the () telephones. It was made in 1876.
11. () is another telephone made in 1877. () is a picture taken

12. about 70 () ago. The people answering the () here are operators.
13. I'm fifteen. () mother says junior high school () shouldn't have
14. cell phones. What () you think? (Mike Davis)
15. I agree with () mother. You can use your () phone or a public
16. phone. () don't understand why you need () cell phone. (T. J.)
17. But it's not () to find public phones in () emergency. (Kaori)
18. That may be true. () people using cell phones sometimes () careful.
19. Some accidents are caused () people using cell phones. (R. B.)
20. Cell () are very useful. But people () understand
21. when and where to () them. (Bird)
22. In my opinion, people () use cell phones in trains () restaurants,
23. and never in school! (Hungry Lion)
24. () is a book I bought () the United States.
25. These are () of the people you can () in it.
26. Choose one and () a report about her or ().
27. Carson was a scientist who () about the danger of farm ().
28. Few people worried about it () the 1950's, but she did.
29. In 1962 () finished her book *Silent Spring*. "() Spring" means
30. "a spring without ()." The book became a best-seller.
31. () was a book that changed () view of nature.
32. Carson was () on farm. She loved nature () her life.
33. She especially loved () sea. When she was a (), she liked to write.
34. Later () wanted to be a writer () a scientist. She became both.
35. () had cancer while she was () *Silent Spring*.
36. But she worked () hard and finished it. Some () books that
37. she wrote are () *Sea Around Us* and *The () of Wonder*. jMET
- 3

4.3. The Second Term Test for 8th Graders (STT 2)

The Second Term Test for 8th Graders (STT 2), based on the textbook *New Horizon English Course 2*, consists of reading comprehension and listening comprehension, and has 50 questions (5 for listening comprehension and 45 for reading comprehension). The full score of the reading comprehension is 90 points, and the full score of the listening comprehension is 10 points. Therefore, the full score of the STT 2 is 100 points. The scope of

the STT 2 is included in that of the jMET 2. The STT 2 was administered in December 2010. The test lasts about 45 minutes. The subjects had been informed of the scope of the test before it.

4.4. The Second Term Test for 9th Graders (STT 3)

The Second Term Test for 9th Graders (STT 3), based on the textbook New Horizon English Course 3, consists of reading comprehension and listening comprehension, and has 50 questions (5 for listening comprehension and 45 for reading comprehension). The full score of the reading comprehension is 90 points, and the full score of the listening comprehension is 10 points. Therefore, the full score of the STT 3 is 100 points. The scope of the STT 3 is included in that of the jMET 3. The STT3 was administered in December 2010. The test lasts about 45 minutes. The subjects had been informed of the scope of the test before it.

5. Analysis

We collected the data from 8th and 9th graders at a junior high school in Aichi prefecture. The details of the participants are shown in Section 5.1, and Section 5.2 provides the procedure of our analysis.

5.1. Subjects' Background

The participants are 8th graders and 9th graders at a junior high school in Aichi prefecture. The jMETs and the Second Term Tests were administered to the participants in December 2010. Table 3 shows the standard analysis.

Table 3: Standard Analysis

		8th Graders	9th Graders	
Observations (Male: Female)		245 (123:122)	232 (130:102)	
Average Age (Age Range)		14.03 (13-14)	14.99 (14-15)	
Average Scores	jMET		24.28	24.41
	Term Test	Listening	5.96	4.75
		Reading	50.73	37.73
		Total	56.69	42.48

5.2. Procedure

We analyzed the data by a simple regression analysis (correlation analysis). The level of statistical significance was $p < .05$ throughout the paper. We follow Yanai (1998) in interpreting values of correlation coefficients. She assumes the correspondence between correlation coefficients and their characteristics shown in Table 4.

Table 4: Correspondence Between Correlation Coefficients and their Characteristics

Correlation Coefficients	Characteristics
$0 \leq r < 0.2 $	almost no correlation
$ 0.2 \leq r < 0.4 $	weak correlation
$ 0.4 \leq r < 0.7 $	moderate correlation
$ 0.7 \leq r < 0.9 $	strong correlation
$ 0.9 \leq r < 1.0 $	extremely strong correlation

First, we examined correlations (a) between the scores on the jMET 2 and the total scores on the STT 2, (b) between the scores on the jMET 2 and the scores on reading comprehension in the STT 2, and (c) between the scores on the jMET 2 and the scores on listening comprehension in the STT 2,. Table 5 shows the results of the regression analyses.

Table 5: Results of Regression Analyses for 8th Graders

	Total Scores	Reading Part	Listening Part
Correlation Coefficient (R)	.88	.87	.62
R Square	.77	.76	.38
Adjusted R Square	.77	.76	.38
Standard Error	8.16	8.39	13.36
Observations	245		
Regression Line	$y=.52x-5.10$	$y=.55x-3.45$	$y=3.76X+1.88$
P-value	2.21E-79	1.91E-76	3.86E-27

We found strong correlations (a) between the scores on the jMET 2 and the total scores on the STT 2 ($r=.88$, $n=245$, $p<.05$), and (b) between the scores on the jMET 2 and the scores on reading comprehension in the STT 2 ($r=.87$, $n=245$, $p<.05$). As for the correlation between the scores on the jMET 2 and the scores on listening comprehension in the STT 2, we found a moderate correlation ($r=.62$, $n=245$, $p<.05$).

Second, we investigated correlations (a) between the scores on the jMET 3 and the total scores on the STT 3, (b) between the scores on the jMET 3 and the scores on reading comprehension in the STT 3, and (c) between the scores on the jMET 3 and the scores on listening comprehension in the STT 3. Table 6 shows the results of the regression analyses.

Table 6: Results of Regression Analyses for 9th Graders

	Total Scores	Reading Part	Listening Part
Correlation Coefficient (R)	.90	.89	.60
R Square	.81	.79	.36
Adjusted R Square	.81	.79	.35
Standard Error	6.64	6.84	12.09
Observations	232		
Regression Line	$y=.57x+.30$	$y=.60x+1.84$	$y=3.85x+6.13$
P-value	4.74E-84	5.15E-81	6.76E-24

We found (a) an extremely strong correlation between the scores on the jMET 3 and the total scores on the STT 3 ($r=.90$, $n=232$, $p<.05$), and (b) a strong correlation between the scores on the jMET 3 and the scores on reading comprehension in the STT 3 ($r=.89$, $n=232$, $p<.05$). As for the correlation between the scores on the jMET 3 and the scores on listening comprehension in the STT 3, we found a moderate correlation ($r=.60$, $n=232$, $p<.05$).

6. Results

Let us now examine whether the hypotheses in (4) were confirmed by the obtained results. Firstly, hypothesis (4a) is reproduced as (8).

(8) Hypothesis

There will be a strong correlation between the scores on the jMET 2 and the total scores on the STT 2, because both tests are based on the same text book *New Horizon English Course 2*.

Hypothesis (8) was confirmed, because there was a statistically significant strong correlation between the scores on the jMET 2 and the total scores on the STT 2 ($r=.88$, $n=245$, $p<.05$).

Secondly, hypothesis (4b) is reproduced as (9).

(9) Hypothesis

There will be a strong correlation between the scores on the jMET 3 and the total scores on STT 3, because both tests are based on the same text book *New Horizon English Course 3*.

Hypothesis (9) was also confirmed, because there was a statistically significant extremely strong correlation between the scores on the jMET 3 and the total scores on the STT 3 ($r=.90$, $n=232$, $p<.05$).

7. Conclusion

The present paper confirmed both hypotheses (8) and (9). Therefore, the results of this study provide strong support for Maki et al. (2009). These findings indicate that as long as the passages in a jMET overlap the materials covered by a term test, the jMET can more or less predict the scores on the term test. Given this fact, if the jMETs are further elaborated through a series of experiments, such as administering it to junior high school students who do not use *New Horizon English Course*, (i) we may be able to acquire for the first time in the field of SLA a 5 minute test that can predict the scores on a general English test for junior high school students that consists of reading and listening comprehension, and that it takes as long as or longer than 40 minutes to administer, and (ii) a version of the jMETs will enable SLA researchers to test hypotheses in pilot studies in SLA by junior high school students in a time-saving manner.

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The Current state and expectation in computer and Internet usability for the data revelation of primary school for the hearing impaired students

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Abstract

The purpose of this research was to study the current state and expectation in computer and internet usability for the data revelation of primary school for the hearing impaired students in Thailand. The subjects were 89 male and 97 female hearing impaired students in primary school, the academic year of 2010 from the Education Hearing Impaired School under the Special Education Elementary Education Department, Ministry of Education in Bangkok and Nonthaburi province. Tools were questionnaires and interview form. Data were analyzed using descriptive statistics. This research was presented in table form, chart form and content analysis passages. The results showed that 99.46% of hearing impaired students can use computer but 59.68% of hearing impaired students can use internet. The 4th – 6th graded of hearing impaired students (51%) can use internet better than 1st – 3rd graded of hearing impaired students. Most of them used the internet for online game, chat, and general information. The 61 % of students would like to use computer for get on explanation of the meaning of written words. The explanation should present information using sign language and illustrations. It gives an opportunity for hearing impaired students to use internet effectively and also get more understanding on content and Thai language.

Introduction

The National Statistical Office Thailand, Ministry of Information and Communication Ethnology stated that in 2009, out of 61.3 million people older than 6, 17.9 million (29.3%) use computers and 12.3 million (20.1%) use the internet. Considering each region of Thailand found that Bangkok was the most of computer usage (45.8%) and internet usage (38.0%). Also 6-14 year old use computers about 65.4% and internet about 29%, 15-24 year olds use computer 55.5% and internet 47.3%. The most popular use of computers is for the internet (46.8%), 33.4% use computer and internet at home and 29.0% computer and internet at office. Computer's activities are searching for information (80.6%), online game 23.8% and e-mail 18.6%. The frequency internet usage is 1-4 days per week (59.8%) then 5-7 days per week (25.4%). (TNSO, 2010)

In addition to above paragraph, the Internet has benefits to hearing impaired people. Deaf persons are not only finding new information by using internet resources but also then learn how to learn? This engagement is crucial for the development of their meta cognition. Meta cognition, i.e. "learning how to learn" largely remains underdeveloped because of limited oral communication skills of the deaf. The two-way interactive nature of the man to machine communication creates ample opportunities to adapt the best route to learning. Once the learning is triggered

with the help of ICT the learning process is accelerated many fold. This intervention must be ensured as early as possible so that the child does not lag behind others in language acquisition. (Hameed., 2007)

This research points to the current state and expectation in computer and internet usability for hearing impaired students. They currently use the ICT for information and media. In the future there can be additional benefits for their education and knowledge.

Objectives of the study

1. To study ICT skills of hearing impaired students
2. To study expectation of hearing impaired students for learning development tools

Method and material

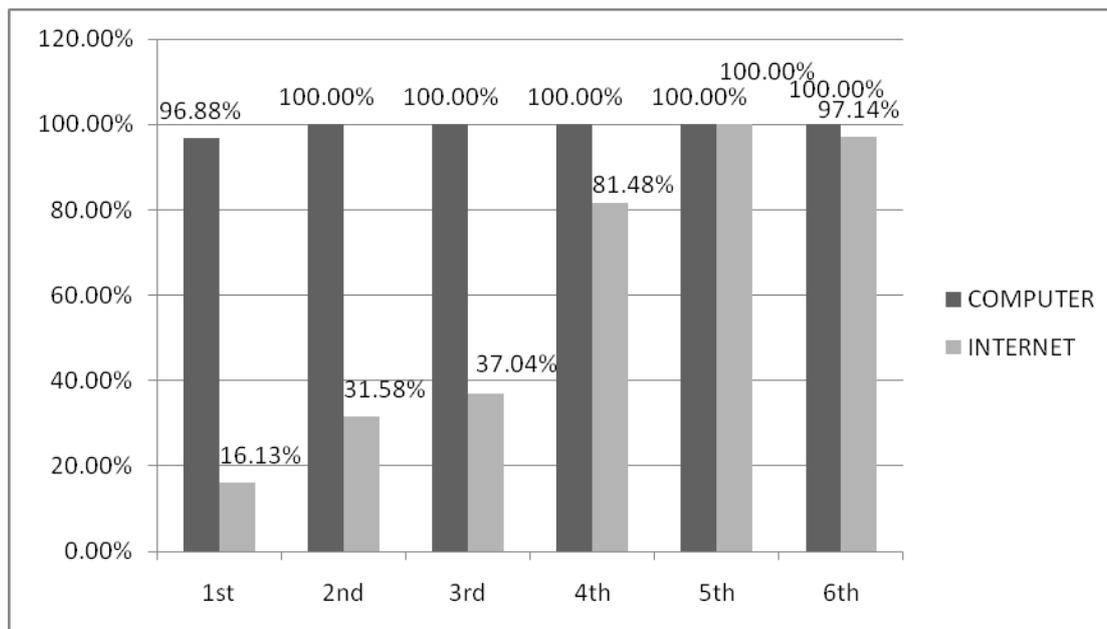
The data were collected from Setsatian school for the deaf under the royal patronage of his Royal Highness Crown Prince Maha Vajiralongkorn, Thungmahamek school of the deaf and Nonthaburi School of the deaf in the academic year of 2010. The sample groups were 186 hearing impaired students (89 male and 97 female). The data is collected from primary students studying in the education hearing impaired school under the special education elementary education department, ministry of education in Bangkok and Nonthaburi province. We used questionnaires and interview form with sign language assistant for the data collection.

Finding

1. Usage of ICT by Hearing Impaired Students in Primary School

Of the sampling group 186 hearing impaired students 185 students (99.46%) can use computers. 111 (59.68%) hearing impaired Students can use the internet. 5th grades of hearing impaired students used the internet the most (100%), 97.14% of 6th grade students used the internet and (81.48%) of 4th grade students used internet. See in figure 1

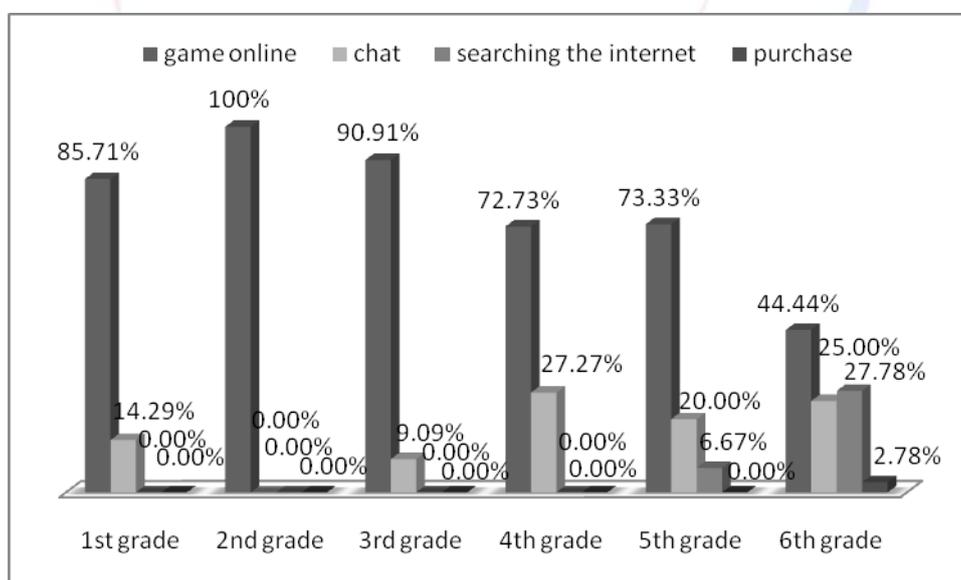
Fig. 1 Show the percentage of hearing impaired students grades usage ICT



2. Activities Using in Computer and Internet of Hearing Impaired Students

59.68% of the hearing impaired students used the internet. Analyzing their activities we found that they were mainly interested in online games and searching the internet. See in figure 2

Fig 2 Shows the hearing impaired students activities while using ICT

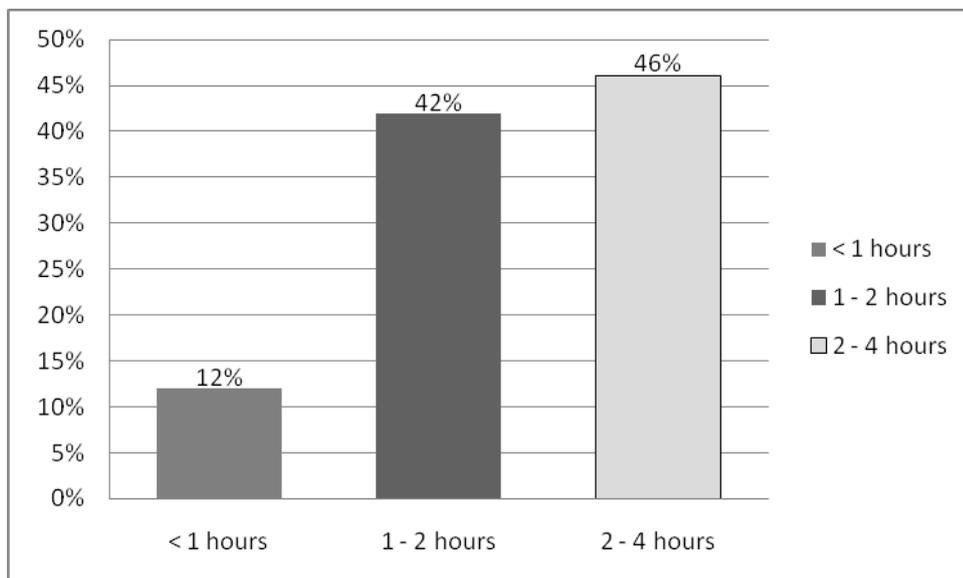


From figure 2, which shows the activities of hearing impaired students using ICT. We studied online reading activities of hearing impaired students who used ICT. We found that 18.18% of 3rd grade students, 70% of 4th grades students, 75% of 5th grade students and 90.48% of 6th grade students read online. Hearing impaired students were interested in chat activities, reading forums and E-mail, but were not interested in reading offline text books.

3. Time and Location for ICT usage

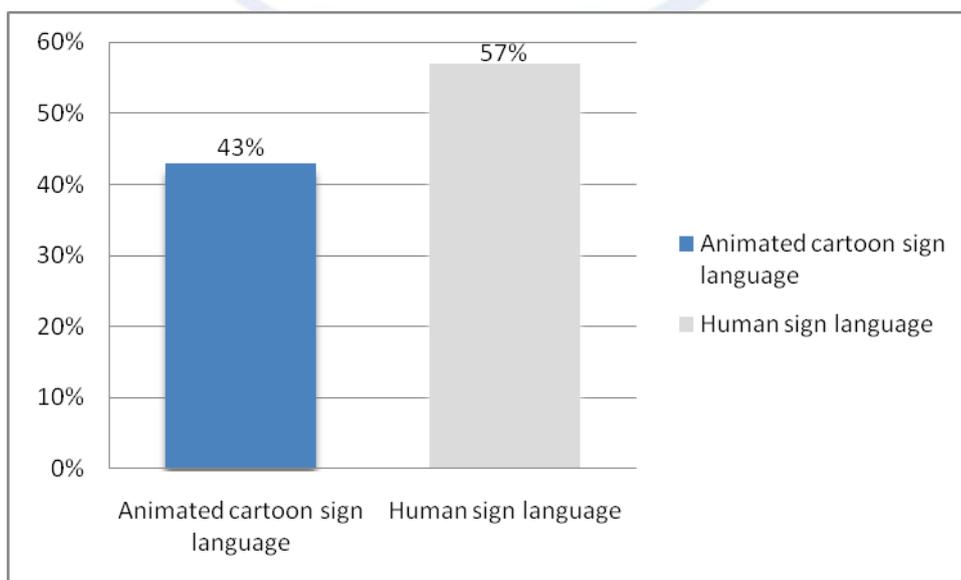
The students used ICT at school on Fridays in their ICT classroom and sometimes used ICT at home on Fridays and on the weekends. ICT usage was 2-4 hours per week for 46% of the students, 1-2 hours per week for 42% and less than 1 hours per week for 12% of the students. See in figure 3

Fig. 3 Amount of Time hearing impaired students used ICT per week



4. Students Expectation for ICT Usability

57% of the hearing impaired students preferred the sign language assistant to using a human to help them to understand the meaning of Thai sign language. 43% of the students preferred an animated cartoon sign language interpreter to assist them. All of the students wanted illustrations to help explain the meaning of Thai sign language vocabulary.



Conclusion

The hearing impaired students in grades 4th – 6th used ICT more than hearing students. Those in grades 1st – 3rd used ICT 2 – 4 hours per week. In ICT reading usage they used chat, Forum and E-mail. Hearing impaired students want to have tools that explain Thai vocabulary using Thai sign language and illustrations of word meanings for their understanding and to help them remember easily.

Discussion

The hearing impaired students preferred pictures to help them learn because a picture helped them remember what they learned better than text. The deaf children reader can understand, enjoying the story from illustrations, which helps build the knowledge necessary to understand the story. (Schleper, 1996) The book has pictures and illustrations that can tell a continuous story. When the children look at it, they can tell the story in their own words. This helps to develop their imaginations. Even when words are used in books for pre-school children and beginning readers, these children understand the language and the message better when there are many pictures. Illustration accentuates the cognitive function. Good illustrations can contribute to the overall development of the child by stimulating his imagination, arousing his perception, developing his potential (Segun., 1998). In this survey we found that all grade levels of the hearing impaired students were interested in ICT. They were most interested in online games, then entertainment that used pictures to tell a story and last they were interested in ICT for educational purposes. This differs from normal un-impaired students who enjoyed educational ICT more. We surmised that the hearing impaired students were less interested in education ICT because it is presented to them in text only without pictures, animations or game-like activities. Currently they study offline (non-ICT) using books with very few and small sized pictures. They like cartoon books more because the pictures can explain more to them than text only. Hearing impaired students would have better learning achievement if they received more prior knowledge at home from their families but their families usually do not know sign language and the students are limited to lip reading and pictures to understand their family's efforts to communicate with them. Support from their teachers in school is also limited because the teachers do not know Thai sign language.

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Bridging the competency gap between university education and biotechnology industry requirements – Novel pedagogy in India perspective

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The logo for the International Association of Agricultural and Food Researchers (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of several overlapping, semi-transparent arcs in shades of blue and red, creating a sense of motion or a globe.

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Abstract

The biotechnology industry is one of the fastest growing knowledge based sectors catering to human health care and allied areas. It is estimated to grow at 18-20% annually worldwide. However, the success of biotechnology industry would depend on, among other requirements, the availability of trained human resources. One of the most challenging tasks, particularly in India, is to get competent workforce to support the growth of industry. The existing university curricula in biological sciences or in biotechnology impart sound theoretical knowledge but fail to provide practical knowledge thereby failing to equip students with skills required for adapting to the industry environment. Therefore, hiring fresh graduates from the university did not seem to be a viable option when the industry required highly skilled personnel for fueling its growth. In view of this deficiency, and considering the business growth plan of biotechnology companies in India, one year advanced diploma programs were designed on biotherapeutics and clinical research to bridge the competency gap. The curriculum included in depth knowledge of various steps of drug and cell product development process, including discovery research, process and product development, clinical development, commercial manufacturing of the therapeutics and management related topics. The goal was to impart rigorous training both on theory and practical aspects with a research dissertation as a mandatory requirement for the diploma program. The pedagogy was innovative, included case studies from industry and hands-on training in some of the finest state-of-the-art facilities. The mentoring was done by the professionals both from academia and industry in order to make sure that the graduates are 'industry ready' at the end of the program. These programs have been very successful in supplying trained human resources for the Indian biotechnology industry.

Key words: Biotechnology; Biotherapeutics; Higher education; Competency development; Industry; Product development

1. Introduction

Human insulin, the first commercial biotechnology drug produced through recombinant DNA technology, was introduced in the market in 1982 for diabetes patients. Since then, significant scientific and technological advancement had led the growth of biotechnology industry worldwide. Biotherapeutics, which include human blood plasma derived therapeutics, recombinant therapeutics, monoclonal antibodies, vaccines, antisense therapy and cell therapy products, have consistently contributed the largest annual revenue in the total revenue earned by biotechnology sector. Biotechnology industry in India, broadly divided in to three segments *viz.* medical biotechnology, agricultural biotechnology and biotechnology services, was perceived to grow into billion dollars business by 2010 [1]. A similar report on India's biotechnological prowess has also been published [2]. The Indian biotechnology industry grew at an average growth rate of 17% in the fiscal year of 2009 and 2010 and earned revenue of more than 3.0 billion dollars [3].

The growth of the industry resulted in increased demand for talent at various levels of the organizational hierarchy. Also, the necessity was to adopt contemporary technology was one of the critical success [4]. Moreover, adoption of open innovation would be necessary for the modern biotechnology industry in order to cater to the future requirement [5]. Typically the sources of talent have been universities and research institutes for entry level and biotechnology companies in India and abroad for experienced professionals. In a growing economy like India, most of the talents at the entry level comprise fresh undergraduates and postgraduates from universities and institutes. India has about 431 universities including 11 private universities. These universities enroll about 11.61 million students per annum. About 71.7% of the student population gets enrolled in undergraduate courses, 7.2% in postgraduate courses and 0.6% in doctoral programs [6].

The academic curricula in India, both at undergraduate and postgraduate levels, stress on theory with less practical hands-on training. Therefore, although fresh undergraduate and postgraduates have strong foundation in theory, they are poor in practical aspects of various subjects taught in the university. Industry, on the other hand, prefers practical knowledge and problem-solving capabilities in prospective employees at the entry level. Therefore, very often, the university curricula do not meet the requirements of biotechnology industries.

To circumvent this situation, industry builds its own academic institutions, admits fresh undergraduates and postgraduates, imparts holistic training as par with its own requirement.

Reliance Life Sciences, a millennium initiative of Reliance Group of Companies, the largest private company in India, is a diverse biotechnology company which was established in 2001. It is a knowledge-based organization actively engaged in contemporary areas of biological research leading to the development of therapeutics primarily for the poorer population in the world. It has started growing exponentially

since the year of 2005 and felt the need for trained human resources in order to fuel growth. However, employable resources were not available. As a consequence, it established Reliance Institute of Life Sciences (formerly Reliance School of Life Sciences) in the same year in order to train fresh university undergraduates and postgraduates in the areas which are relevant to the biotechnology industry. The institute had designed about ten competency development programs under the aegis of Young Professionals' Program and trained hundreds of fresh university graduates in order to fulfill the need of Reliance Life Sciences [7]. However, the custom designed training programs were made available to the public in the year of 2007 for the benefit of other biotechnology companies in India and abroad. These programs were named as Advanced Diploma Program covering the most recent knowledge in the areas of biotherapeutics and clinical research.

This report identifies biotherapeutics as a thrust area, delineates the strategy of student selection, captures the novelty of pedagogy, explains the competency development process, evaluates the effectiveness of the program and discusses the result of the program.

2. Advanced Diploma Program

2.1 Selection of students

The students are selected on an all India basis through a national level on-line test, followed by a personal interview at the campus of the Institute. While on-line test measures aptitudes in physics, chemistry, mathematics, biological sciences, analytical abilities and English vocabulary, the personal interview evaluates the student on the depth of understanding of the subjects in their Bachelors or Masters degree program as well as behavioral aspects such as commitment to science, fluency in English and integrity of character. Since, the selection is done on an all India basis, the programs get students from all over the country, which promotes multilingual and multicultural environment for learning. The selection criteria are stringent and the total capacity of the batch is not filled if suitable candidates are not found.

2.2 Design of pedagogy

Biotherapeutics are small molecules (Antisense ribonucleic acid, nucleopeptide, gene), proteins (human blood plasma derived therapeutics, vaccines, recombinant therapeutics, monoclonal antibodies) and cells (stem cells) (Fig 1). These entities are widely used for the treatment of various diseases and disorders. The therapeutic moiety development program includes discovery research, evaluation, process development, preclinical and clinical development and manufacturing (Fig 2). The development value chain is subjected to stringent quality management criteria as par with local regulations (Indian Food and Drug Agency, Central Drugs and Standard Organization of India) and global regulations (United States Food and Drug Agency, European Medicines Evaluation Agency).

The Advanced Diploma Program in Biotherapeutics covers the entire gamut of therapeutic moiety development both through theory and practical session and addresses the competency needs at various stages of development of the therapeutic moiety at par with global standards (Fig 3). It comprises class room training for three months and dissertation research for eight months. There is a month long bridge between classroom training and dissertation research through common laboratory training. The class room curriculum includes stem cell biology, molecular biology, upstream bioprocessing, downstream bioprocessing, clinical development and manufacturing according to current good manufacturing practices. The curriculum has strong focus on quality management including quality control, quality assurance, validation sciences and regulatory affairs. Since, the goal is to develop well rounded professionals, the curriculum includes various aspects of soft skill development.

Rigorous theoretical grounding is imparted during class room training through lectures, demonstration and oral presentation assignment. The students are exposed to the latest research publications and are encouraged to make presentations on published literature. This practice enables better reading comprehension, assimilation of knowledge and enhancement of public speaking capabilities. The faculty members are drawn from Reliance Life Sciences and other industries so that the students have the opportunity to listen to professionals who are already in this industry. The entire program is built on interdisciplinary approach where elements of science, engineering, medicine and management are brought together to give a solid foundation for carrying out the dissertation research further.

The common laboratory training imparts knowledge on handling state-of-the-art laboratory equipment and on correct laboratory practices. This component of the program evaluates the participants' knowledge in physics, chemistry and mathematics and trains them on the core techniques which are essential for biotechnology research. It hones their ability to design experiments, perform experiments independently and interpret experimental data correctly.

The dissertation research focuses on the cutting-edge research areas in stem cell biology, molecular biology, biological process engineering and quality management including quality by design. Research projects are customized to the need of the industry and each research project has timelines and deliverables. These are carried out in a manner that the students get research experience in a real-time industry setting. Research projects also generate valuable data which are patented and published in international peer reviewed journals.

The soft skill development component focuses on effective communication, ethics and etiquette, leadership, working in a team, time management, self-discipline and other relevant areas, which are indispensable in a corporate organization. The sessions comprise lectures and workshops where all students participate actively.

The pedagogy has been designed in such a way as to provide the latest knowledge in contemporary biological sciences and also focuses on the holistic development of a

young professional. It is important to note that, since the talent pool is relatively larger than available job opportunities, the job market is highly competitive in India. Therefore, the Advanced Diploma Programs equip the students with intellectual tools which enable them to withstand competition and excel in their respective professional domains.



Figure 1: Biotherapeutics

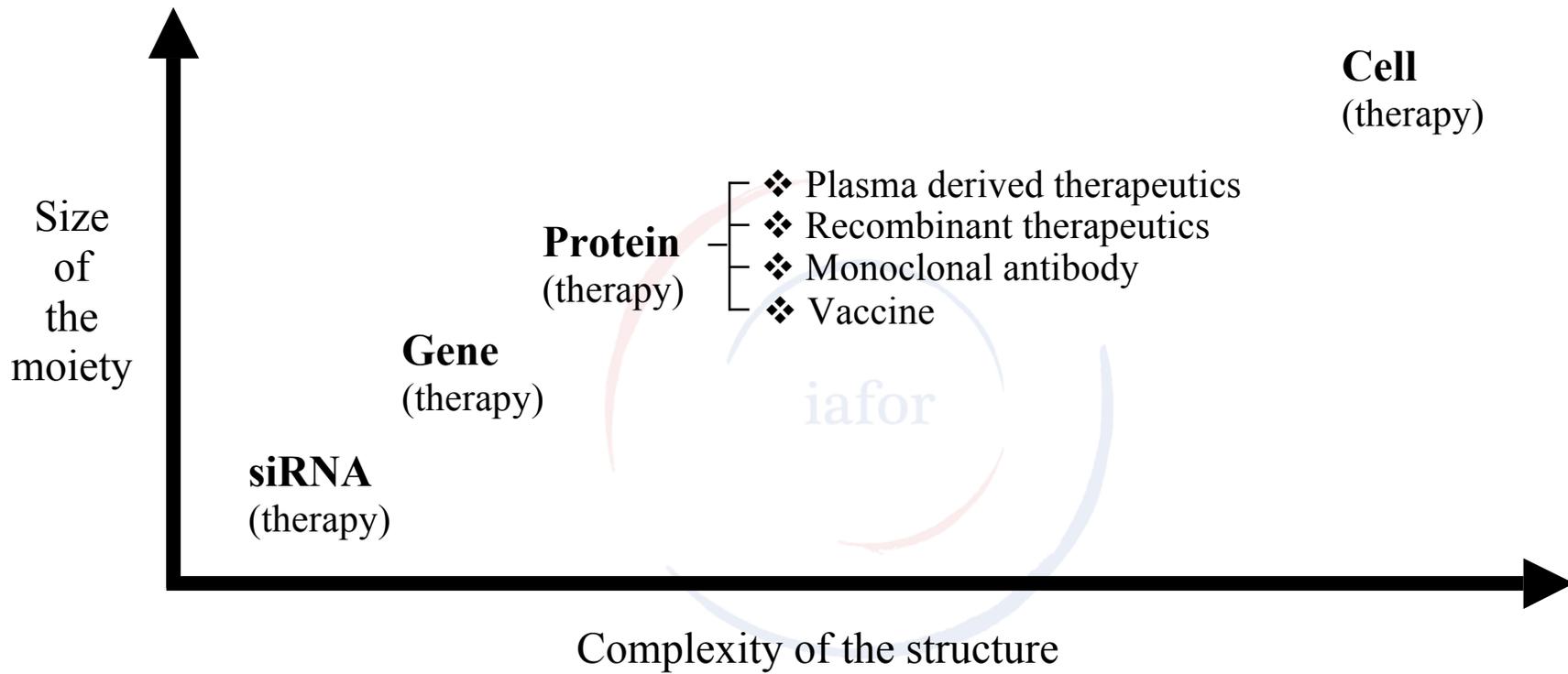


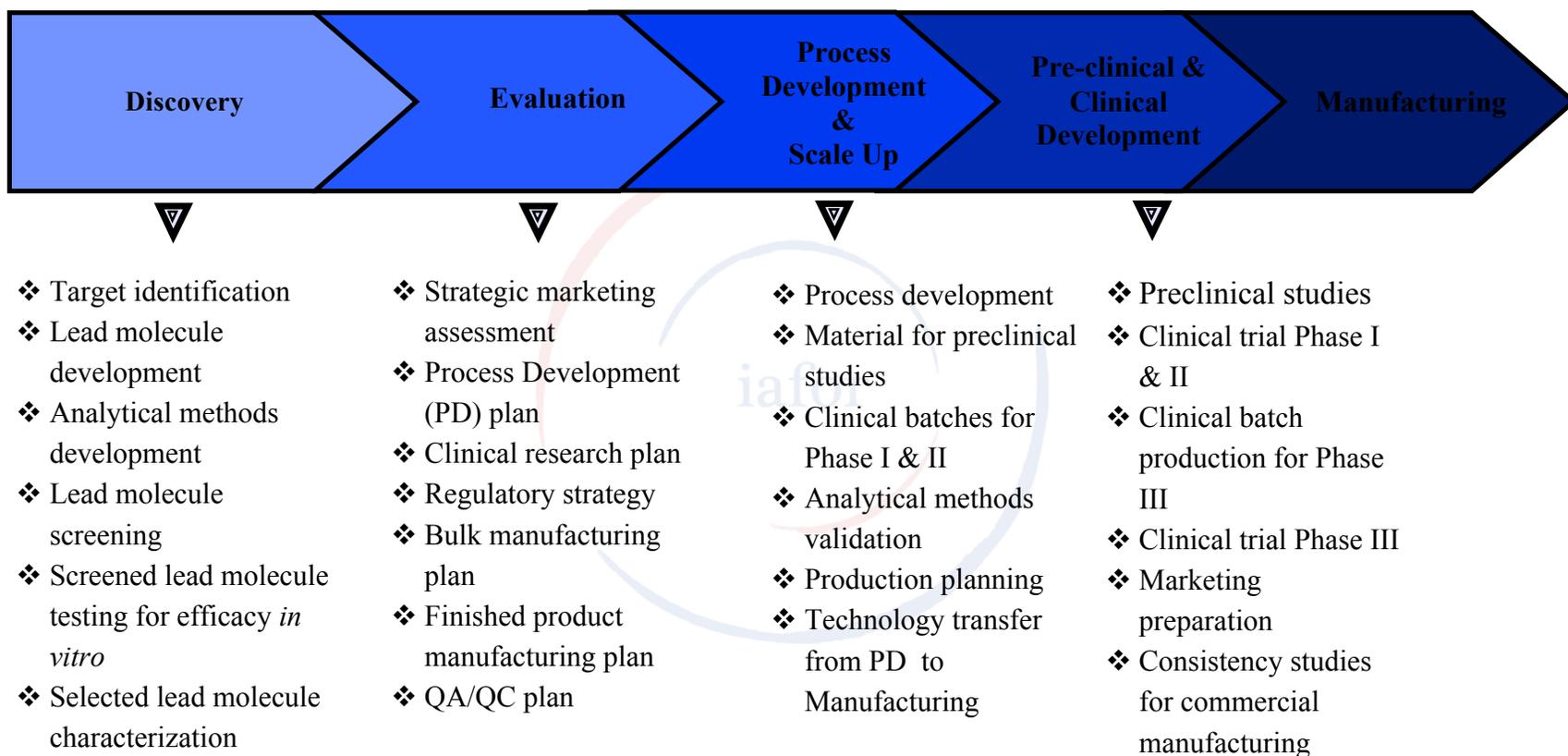
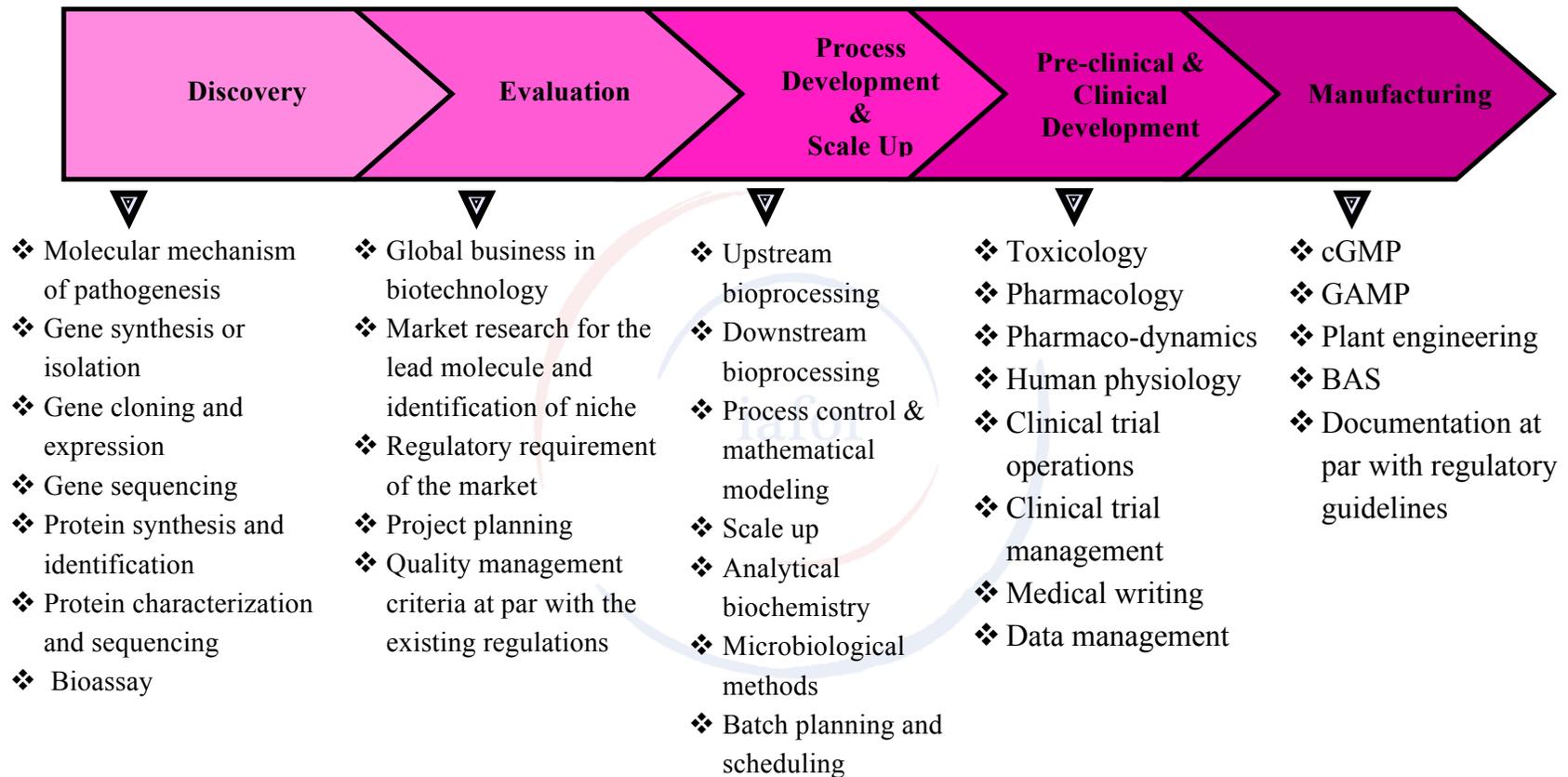
Figure 2: Development of biotherapeutics

Figure 3: Competency requirement

cGMP : Current Good Manufacturing Practices; GAMP : Good Automated Manufacturing Practices; BAS : Building Automation System

2.3 Delivery

The class room training is delivered through structured syllabii. The standard of the syllabus is at par with those of graduate studies in developed countries. It starts with stem cell biology and is followed on with molecular biology, biological process engineering, manufacturing and quality management. In addition to these core subjects, class room training also includes various aspects of corporate management, occupational health and occupational safety. Apart from the theory, practical aspects of the subjects are taught, which are useful in industry. The class room training includes laboratory visits and manufacturing plant visits so that students can relate the theory to actual practice. Faculty members are drawn from industry, particularly from Reliance Life Sciences and multinational companies operating in India. The training is therefore imparted by the faculty members who themselves are working in the biotechnology sector. It enables students to imbibe the work culture of the industry while they go through the training.

Common laboratory training is also delivered by faculty members from industry as well as from academic institutions. The training incorporates several high-end equipment, which are required for carrying out research in cutting edge areas of biological sciences and related domains. Students are given hands-on training during this part of the curriculum and are exposed to the most modern tools and techniques available world-wide. Good practices are ingrained, so that these are followed throughout their research career. Designing of experiments and interpretation of experimental results are taught in a manner that the students become independent before they join industry or academic institution as doctoral researchers at the end of the program.

The research dissertation is carried out in various research groups under the able supervision of senior scientists. Each research project is customized to the need of the industry and each project has well-defined timelines as well as deliverables. Since, the research dissertation is of only eight months and the work load given to the students are very high, the students get trained on time management, efficient design of experiment and precise execution of experiments. Most of the students contribute to the project immensely and some of the research results are further taken forward for commercialization. The program requires the students to submit a well-written dissertation, which is reviewed by a panel of senior scientists as well as legal specialists for intellectual property issues.

2.4 Evaluation of the training and performance of the students

The progress and effectiveness of the programs are evaluated at regular interval in the course of the year. The performance of faculty members is monitored through the feed back received from the students. The performance of the students is evaluated through quizzes at the end of each module. On an average, a quiz is given after every thirty hours of lecture sessions. In addition, students are given group assignments on industrial case studies and oral presentation on published literature. The behavioral aspects are evaluated during their participation in workshops related to soft skill development.

The performance in common laboratory training is evaluated before the training starts, during the training and after the training is completed. Quizzes are given on theoretical aspects and 'hands-on' practical examination is conducted on the techniques and good practices they learn.

The dissertation research is monitored monthly for eight months. The performance of each student and the progress of the research project are judged by their respective research supervisors. The quality of the research work is judged by a panel of senior scientists. The dissertation is subjected to thorough scrutiny for accuracy and quality. It is also examined by legal specialists for both infringement of intellectual property and novelty of the research, which could potentially be patented. The dissertation is accepted by the institute after receiving legal clearances. Students are required to defend their dissertation through a presentation and a *viva voce*.

The Diploma is granted after successful defense of the dissertation in an annual convocation ceremony.

3. Result

Higher education in India in biotechnology has been theoretical knowledge centric. The existing university curriculum in India for biotechnology does not provide enough hands-on training to students. Moreover, university curricula do not include topics on international regulatory affairs, good practices (laboratory, clinical, manufacturing, automated manufacturing) which are essential in industry that produces biotherapeutics and other health care products. The biotechnology industry, on the other hand, requires young candidates who are well versed with both theory and practical aspects in these areas. Therefore a conspicuous gap exists between university curricula and industry requirements, particularly in the area of practical training, modern applied sciences, latest technology and global regulations on biotechnology products. Though, biotechnology curriculum has been developed for biomanufacturing industry in the past [8], a comprehensive curriculum covering the entire biotherapeutic development program has never been reported.

Reliance Life Sciences, while growing exponentially in the last five years, felt the need to establish a life science focused academic institution which would be able to bridge this gap and provide trained human resources to support the growth of the company. Reliance Institute of Life Sciences has been established to bridge this competency gap which has catered to the need of Reliance Life Sciences successfully through a number of custom designed Young Professionals Programs. It has then started building resources for biotechnology industry in India through Advanced Diploma Programs. These uniquely designed programs generated a number of well-trained young professionals who, after successful completion of the programs, have been employed in various high profile biotechnology companies in the country, including Reliance Life Sciences. Some of the students have opted for higher studies and have joined institutes of national and international importance for doctoral programs.

4. Forward path

Indian higher education sector is going through progressive changes and the role of modern education policies, systems and institutions in changing India has been explored [9]. Impact of university and industry research collaboration on the intellectual property related to discovery and development in the field of biotechnology has been critically analyzed [10]. In order to stay competitive in the global market, biotechnology companies would need to upgrade the competencies continuously, either through in-house knowledge creation or through forging industry – university partnerships. In addition, they would require employable graduates to fuel growth. Reliance Institute of Life Sciences, founded by Reliance Life Sciences, is a unique model through which a biotechnology company generates competent human resources, as well as supports innovation in research and development. Reliance Institute of Life Sciences improves the pedagogy of its programs every year in order to stay ahead and meet the expectations of industry. It is also working towards becoming a life sciences focused university which would have collaboration with well-known universities in developed countries. Efforts are in place to invite industries which develop hardware, software and services to the biotechnology industry to open their own centers of excellence in Reliance Institute of Life Sciences and work as a partner for product and technology development which would enable them to upgrade and expand their existing businesses.

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**Community-School Partnership in Nonformal Basic Education:
Targets and Successes in Pakistan**

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Community-School Partnership in Nonformal Basic Education: Targets and Successes in Pakistan

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Abstract

Nonformal basic education (NFBE) community schools were established to cover gaps in provision of educational facilities and to achieve the goal of universal primary education with the support of community in Pakistan. The present study was conducted to evaluate the current successes of community-school partnership in NFBE community schools. The objectives of the study were: a) to analyze status of community school-partnership in nonformal basic education community schools, b) to assess the successes achieved with the support of community-school partnership, and c) to identify problems and to propose steps to strengthen the community-school partnership to achieve the proposed targets. Population of this study consisted of all NFBE community school teachers in Pakistan. The researchers used questionnaire as a research tool. Data were collected from 50 NFBE community school teachers including provincial and federal capitals of Pakistan. Percentage and frequencies were used for data analysis. The main findings of study were: i) members of education committees (ECs) were less motivated, and ii) teachers were less trained regarding community-school partnership. It was also identified that VEC (village education committee) members need more training to increase community participation. On the basis of findings some recommendations are made to strengthen community-school partnership that will ultimately help to achieve the goals of NFBE community school programme in Pakistan.

Keywords: Nonformal basic education, community school, Community-school partnership

Introduction

It is acknowledged worldwide that progress of a nation does largely depend on good and quality education it receives. As education is a social phenomena, the active participation of social communities may help to provide quality education to the society. Strong communities need good education to built and sustain the good nation. To achieve the target of good education the partnership of basic institutions of education "school" and community is the need of the time to make the available resources more for society.

In communities, large and small, community-school partnership initiatives are aimed to work for the improvement of school system. Blank (2004) is of the view that school-community partnership is a key component for improving student achievement, especially in communities with less facilities of education and other resources.

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According to Blank et al., (2003), community-school partnership includes all the stake holders of communities including youth groups, parents, religious institutions, government departments, nongovernmental organizations, and community based organizations and groups. It is the teacher of community school who mobilizes and rearranges all the resources and stake holders of community including human resources to strengthen student success. Davies (1996) suggests that the only way to increase the student achievements, is school partnership with families and communities. The main benefit of stronger ties with communities is increased academic achievement by students. Parent and community partnership can help to boost the academic achievements from pre- school through high school.

In the light of the above mentioned views it can be said that community involvement and participation may contribute to improvement in the school system and school functioning and students' academic achievements. The need for community partnership seems to be crucial in a country like Pakistan where basic educational facilities are not available even in a large number of formal schools. The current data reveals that 40% of schools are without boundary walls, 36% without drinking water facilities, 61% without electricity, 39% without sanitary facilities and 6% without any buildings (National Education Policy, 2009). Without provision of basic facilities, it is extremely hard to concentrate on teaching learning environment in classroom. Due to limited financial resources, Pakistan has been able to spend only 2.5 % of its GDP on education in the last five years. (Economic Survey of Pakistan, 2008-09). The community partnership can be effectively utilized for provision of necessary facilities in schools for their better functioning. Bouillion and Gomez (2001) argue that if the relationship and partnership of school with communities is not strong, it is likely that the school targets remain unachieved.

According to UNESCO (2005), unfortunately at present, six million children (5-9 years) have no access to schooling and only 50% of those who are enrolled in grade one, complete primary education. Pakistan has a growing population with low literacy rate. The importance of education was realised in all education policy documents. However, due to lack of resources for construction of buildings and provision of educational facilities in formal schools, it was planned to open Community Schools through nonformal approach to achieve the goal of Universal Primary Education with the participation of communities (MOE 1998). According to the National Education Policy (2009), community participation through SMCs (school management committees) and parent teacher associations will be ensured to increase the net participation rate at all levels.

Non-formal basic education (NFBE) community schools were established to cover gaps and to achieve the goal of universal primary education with the support of community in Pakistan. In 1996, initially 3000 nonformal basic education community schools were opened with targets to reduce the expenditure through community-school partnership. According to the PMLC (1996) in PC-1 document it was planned that the community will arrange one or two rooms as school building, matriculate teacher, and basic necessities to support the teaching learning process. Another stake holder, non governmental organizations (NGOs) will provide services for training of teachers, monitoring of schools and motivation of community as volunteer partner on nominal cost. The government will provide the teaching learning material and a nominal honorarium to the teachers. It was planned that community-school partnership will be established through the formation Education committees with members from all stake holders of communities to achieve the targets.

In the duration of ten years NFBE schools increased up to 9, 267 and all the targets remained unachieved. The project was reviewed and target was revised realistically with new name "Basic Education Community Schools" in the year 2007. The project was handed over to National Education Foundation as executing agency for the establishment and operation of 20,000 Basic

Education Community (BEC) Schools in the country with the sponsorship of Federal Ministry of Education, Govt. of Pakistan. (NEF, 2009).

Table 1.0 Students' Enrolment at Basic Education Community Schools - 2009

Province/Area	Number of Schools/Teachers	Total Number of Students	No. of Students	
			Male	Female
Punjab	6,465	262,744	107,825	154,919
Sindh	2,075	78,522	34,389	44,133
KPK (NWFP)	1,764	72,441	24,183	48,258
Balochistan	1,284	41,491	22,092	19,017
FATA	1,166	48,572	32,441	16,131
FANA	303	11,746	4,505	4,241
AJK	223	10,214	4,938	5,276
ICT	323	12,129	6,073	6,056
Total	13,603	537,477	236,446	301,031

Source: National Education Foundation (2009) EMIS Cell

As the project was based on the community-school partnership through education committees (ECs), the present study was conducted to evaluate the success of community school partnership in nonformal basic education community schools.

Objectives

The present study was conducted to evaluate the current successes of community-school partnership in NFBE community schools.

The objectives of the study were:

- a) To analyze the status of community school-partnership in nonformal basic education community schools,
- b) To assess the successes achieved with the support of community-school partnership, and
- c) To identify problems and to propose steps to strengthen the community-school partnership to achieve proposed targets.

Research Methodology

Population of the study consisted of all NFBE community school teachers working to achieve the goal of universal primary education as volunteers in all provinces of Pakistan including Azad Kashmir, FATA, FANA under the umbrella of National Education Foundation (NEF).

Sample of 50 NFBE schools ten from each province including Islamabad Capital Territory (ICT), was selected conveniently keeping in view the urban and rural population. Province wise details of the sample were:

Table 1.1 Details of the sample

Province	Urban NFBE Schools	Rural NFBE Schools	Total
Punjab	5	5	10
Sindh	5	5	10
NWFP	5	5	10
Balochistan	3	7	10
ICT	0	10	10
Total	18	32	50
	36.0%	64.0%	100.0%

Since the study was descriptive in nature, survey approach was considered appropriate to collect data. For this purpose, a questionnaire was developed. Pilot study was conducted to improve the questionnaire. Data were collected from 50 NFBE community school teachers including provincial and federal capitals of Pakistan. Data collected through questionnaire were coded and analysed by using SPSS XVI in terms of percentages and frequencies to analyse the current status of community-school partnership and to identify its problems.

Findings

The findings drawn from the data collected through the questionnaire and analysed in terms of frequencies (F) and percentage of column (%C) are given below:

Table 1.2 Status of Education Committees (EC)

EC		Urban NFBE Schools	Rural NFBE Schools	Total
Formed	F	11	13	24
	%C	61.1%	40.6%	48.0%
Not formed	F	7	19	26
	%C	38.9%	59.4%	52.0%
Total	F	18	32	50

Table 1.2 reflects the status of education committees of NFBE community school working for the support of schools. According to the data, 48% EC were formed while 52% were not formed still. In majority of urban schools, ECs were formed while in rural schools the situation was different.

Table 1.3 Structure and Membership of Education Committees (EC)

EC Membership		Urban NFBE Schools	Rural NFBE Schools	Total
1-3	F	2	2	4
	%C	18.2%	15.4%	16.7%
4-6	F	7	6	13
	%C	63.6%	46.2%	54.2%
7-10	F	2	5	7
	%C	18.2%	38.5%	29.2%
Total	F	11	13	24

Table 1.3 shows the structure and membership of education committees of community schools. The data indicates that majority of committees (54.2%) have four to six members whereas 29.2% committees were with seven to ten members and some ECs (16.7%) were with only 1-3 members. The data reflects that structure of ECs was not well defined.

Table 1.4 Gender wise Membership of Education Committees (EC)

EC Membership		Male membership in EC			Female membership in EC		
		Urban	Rural	Total	Urban	Rural	Total
1-3	F	3	9	12	9	8	17
	%C	30.0%	69.2%	52.2%	90.0%	61.5%	73.9%
4-6	F	6	4	10	0	3	3
	%C	60.0%	30.8%	43.4%	.0%	23.1%	13.0%
7-10	F	1	0	1	1	2	3
	%C	10.0%	.0%	4.3%	10.0%	15.4%	13.0%
Total	F	10	13	23	10	13	23

Table 1.4 reveals the gender wise membership of education committees. According to the data in urban area, majority of ECs (60.0%) have 4-6 male members while in rural area majority of ECs (69.2%) were with 1-3 male members. Overall majority of ECs (52.2%) were with 1-3 male members. On the other hand female membership in ECs has similar numbers in majority of NFBE community school ECs. 90% of urban ECs and 61.5% of rural schools ECs were with 1-3 female members and overall majority (73.9 %) of ECs have only 1-3 members.

Table 1.5 Status of EC members' support to NFBE community school

Teacher opinion		Urban NFBE Schools=11	Rural NFBE Schools=13	Total=24
Supportive	F	9	11	20
	%C	81.8%	84.6%	83.3%
Not Supportive	F	2	2	4
	%C	18.2%	15.4%	16.7%

Table 1.5 reveals the teachers' opinion about the ECs members participation and support. According to the data, it was admitted by teachers that majority (83.3%) of ECs have supportive members. While less ECs (16.7%) were with members who were not supportive to NFBE community school

Table 1.6 EC Members Supports in Enrollment

Statement		Urban NFBE	Rural NFBE	Total =24
		Schools=11	Schools=13	
EC members provide their support to increase enrollment	F	6	2	8
	%C	54.5%	15.4%	33.3%
EC members participate in meeting regularly	F	5	5	10
	%C	45.5%	38.5%	41.7%
EC members help in preparation of NFBE school record	F	0	0	0
	%C	0%	0%	0%
EC members support in students' assessment tests.	F	0	2	2
	%C	.0%	15.4%	8.3%
EC members' support in books and learning material delivery	F	2	2	4
	%C	18.2%	15.4%	16.7%
EC members' participation in school activities to increase community participation	F	2	3	5
	%C	18.2%	23.1%	20.8%

Table 1.6 provides the detail picture of ECs members support in different matters of community schools. According to the data majority of Urban ECs were helpful in enrolment increase. Overall the situation was different. Data reflects that less number of ECs 33.3%, 41.7%, 0%, 8.3%, 16.7%, and 20.8% were supportive in enrolment, participated in meeting regularly, were helpful in preparation of school record, were supportive in students' assessment tests, were with teacher in receiving learning material and textbooks and participate in school activities to increase community participation respectively.

1.7 Table Regularity of ECs meetings

Teacher opinion		Urban NFBE	Rural NFBE	Total
		Schools	Schools	
Monthly	F	6	4	10
	%C	54.5%	30.8%	41.7%
Quarterly	F	4	3	7
	%C	36.4%	23.1%	29.2%
Biannually	F	0	5	5
	%C	.0%	38.5%	20.8%
Never	F	1	1	2
	%C	9.1%	7.7%	8.3%
Total	F	11	13	24

Table 1.7 explains the status of regularity of NFBE community school education committees' meetings. According to the data, in urban schools majority (54.5%) of NFBE schools were conducting their ECs meetings on monthly basis regularly while in rural NFBE schools less percentage of schools were conducting their ECs meetings on monthly basis. Overall 41.7% schools were conducting their ECs meetings on monthly basis, 29.2% schools were conducting ECs meetings on quarterly basis, 20.8% were conducting their meetings on biannually basis and 8.3% were not conducting ECs meetings. Data reflects that every school has its own choice for ECs meetings.

Table 1.8 Problems in community-school partnership

Opinion about EC members	Urban NFBE Schools	Rural NFBE Schools	Total	%
Less motivated members and consider School ECs less important	5	6	11	52.4
ECs members have less awareness about role and responsibilities	3	4	7	33.3
Lake of funds to solve the NFBE school needs	3	0	3	14.3
Total	11	10	21	100.0

Table 1.8 shows the opinion of teachers regarding the ECs members and causes of problems they were facing. According to the data majority of ECs (52.4%) were less motivated and consider the ECs less important to their personal jobs, 33.3% were with no awareness about their role and responsibilities, and 14.3% identified lack of funds as problems to achieve the targets.

Table 1.9 Suggestions for improvement of performance of ECs

Suggestions		Urban NFBE Schools=18	Rural NFBE Schools=32	Total =50
Incentives (Prizes and Praise) will be helpful for better performance of EC	F	12	27	39
	%C	66.7%	84.4%	78.0%
New Membership of EC will be helpful for better performance EC	F	12	29	41
	%C	66.7%	90.6%	82.0%
Awareness of duties will be helpful for better performance EC	F	11	20	31
	%C	61.1%	62.5%	62.0%
Training of VEC will be helpful for better performance	F	8	24	32
	%C	44.4%	75.0%	64.0%
Motivation of VEC will be helpful for better performance	F	14	22	36
	%C	77.8%	68.8%	72.0%

Table 1.9 highlights the suggestions of teachers to improve the performance of ECs to achieve the targets of NFBE community school programme. According to the data, 78.0% teachers suggested incentives (prizes and praise) to improve the performance of EC, 82.0% pointed out that new membership of EC will be helpful for better performance, 62.0% suggested the awareness of duties for better performance of EC, 64.0% proposed the training of VEC, and

72.0% suggested motivation of VEC for better performance of VEC to achieve the targets. All the suggestions were from the majority of NEBE school teachers.

Conclusions

Community participation affects the performance of teachers and students. It also affects the targets and successes of the nonformal basic education community schools. On the basis of findings the conclusions can be made:

- i) ECs were formed in less number of NFBE community schools and more were working without ECs which affecting the role and participation of community.
- ii) Structure and activities of ECs were not well-defined. It was different from school to school and community to community. Female membership was less than male in ECs
- iii) Members of ECs seemed less motivated, and ECs' activities were not on their priorities.
- iv) Teachers were less trained regarding community-school partnership as they were not able to motivate the community members in ECs to participate in school activities.
- v) It was also identified that ECs' members need more training, incentives and motivational programmes to increase community participation for strong and sustainable community-school partnership.

Recommendations

On the basis of findings and conclusions following recommendations are made to strengthen community-school partnership that ultimately will help to achieve the goals of NFBE community school programme in Pakistan:

1. The formation of ECs in all NFBE community schools may be taken as priority to ensure the participation of all stake holders of community, with gender equality, well-designed structure of EC and well-defined role of EC members.
2. A campaign may launched for motivation of ECs and all community members through media and all other possible sources including training of teachers to strength the community school partnership.
3. ECs members need awareness and training to increase participation in NFBE community school with interest and ownership.

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Abstract

- Title:** A Model of Development for Academic Administration
Decentralization of Lab Schools in the Lower Southern Area
- Author:** Dr. Rungchatchadaporn Vehachart
- Keywords:** decentralization, academic administration
- Institution:** Faculty of Education, Thaksin University

Introduction

Educational decentralization in Thailand has a long history of development. Analyses have been made for the advantages and disadvantages of such development. Comparative studies depicting country's experiences of educational decentralizations appear regularly. In educational circle, there is a statement to the effect that where a school is given opportunity to formulate its own policy and to perform educational administration, the school will have a higher level of academic achievement in general and the morale of teachers and personnel will be higher. Decentralization allows the opportunity for the schools to respond to the educational needs of the people, thus allowing them to participate directly in the administration of education (Office of Educational Council, 2007). The project for establishing a lab school for each administrative district has been launched to extend quality education for school children in the provincial areas throughout the country. The idea is to give opportunity to rural students to attend a school with similar nature with and comparable to well-known schools in Bangkok. The lab school project is part of decentralization of quality education, where emphasis is placed on good school-based management. To attain such status, it is necessary for the school to have effective and flexible management, which is conducive to positive working environment. Information technology and communication network are introduced into school management. It is hoped that school children who pass through educational experience from the school will have a bright future and lead a happy life in the society.

The joint-survey conducted in 2007 by the Office of Basic Education Commission and the Office of Educational Area reveals that 25% of the school children are unable to read or write, most of whom attend the schools in the border areas such as Tak from the North and Pattani, Yala and Narathiwat from the South. The average 2006 Normal Test scores for Prathomsueksa 6 (grade 6) students in this area decrease in almost all of the subjects. In the three Southern border provinces, political violence and military conflicts often lead to a temporary closure of the schools sometimes up to 30-40 days per year, accounting for 20% of the total class hours. The problem of teacher shortage has been critical since a large number of teachers request for a transfer out of the area. Moreover, the schools in this area lack proper infrastructures; only 3% of the schools has been equipped with a high speed internet system. Such situations coupled with the fact that 80% of school children in this part of the country are Muslim and speak local Malay dialect as the mother tongue and by implication their ability to use the Thai language is lower than those in the other regions lead to a low academic achievement. The Ordinary National Education Test (O-NET) scores of upper secondary students are among the lowest ranks in the country. The students are not fully prepared academically for university studies. Most first year students earn a GPA lower than 2.00 out of 4.00, a minimum criteria for students to continue their studies. It is unfortunate to find that about 40% of the students are under this academic category. As a teacher teaching the academic administration subject in at both undergraduate and graduate levels at Thaksin University for Songkhla and Phatthalung campuses, the researcher is fully aware of the existing problems. Attempts have been made by the researcher to look into the projects offered by the government in making improvement of education for the students in the affected area. It is conceived that the lab school project may be viable in solving the problems.

Research Methodology

This study utilized both the documentary research and field research techniques. The first phase of the study involved reviews of related literature from articles, interviews, research papers, policy statements and strategic plans to form a

conceptual model for decentralized academic administration. The second phase dealt with in-depth interviews with seven experts in the field from the provincial Office of Educational Area using the snowball technique. The third phase consisted of conducting the focus group with 12 school administrators and academic teachers in the lab schools under study.

Results and Discussion

1. **Academic Administration:** From the in-depth interviews with experts in the field, the appropriate model for the decentralized academic administration in the lab schools in the Lower Southern Area can be generalized in terms of decentralized academic administration and educational management. Aspects of decentralization include flexibility, participation and accountability, which can be subcategorized into the following 14 tasks.

1.1 Curriculum development for the school. The study reveals that the school develops its own curriculum through research and curriculum development. The developed curriculum is aimed at promoting human perfection in the students. Local educational offices are entrusted with the task of making a school guideline. Instances of in-school curriculum development from other countries are worth considering. In Japan, a school is allowed to have its own curriculum for 10% of the total curriculum structure as well as to come up with a blueprint for academic administration. In France, the government specifies the curriculum and its structure. Similarly, in Australia, the government prescribes the curriculum for the schools nationwide. However, the task of academic administration in the school has been revised to give a free hand to the school. In the 1990s, the Australian government recalled the task of curriculum development from the school (The Office of Education Council, 2006).

1.2 Learning management development: The teachers should provide the learning subject and activities in response to students' interest and appropriate to their ability. Students are given opportunity to practice their skills, utilize their thinking process and cope with the challenging situations. Activities should be organized for students to learn from real experience. Teaching should be conducted

through an appropriate combination of various aspects of knowledge. Teachers should be encouraged to create the atmosphere and environment and to use the media and facilities for students' learning. Research should be part of the learning process. Learning should take place at any time and place where there is cooperation with parents and members of the community. There should be a study for a model or design of an advanced learning process; in this way teachers serve as a leader in learning management and as a role model for other schools. In Australia, head of subject section in the school plays an important role in formulating a policy for designating students' scores, giving students assignment and putting students in a class.

1.3 Measurement and evaluation: The school should specify measurement and evaluation regulations to correspond with the policy at a national level. Documents should be produced in accordance with the school measurement and evaluation regulations. Measurement, evaluation and grade transfer based on experience and grade approval should be done at each level; remedial teaching should be provided for those students who do not pass the evaluation criteria. Measurement and evaluation tools should be supplied. Information system on measurement, evaluation and grade transfer should be introduced for referencing, auditing and for development of teaching and learning. School administrators should approve learning outcome annually/by semester and decide on the passing the educational level and completing of the basic education. The school has the power to appoint a committee to deal with specifying measures and methods in the transfer of academic credit, which are submitted to curriculum and academic administration committee for final approval.

1.4 Research for development of educational quality in the school: The school should formulate a policy and a guideline for the use of research as part of learning process and the working process of students, teachers and personnel involved with education. The school should make improvement on the teachers and students to understand the concept of educational reformation through research for complicated learning process. In this way learners are able to practice their thinking, managing and reasoning in the solution of problems. In addition, students should integrate the multi-discipline knowledge with learning the subjects in which they are interested.

Quality of education should be developed through a research process and its outcomes publicized for learning and development of quality education. Furthermore, teachers should be encouraged to utilize the outcomes of research for further development of learning and development of quality of education for the school.

1.5 Development and promotion of learning sources: The school should provide diverse learning sources both from within and outside the school. The aim is to support self-search for knowledge and knowledge management and learning source information management within the school for learners' learning inducement. It also encourages teachers and students to use the learning sources for learning development, supervision, monitoring, assessment and continuous improvement. In addition, teachers and students are encouraged to use learning sources from abroad.

1.6 Educational supervision: The administrators should create awareness among teachers and concerned personnel to understand that line supervision is a cooperative work process based on supervisory reasons for making improvement of each individual's work. Supervision is part of an administrative process in creating self-confidence for performing the task correctly, progressively and beneficial to the students as well as the teachers. Quality line supervision should be conducted in a thorough and continuous manner and the line supervision system should be linked to the system run by the Office of Educational Area.

1.7 Educational guidance: The administrators should formulate an educational guidance policy consisting of major factors such as creating a clear guidance organizational structure and a task of helping students. Teachers should be made aware of the merit of guidance and they should be implanted with the knowledge of psychology and guidance. Teachers should assist students in integrating their knowledge with their livelihood. Knowledgeable and capable personnel should be selected to work as guidance teachers, advising teachers and class teachers. The guidance subcommittee should be appointed to monitor, supervise and support guidance operation and to give assistance to students. Cooperation should be encouraged for better understanding among teachers, parents of students and members of the community. A guidance network should be established by the coordination between the school, private and public sectors, students' home, religious places and

the community. The guidance system should be linked with the student assistance system.

1.8 Development of internal quality assurance and educational standard: The school should give priority to additional standardization in consistent with that of the national standard, basic educational standard, and the standard set by the Office of Educational Area and the need of local populace. The administration and information system as well as a school plan focusing on educational quality (strategic plan) should be established. In the operation of the project/activity, the school has to establish a strong work system which emphasizes participation and quality development using the Deming Cycle. Internal quality assessment should be made to support the external assessment. SAR and annual report should be published with approval of the basic educational institution committee and these documents should be submitted to the original affiliation and further publicized to educational circles. In quality control, France has an auditing system called Inspection Generale where 159 auditing officials or Inspectorat are appointed for each educational area (academie) by the state. These inspectorat are responsible for inspection into educational matters at two levels, i.e. 1) Inspecteur General have the duty to monitor, audit and make assessment of the administration of primary and secondary schools at the national level and 2) Inspecteur Regional have the duty to supervise and make assessment of teaching of teachers and score the teaching performance.

1.9 Community promotion for community strength: The teachers should manage the learning process with personnel, households, communities, community organizations, local administrative organizations, private sector, non-government organizations, professional organizations, religious institution, enterprises and other institutions in promoting community strength. The task can be accomplished through establishing learning process within a community, encouraging communities to engage in training, searching for knowledge and information and choosing available folk wisdoms. The community should be developed in line with local problems and the need for exchanging of experience among the communities. After the educational reformation, New Zealand has adopted a decentralization and quality auditing by giving power to the school committee to handle all matters related to the operation of the school. In the decentralization process, the school is required

to follow the curriculum structure strictly with cooperation in all aspects of administration- financial, personnel and academic, from the people who are stakeholders. Decentralization takes into account of the interrelationship between the national level, local level and school level under the National Education Guideline, National Educational Goals of New Zealand and the New Zealand Curriculum Framework.

1.10 Collaboration for academic development between the school and other organizations: The school should mobilize educational resources including resource persons from outside and local wisdoms to reinforce development of students in all aspects, such as in carrying on the local traditions and cultures, and forging relationship with the community as well as coordinating with public and private sectors in developing the school as a community resource. The school also takes part in community development and provides the academic service that can be linked to or exchanged of information with other academic sources. Activities should be organized together with the community to promote the culture of good relationship with alumni as well as meeting with the parents, engagement in community work and in activities with other educational institutions. In New Zealand, sessions of brainstorming from communities were held and the results were passed on to the school committee. The school should hold meetings with the parents and listen to viewpoints of the mass media and the public. The opinions gathered should be used to plan the school in terms of both strategic and development plans.

1.11 Academic promotion and support at various levels, such as person, family, organization, institution, enterprise and other educational institutions: The educational institution should make dissemination for the public to understand the rights in the management of basic education, the use of shared resources for maximum benefits to learners, promotion of joint learning activities, search for necessary academic assistance, and promotion and development of learning sources in terms of quality and quantity for effective life-long learning. In the United States, a school board and a parent teacher organization oversee the management of the education board for each area. They work together with the principal, teachers, parents and the council for school curriculum development to come up with practical

development guidance of the school. At present, in some states the power of decision making for educational decentralization is given to school district.

1.12 Academic regulations and practices for the school: The administrators should analyze the regulations and practices for academic matter of the school for convenient performance. Regulations and practices regarding academic matter should be drawn up, revised and put into real practice. They should be audited and assessed for further improvement.

1.13 Selection of textbooks for the school: The administrators should allow the teachers to scrutinize the textbooks for quality learning in consistent with the school curriculum. The school also produces and checks for quality of its own textbooks, experience enhancing textbooks, books assigned as outside reading, exercises, worksheets and information sheets for use in accompanying teaching.

1.14 Development of media and the use of educational technology: A lab school should formulate a policy and planning in sourcing and developing learning media and educational technology. The lab school should also train its personnel to develop the media and educational technology along with the establishment of academic network and academic club to serve as learning sources of the school. The developed media and educational technology are meant to create new body knowledge; therefore, the school should seek to locate the sources of the media to effectively complement the education of the school. A library should serve as a learning source of the school and the community. The school should supervise, audit and assess the performance of the personnel responsible for the production, use and development of the media and educational technology.

2. Decentralization of lab schools: From external assessment and focus group discussion, the findings point toward that quality students, professional teachers, professional administrators, quality schools and quality communities.

2.1 Quality students: Persons of learning, having self-confidence and possessing Thai-identity attributes: It is found that learners should make improvement in developing necessary knowledge and skills as prescribed in the curriculum to be used as a tool for further education and job engagement. The academic achievement of the students is low in all subject groups and it should be improved. The students should be developed in terms of decision making, problem

solving and search for knowledge from the internet. They should be made to be enthusiastic about learning from various sources and to love reading. Students are lax in their disciplines and their responsibilities in participating in activities. Students are not attentive and enthusiastic in learning.

2.2 Professional teachers: Professional teachers with professional skills and self-development as required. The teachers are not able to produce teaching plans for all subjects and they should make integration of the curriculum. The teachers do not use diverse techniques in their provision of learning process. The teachers use less effort in stimulating students to think, seek and create body of knowledge by themselves through learning from various media such as folk-wisdoms and technology. The measurement and evaluation process and the application of research outcomes for development of learning are rather vague. Teachers are not skillful in curriculum development and the evaluation is not in line with the theoretical concept. Teaching plans are not designed with diverse techniques and the contents taught are drawn mostly from textbooks. Learners are not given opportunity to seek knowledge in consistent with the requirements of local community in coping with the fast changing economy of the community. The teachers should provide additional learning activities or encourage students to perform analytical or synthetic thinking process in line the subjects taught.

2.3 Professional administrators: Leaders for change, independence in administration and the use of participative and accountable administration. It is found that administration should be independent in its operation. Teachers should be supervised and assessed for the performance each day. Internal information system should be established in the school and the personnel should be trained to understand the use of information system continuously. The strategic administration should be performed as well as the balance and check system established in the school. Activities should be organized for learners to seek self-learning. Teachers should be implanted with thinking skill as well as team work skill. The administrators should adjust the academic administration system by encouraging the assessment of school curriculum usage, particularly the development of school curriculum based on the capacity prescribed for curriculum administration committee. All of the said activities

have not been noticeably carried out with an exception of the meeting of curriculum administration committee.

2.4 Quality school: Good governance schools with integrated learning process and quality assurance. It is found that the public relation task is carried out only within the premises of the school and the image and reputation of the school is not known by outsiders. The decentralization of the administration to a certain extent has not been performed throughout the school. School wide performance is not observable. It is suggested that the task performance should be dynamic. The school should be treated as a model (not sample) school, serving as a host with strength in developing other schools at the district and sub-district level. The school should be effectively developed in all aspects, particularly in terms of media and learning technology. The school should be committed to development. The one-district-one-school or lab school project is divided into three phases. Initially emphasis is placed on developing a school selected by the community at the district level. The school is then equipped with media and learning technology for the maximum benefit of the teachers and students in continuous learning process. Meanwhile, the school is linked as a network with other selected schools to generate learning atmosphere through wider learning sources. The second and third phase of the project involved an extension of the operation to selected schools at sub-district level nationwide. It is found that certain schools are confused with the procedures operated at each phase.

2.5 Quality community: Physical, resource and wisdom force. It is found that the school and the community should establish mutual relationship with other institutions in terms of resource mobilization from locality and non-government organization. A network system between the school and universities, educational institutions and other agencies should be established. The principle of administration is that the school should exercise convenient and independent operation, whether on the task of student admission, student referral, teacher development and resource mobilization. The working format is through the school administration committee functioning as a principal organization and through the school administrators who will implement the policy. An academic advisory committee is appointed to handle the academic tasks focused by the lab school, whether on the application of ICT or the creation of learning sources, the task which will be assisted by the committee. The

school committee, which will support resource mobilization, may be divided into various sections such as directorate, academic, student development and planning. This organizational structure helps create efforts of resource mobilization.

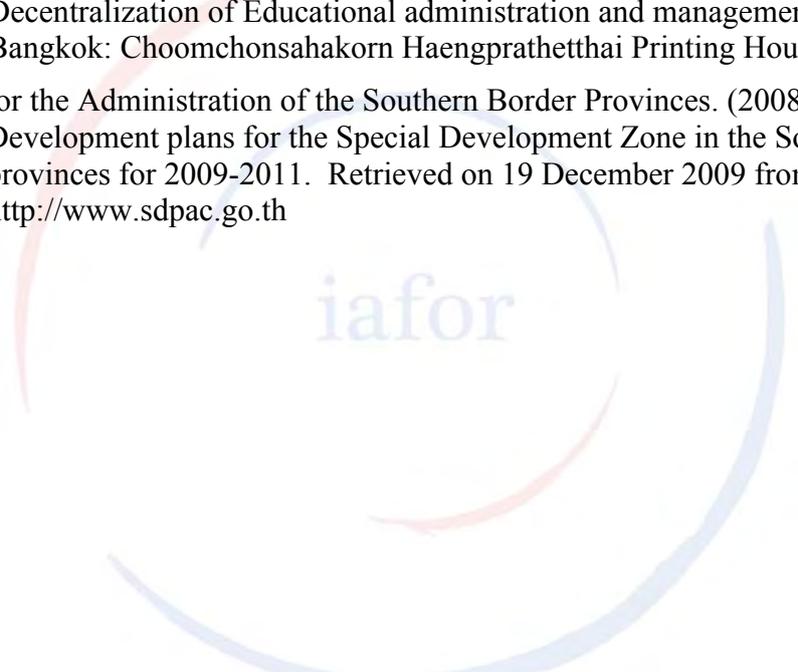
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The logo for the International Association for Frontiers of Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular pattern.

A Comparative Study of Human Teacher and Computer Teacher

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Abstract

This ongoing research project investigates learners' preferences and perceptions with regard to human and computer teachers. In this study, a human teacher is defined as the experienced, knowledgeable and patient teacher giving the traditional face to face lesson/lecture. The computer teacher is the educational computer software, multimedia and/or various learning resources on the Internet. Survey results and analysis have indicated that the majority of the respondents believe in the use of the latest computer technologies in education but they have a preference for a human teacher.

This research also paves the way for further work and development in adopting the latest technologies in tablet computing in education. In particular, the more human-like interface features, offered by Apple's iPad and other touch devices is being investigated for educational development.

Key words: Technology, Tablet, Education

Evolution to Tablet Commuting

Even the early versions of computers were recognized as ideal tools for educational purposes. That is due, mainly, to abilities to store and process large amounts of information. Their real potential for learning and teaching was identified in the 1980s when personal computers with multimedia features became more readily available. For instance, an old favourite was Commodore 64 (C64). When back in the 1980s, this personal computer entered the homes of several hundred thousands of people in different parts of the world; it revolutionized how one should work with and use computers. That is whenever and to a certain extent wherever one wishes. In other words, computers were not restricted to only computer labs of learning and industrial organizations. The other significant contribution to computer aided learning was the multimedia features of these relatively inexpensive home computers.

Numerous software packages for educational purposes were designed and developed for personal computers such as Commodore 64. They included programs with abilities to teach with text, sound, images and relevant graphs. A significant approach to reinforcing learning was the use of multimedia quizzes with sound and colour for learning enhancement. See Schembri, T., & Boisseau, O. (2001) for details on Commodore 64.

The progress in the technology, its capabilities and educational applications have continued and enhanced exponentially over the recent years. The latest developments focus on the web based learning systems for the purposes of better understanding. For further information, see Chau (2007). Although the Internet based learning play a major role in education and its delivery, the latest hardware features promise exciting developments. These features include a different and more natural way of interface. For instance Apple's tap, pinch and draw capabilities using fingers on iPod Touch and iPhone are good examples. These features have enabled the application developers create very interesting and useful educational apps. These apps are readily available at reasonably modest prices on the App Store accessible via Apple's iTunes and devices such as iPhone. These apps cover numerous fields such as languages, arts, music, science, mathematics and statistics. The list is continually growing. With the recent release of iPad, the Touch technology will have even more serious implications for education. Just before the formal launch of iPad in the US, Fry S (2010) had the following comment after interviewing Steve Jobs (Apple's CEO) and reviewing the product for Time Magazine:

"When I eventually got my hands on one, I discovered that one doesn't relate to it as "tool"; the experience is closer to one's relationship with a person or an animal."

According to Fry (2010), Tracy Futhey, of Duke University, was quite optimistic about iPad's potential in education and commented that:

"The iPad is going to herald a revolution in mashing up text, video, course materials, students input ... We are very excited."

The experience through the Apple's Touch technology does certainly create a more natural interface between the user and the machine. To demonstrate this capability, applications which utilize the touch features intensively may be referenced here. For instance, the painting and drawing apps for the iPhone enable a user to experiment with painting in a totally innovative fashion. The painter uses the iPhone screen as a canvas and the fingers as brushes. The colours are selected by tapping and touching a colour wheel. The chosen colour is placed on the user's palette and he the index finger starts drawing and painting on the screen. The iPhone is extremely responsive to strokes and the tiniest detail as desired by the painter are depicted on the canvas. The pinch and zoom feature is used to draw and paint the fine details. The following image (Figure 1) was painted by the author using Brushes app on the iPhone. The painting experience does certainly create a much closer relationship between the painter and the subject.



Figure 1 – Finger Painting of an Australian Farm and Toowoomba’s Japanese Garden (Queensland, Australia) on iPhone

Another innovative technology which certainly has a place in the modern approaches to learning is the Amazon Kindle. Kindle is a specially developed hardware and software packaged into a very compact and attractive tablet. Kindle has free international electronic book, magazine or document download capabilities via 3G. Kindle with its whispernet synchronization between the user’s different devices, is a very good example of seamless technology for learning. For further information on seamless learning, see Looi (2010). Hence the user can download numerous items of interest from the Amazon's Kindle Store. In addition to its very useful features such as an active dictionary and free 3G access to Wikipedia, it is equipped with an experimental text to speech function. When switched on, this function allows the reader to listen to the text on the page. The author has experimented with this feature for the purposes of speed reading training. This experiment was carried out by setting the speech pace to fast and the text on the screen was scanned at the same speed by the author. It was observed that the need for sub-vocalization was removed from the process. Although sub-vocalization is an important factor in comprehension, it is also an inhibitor in achieving higher speeds. The author has comfortably achieved speeds above 250 words per minute with a close to full comprehension outcome.

These technologies are very likely to become readily available on the new tablet computers. They have a great potential for education in many fields. They can even build on the immersive and real-time engagement as in Virtual Reality in online courses. For challenges of using virtual reality in online courses, see Stewart et al (2010). In order to test the technology’s acceptance and perceptions about its suitability and effectiveness, a series of surveys were conducted. As a challenge to determine these technologies’ serious uses in education, the author set himself the task of undertaking the research and writing this paper utilizing several apps on an iPhone. Some examples included apps on communication (text and voice mail), data collection and Statistics, MS Word, document scanning and PDF converter and image cropping. The next sections presents the methodology and results for this ongoing work.

Human Teacher versus Computer Teacher

The participants of this investigation were people who were either directly involved in some form of learning for themselves or closely related to others such as their children or spouses. Adults of both genders from totally different walks of life and backgrounds were selected and contacted for the survey and data collection in this study. These people included college and university students, professionals such as nurses, dentists, technicians and teachers. The study included respondents with varying cultural, linguistic and geographical characteristics too. The following questions are those which have been analyzed in this paper:

1. *How do you rate the learning effectiveness with a Human Teacher?*

1 (Low) 2 3 4 5 (High)

2. *How do you rate the learning effectiveness with a Computer Teacher?*

1 (Low) 2 3 4 5 (High)

3. *How do you rate your interaction in terms of enjoyment with a Human Teacher?*

1 (Low) 2 3 4 5 (High)

4. *How do you rate your interaction in terms of enjoyment with a Computer Teacher?*

1 (Low) 2 3 4 5 (High)

An initial analysis of the data for the difference between the perceptions of the learning process effectiveness indicates a preference for the human teacher. The difference in the means of the responses is slightly over 1.

Further investigation in the form of t-test confirmed that there seems to be a significant difference between the two means of the learners' perceptions for computer and human teachers. As Figure 2 illustrates, the test statistic is significantly larger than the upper end of the critical value. Hence, it falls in the higher end of the critical region. The test was carried out with both 1% and 5% levels of significance and the outcome remained the same. It should be noted that the the p value of is considerably lower 5%.

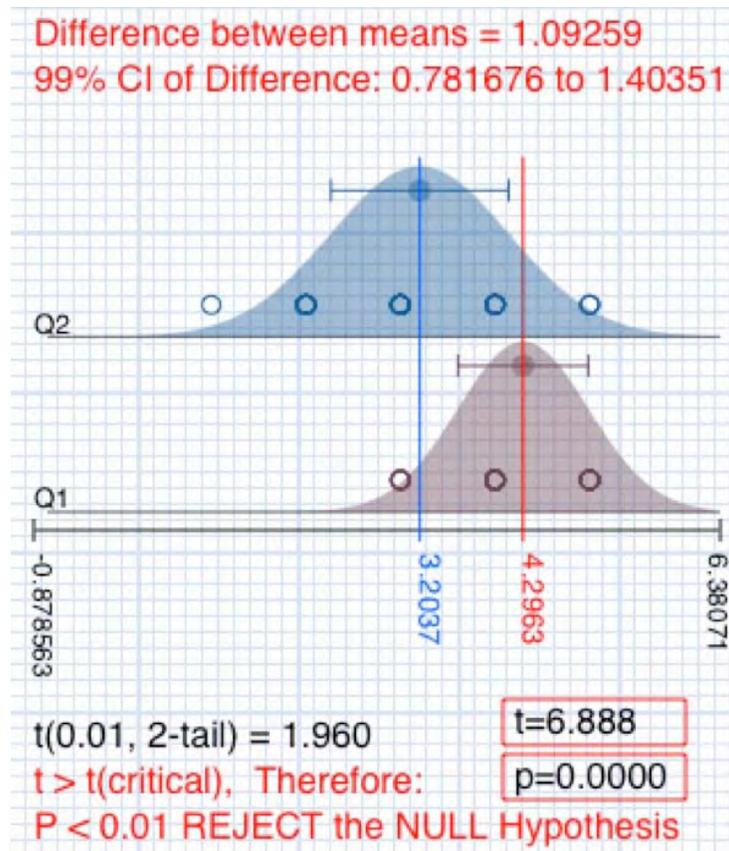


Figure 2 – Difference between the Means of the responses for Question 1 and Question 2

Another aspect of this investigation was to study and compare the levels of interaction-enjoyment for both computer and human teacher. The respondents were asked to rate their perception of the level of enjoyment on a 1 to 5 scale. An initial analysis of the responses determined that the interaction in terms of enjoyment for human teacher has a much larger mean (4.1) than computer teacher (2.8). As Normal Distributions curves in Figure 3 show, the standard deviation for human teacher is also smaller than computer teacher and the respondents appear to have preferences very close to 4(3 and 5).

A t-test even at 1% level of significance indicated that indeed the null hypothesis of identical population means (for computer and human teachers) ought to be rejected. Therefore, it can be concluded that learners, in general, perceive that the learning process with an actual (human) teacher is more enjoyable than a virtual (computer) teacher Figure 4.

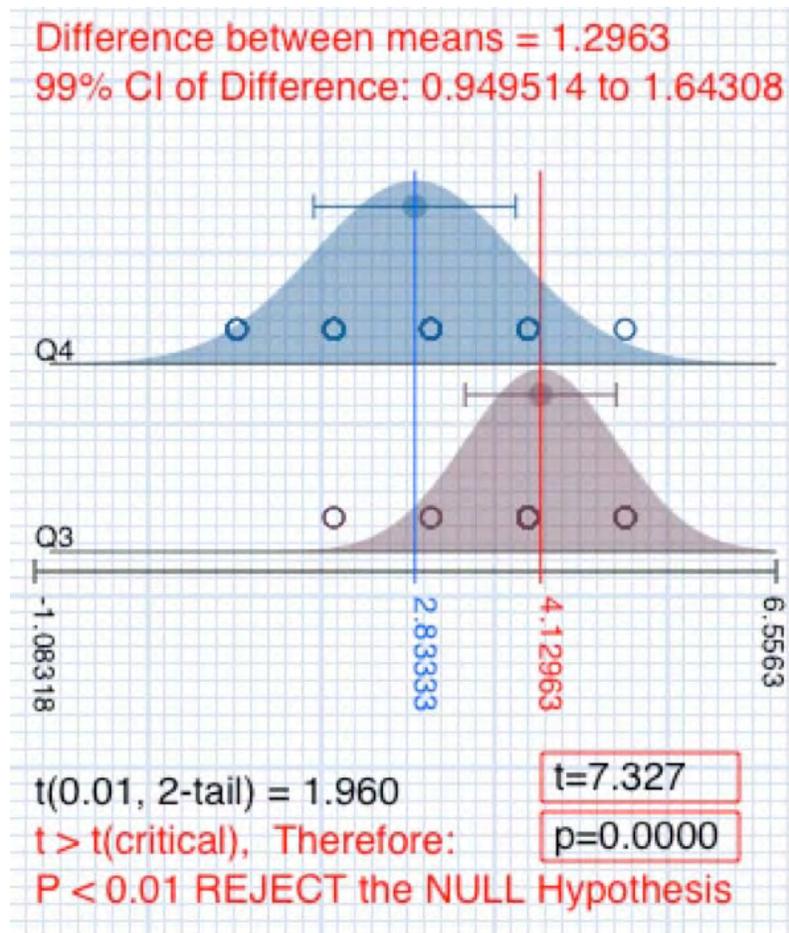


Figure 3 – Difference between the Means of the responses for Question 3 and Question 4

This finding is rather interesting because the respondents would perceive a computer teacher to have a place in the future education. Their very positive response (Figure 4) to the following question (7) is demonstrative of their belief in future technologies for learning and teaching.

Please rate the effectiveness of the following scenario which may take place in the future:

You buy/borrow a book on a topic of your choice, take it home and open it. You then ask the book in your language of choice some questions. The book starts talking and explaining to you by showing you 3 dimensional images. It then invites you to physically (but virtually) interact with them. So, it helps you to learn your topic (e.g. a craft or a skill) by letting you experiment; and it gives you feedback all the time!

1 (Low) 2 3 4 5 (High)

	Q7
Mean	3.7037
Std Dev	1.22289
Sxbar	0.166414
95% CI	3.3742 to 4.0332
Sum	200.0
Median	4.000
Min.	1.000
Max.	5.000
Range	4.000
n	54

Figure 4 – Question 7 Parameters

Conclusions

Although an overwhelming majority of the respondents believe in the future of computers in learning and teaching, they still have a preference for having a human teacher. The respondents' preferences regarding the effectiveness and level of enjoyment with an actual teacher support this finding. The respondents, however, are certainly in favour of an advanced and intelligent system which can respond to learners' needs.

This study is an on-going project and additional data is being continually collected. One of the aims of any future investigation is to undertake a comparative study between different cultural backgrounds. It is also planned to investigate new and emerging applications of tablet computers such as iPad in education.

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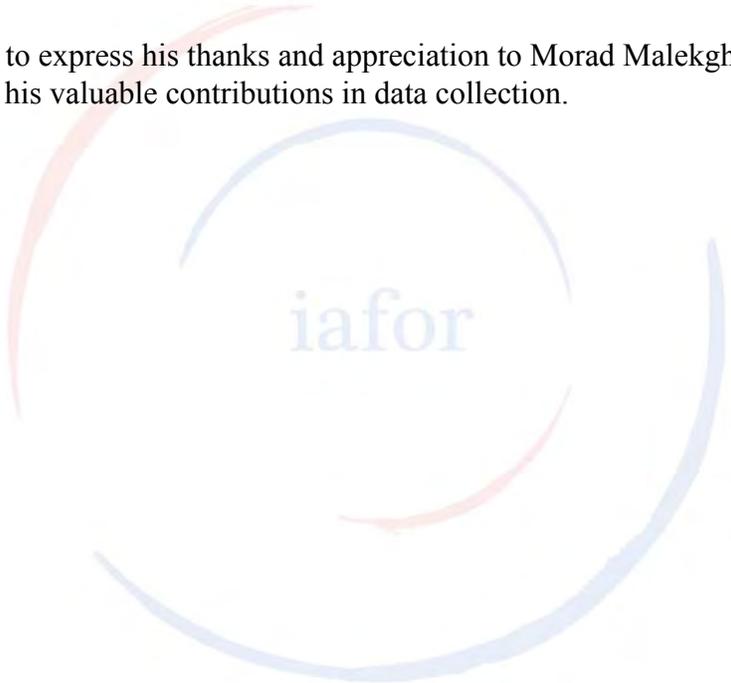
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The logo for the International Association for Frontiers in Education Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The upper arc is a light red color, and the lower arc is a light blue color, matching the text. The arcs are positioned such that they appear to frame the text from above and below, creating a sense of depth and focus.

The Second Asian Conference on Education

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Submission Title: *Using RFID Technology to Construct a Context-Aware Ubiquitous Learning Environment*

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Using RFID Technology to Construct a Context-Aware Ubiquitous Learning Environment

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1. Introduction

Owing to the rapid growth of wireless network and mobile technology development of universal, mobile-learning is becoming an important learning type. At the moment the technology wireless communications and network growing continuously, the development of e-Learning is getting more popular. By the development continuously of mobile implement and universality, it will about to achieve ubiquitous learning (u-Learning). Teaching and learning activities will not be restricted in a physical classroom, and the learning content will not be a book too. In this research, Radio-frequency identification (RFID) is evaluated to be one of the greatest technological innovations in the twenty-first century [1]. As technology improved and rapidly declining price trend will continue to expand the scope of future RFID applications. Besides, with the number and scale of enterprises to adopt RFID technology, more significant benefits RFID show. ABI (Allied Business Intelligence) Research survey in 2009, RFID tag with the price close to the people, will also benefit from the global production value of more than 2008 of 4.6 billion, growing to about 2012, the scale of 9 billion U.S. dollars, and the predicted output of 2010 RDID Up to 11% growth over last year rate [2]. ABI Research also said this year the global output value of RFID as much as 5.3 billion U.S. dollars, growing to at least 2014, 8.2 billion-dollar [3]. In addition, the well-known market research company IDTechEx also claimed that as RFID becomes more widespread, and declining in the prices of hardware, RFID Tag sales estimated 231 million this year, and there will be sold out more than last year in 198 million [4].

RFID technology was originally developed during World War II to distinguish aircraft on radar. In recent years, this technology has moved from obscurity into more commercial and mainstream applications. A number of industries have piloted this new RFID technology [5], including aviation [6], building and construction [7], customer satisfaction [8, 9], fashion industry [10], health management [11, 12], logistics [13, 14], and retailing [15]. RFID is not only a cost-saving technology but also a service-enhancing technology [16]. Hence, it can be expected that the adoption of RFID in the retail sector will increase rapidly. Yet, the adoption rate will depend on the benefits received and the challenges encountered [17]. This research aims to construct a context-aware ubiquitous learning application base on RFID technique and PDA handheld reader equipment. In order to achieve the better effects of teaching and learning purpose,

we will apply situated learning strategy into the teaching and learning process with RFID implements as a middleware media. Moreover, we will also use the Knowledge Map concept to design the learning materials through the context-aware interfaces and then provide personalized learning supports for each learner. Finally, we expect the proposed u-Learning architecture will support learners to enhance the learning motivations and learning performance.

2. Literature Review

2.1 RFID Technology

RFID is an identification system where in an electronic appliance (transponder or RFID tag) attached to an item applies radio frequency into communicate with other appliances (usually a RFID Reader). Besides, there are various forms of identification (ID) and various mechanisms of identifying objects, such as animals, people, food, clothes...etc. As shown in Figure 1, the two most important components in a *RFID* system are the *RFID tag* – an electronic ID device attached to an item to be tracked, and the other is *RFID reader* – a device that can sensor the presence of a tag and access data or information stored in it. The RFID reader usually transmits the data or information to another server/system running edge applications. The server/system always runs *RFID middleware* software that translates reader observations and passes them to the edge application.



Figure 1. RFID Architecture

2.2 RFID Researches in the e-learning industry

Nowadays, researchers have further tried to use sensing or wireless technologies to provide more effective learning tools. There are many technique reports or best practices from related consulting companies or suppliers of RFID technologies companies. In fact, there are still many academic researches have good experiment results, such as Hwang et al. (2009) designed a context-aware ubiquitous learning system with RFID communication and sensing technologies to support lacking practical experience researchers with using single-crystal X-ray diffraction operations [18]. Then, Chu et al. (2010) also proposed a two-tier mobile learning system that

employs RFID technology to detect and examine real-world learning behaviors of students. The experimental results from a natural science course of an elementary school prove this novel method could be improved the learning performance of students and enhanced learning motivation [19]. Moreover, Chiou et al. (2010) presented the navigation support problem for context-aware ubiquitous learning and two navigation support algorithms [20]. The goal is to make learning and navigation more efficacy and efficiency. As the results, this approach is useful for the learners to achieve more efficiently and utilize the learning resources more efficacy.

Therefore, the location-aware mobile learning approach has extended the applications of location-based learning, outdoor learning and situated learning which place learners in real-world learning scenarios [21]. Besides, this approach also integrates both the real-world and digital-world learning resources from absolute in-field learning into a new learning scenario [22]. In order to help learners to organize and extract their personal deep know-how more effectively and efficiently, it is necessary to design new learning middleware tools and learning management systems (LMS) by taking both the real-world and the digital-world factors into consideration [23]. However, it is not easy to design these appropriate learning strategies and environments that incorporate real-world and digital-world learning resources for favoring and conducting learners [24]. Therefore, it has become an important issue to design location-aware mobile learning strategies and construct this learning environment. In this research, a context-aware ubiquitous learning environment will be proposed with RFID technology. Besides, we will apply situated learning strategy into the teaching and learning process and use the Knowledge Map concept to design the learning materials through the context-aware interfaces and then provide personalized learning supports for each learner.

3. System Design and Architecture

This research aims to construct a context-aware ubiquitous learning system base on RFID technique and PDA handheld reader equipment. In order to achieve the better effects of teaching and learning purpose, we design three modules in our proposed system in Figure 2. This system is composed of three modules and we discuss in the following sections. In the U-Learning Module (referred to as ULM), the goal is to allow interaction between learners and course content. ULM will learn the content of the concept map using the knowledge transformed the concept of teaching and formative assessment, conceptual learning process matrix will record the process of learning. This module will provide the learning materials for learners to adjust and record functions. Besides, the learning process and the materials operation will download to PDA handheld reader for each learner in real-time adjustments and feedback.

In the Teaching Materials Management Module (referred to as TMMM), the main purpose is make learning courses for the storage and related scheduling. When learners enter the ULM, it

will provide real-time interactive content through the PDA handheld reader with RFID technology. Besides, teachers could use the TMMM capability to transfer the teaching materials into knowledge map (KM) of the knowledge units. TMMM is based on various concepts related to management and storage. Firstly, the Knowledge map of this module is the main application of the concept of teaching units. Secondly, the Content Repository will select the most consistent target condition or teaching materials for teaching. Then, this learning process will form a personalized learning path and assessment for learning. Therefore, TMMM will be able to use the knowledge map, and will require expert knowledge for teaching the concept of unit analysis.

Examination & Evaluation Module (referred to as EEM) is an important measure of the effectiveness of online learning tools through the questions bank function. In ways of learning through the assessment of EEM, it provides information for action of ULM for courses and tests to adjust the weight parameters. This module provides personalized learning process and test assessment records, the assessment of learners can generate the table, on the teaching effectiveness of control and be helpful. Finally, we expect the proposed context-aware u-Learning system will support learners to enhance the learning motivations and learning performance.

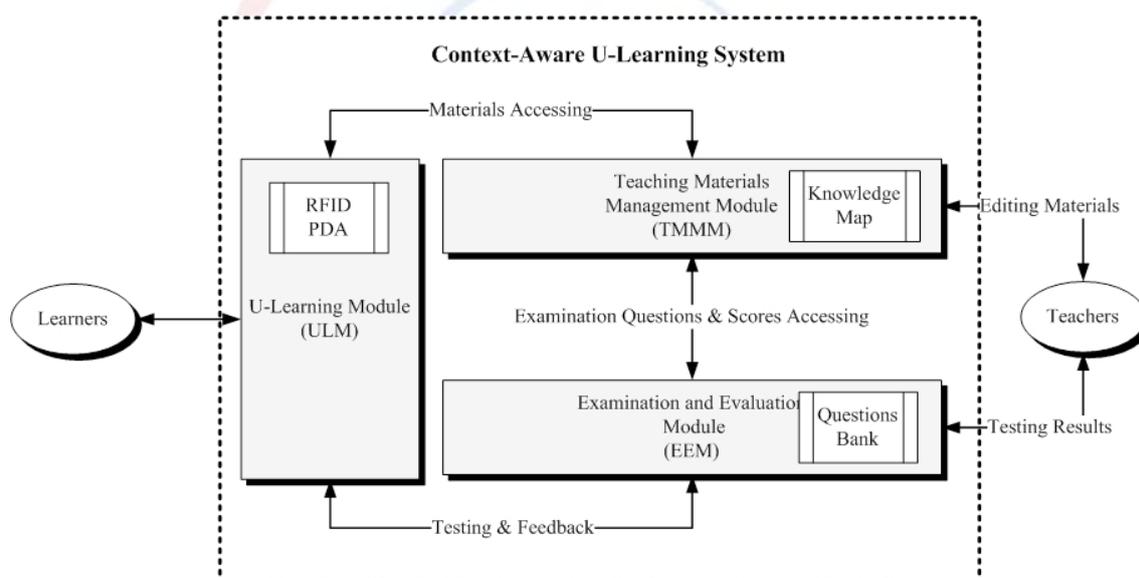


Figure 2. System Architecture

4. System Components

4.1 U-Learning Module

The main purpose for ULM is to allow interaction between learners and course content. ULM will learn the content of the concept map using the knowledge transformed the concept of teaching and formative assessment, conceptual learning process matrix will record the process of learning. ULM will provide the learning materials for learners to adjust and record functions. Conceptual matrix through the learning process and the PDA handheld reader operation will

produce a concept map for learning to meet the learner's learning status in the teaching of real-time adjustments and feedback.

In Figure 3, when learners have studied unit 1 of the instruction, then they will first experience their first formative assessment with their PDA handheld reader, and the system will calculate their testing scores and classify their learning performance. Finally, if learners fail to pass the standard level in unit 1, the system will recommend other appropriate personalized curriculum and different materials with the same concepts. Then, the system will transmit the suitable materials to learners' PDA handheld reader with RFID wireless technology. On the other hand, if learners pass the exam in unit 1 then they will carry on with the additional related topics in enrichment activities. Therefore, learners can re-learn the same concepts through different curriculum sequencing and materials in corrective activities with knowledge map function. When learners complete their corrective activities, they are administered a second formative assessment. This ensures that learners learn the important concepts rather than simply memorize the answers to specific questions from the question bank.

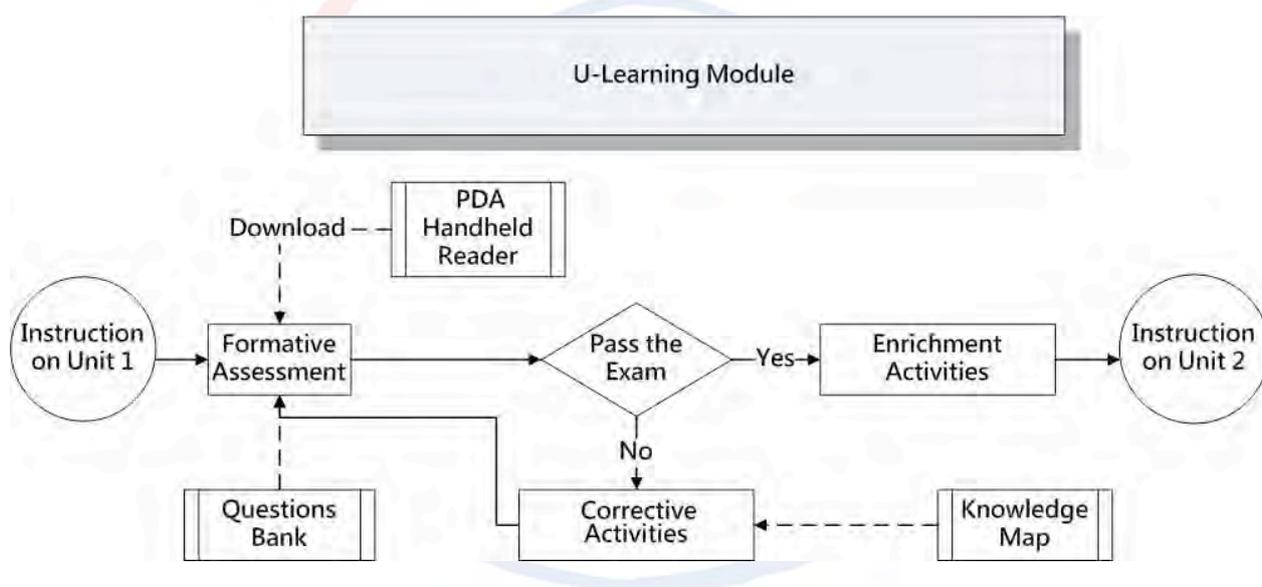


Figure 3. ULM Architecture

4.2 Teaching Materials Management Module

The goal for TMMM is to storage the teaching materials content and related difficulty parameters configuration. When learners enter the ULM, teachers those who use TMMM to transfer teaching content with knowledge map (KM) concept into each knowledge unit of the whole teaching materials. Besides, TMMM could also manage and storage these teaching materials based on various concepts related to each other. Knowledge Map (KM) concept of this module is a mainly conceptual map applications in teaching materials management modules. Besides, KM could also select the most accordance with teaching materials library; form a

concept of personalized learning path. Therefore, teaching units to be able to use the knowledge map, and will require teaching unit from the experts on the concept of knowledge, and constructed the test of each teaching unit assessment, carried out by the learner formative tests (pre-test) for ease of degree parameter. Finally, through the process of Figure 4 to construct the database and have a course curriculum and the corresponding ease of information to provide to the action of ULM and the use of PDA handheld readers.

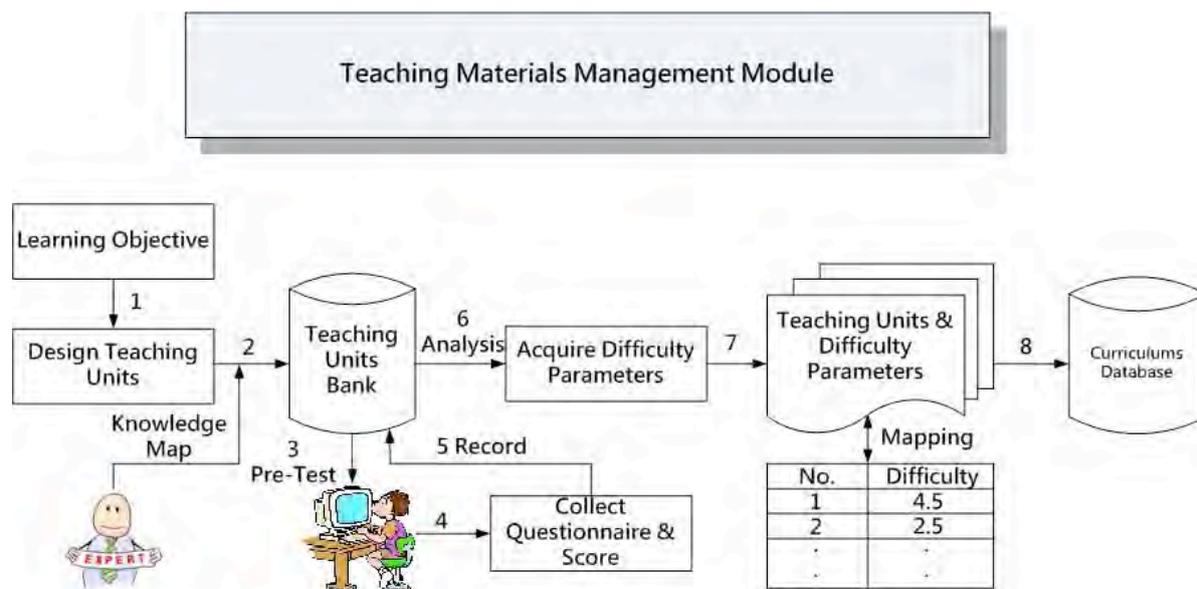


Figure 4. TMMM Architecture

4.3 Examination & Evaluation Module

Examination & Evaluation Module (referred to as EEM) is an important measure of the effectiveness of online learning tools through the questions bank function. In ways of learning through the assessment of EEM, it provides information for action of ULM for courses and tests to adjust the weight parameters. This module provides personalized learning process and test assessment records, the assessment of learners can generate the table, on the teaching effectiveness of control and be helpful.

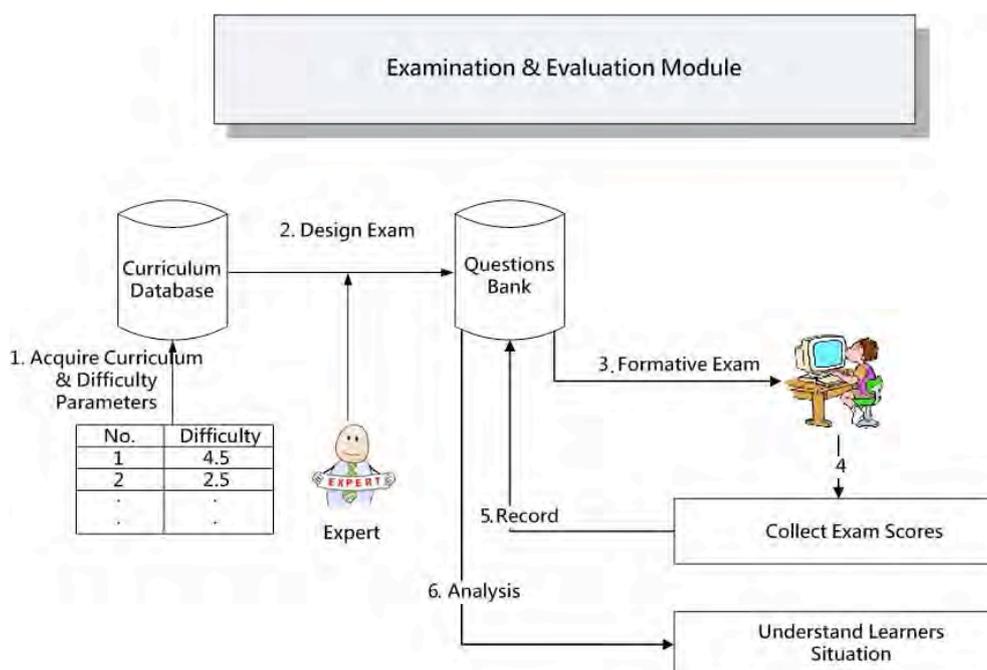


Figure 5. EEM Architecture

5. Conclusion

This research proposed a context-aware ubiquitous learning environment based on the proposed ULM for personalized situated learning with PDA handheld reader, TMMM for personalized learning path generation with KM function, and EEM for personalized learning situation and summative assessment analysis. Besides, our proposed learning path generation approach can also concurrently deliberate the curriculum difficulty level with TMMM function and the curriculum continuity of successive curriculums with EEM function while implementing a personalized curriculum generation in the learning processes.

This paper makes four critical contributions: (1) it presents a *U-Learning Module* and its PDA handheld reader will be able to identify learning objects, deliver learning contents, and be a learning interaction among learners' environment with RFID wireless technology; (2) it illustrates the *Teaching Materials Management Module* to develop various teaching units with Knowledge Map concept; (3) it explains the *Examination & Evaluation Module* to evolve a summative examination or assessment analysis; and (4) it can use ubiquitous and contactless RFID identification to finish learners' learning activities with highly motivations and effects for their self-studies.

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Insurance agencies' organizational learning in a turbulent time: A community of practice perspective

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Topic of the submission: Organizational Learning and Change

Insurance agencies' organizational learning in a turbulent time: A community of practice perspective

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Introduction

A turbulent time is not necessarily bad, it is sometimes even good, for organizational change. Because the external environment is unstable, organizations utilize different approaches to cope with challenges from the turbulent environment so as to sharpen their competencies. Insurance provision is one of the industries which may experience more learning in a turbulent time. Because the external environment is uncertain, many insurance companies have to adjust themselves to changes. Some insurance representatives use their interpersonal networks to find solutions to ease worries, strengthen faith, gain necessary knowledge and sharpen vocational skills. They get together and meet with each other regularly in varied ways including phone calls, emails and face to face communication. They spontaneously involve themselves in common activities to share something which they worry about in common, tips which they personally have and topics which they are mutually interested in. This is the so called communities of practice (CoPs). According to Wenger (1998), CoPs are formed by groups of people who share a common value and get together to engage in collaborative learning. Because establishing CoPs is also a way to facilitate individual and organizational learning, some organizations use the idea to form formal and informal knowledge bases to encourage individual and organizational learning. Although CoPs may have become an important key to assist learning at the organizational level, few studies illustrate how CoPs help organizational learning, and why these facilitating approaches may work. Therefore, the researchers in this study try to find evidence to clarify the following questions.

- A) How do CoPs help organizational learning within the context of insurance companies?
- B) Why may CoPs facilitate organizational learning?

Literature review

When an organization faces a turbulent situation, it needs learning capability to gain know-how and resources quickly to cope with challenges. Learning capability becomes a key to determining whether or not the organization may survive in the turbulent situation. According to Tsoukas (1992), an organization is a place to collect varied knowledge and resources to enable learning to occur spontaneously. The concept of organizational learning is to broaden the view of learning from the individual level to the organizational level. It describes a learning atmosphere in which organizational members can learn expertise, foster consensus and share knowledge with each

other through formal or informal interactions. The organization can then gain knowledge through these collaborative learning activities, so as to have clear orientation for further development or coping with challenges. Therefore, two presentations will be included when learning at the organizational level is discussed. One is organizational learning, the other is individual learning. The presentation of organizational learning implies that the organization adjusts its routines or culture in order to cope with challenges derived from internal and external risks (Huber, 1991). The presentation of individual learning suggests that the individual's learning behavior in an organization is influenced by organizational learning. Because of strong influences from organizational culture, individuals change their behaviors to follow the acknowledged appropriate values and practices.

Organizational learning is similar to individual learning. An organization cannot verify its learning unless its behavior undergoes a long term change (Garvin, 1993). However, learning is not always right, while changing behavior is not necessarily correct. Argyris & Schon (1978) proposed the idea of single and double loops of learning. When an organization can examine its mistakes under established values or goals to correct mistakes, this is so called single-loop learning. When an organization can not only correct mistakes but also reflect on the established values and goals, the organization is experiencing double-loop learning. In other words, in turbulent times, an organization needs not only to do the thing right but also to do the right thing. This may then ensure positive organizational learning.

However, organizational learning cannot be complete in itself. It needs resources to facilitate it and to keep it continuous. The idea of Communities of Practice is one of the resources which may facilitate organizational learning. Members in a CoP are commonly interested in particular topics, expertise and hobbies. They get together spontaneously to discuss the particular hobbies so that the particular field knowledge is sharpened and keep developing during the process of continuous interactions. The learning concept in a CoP focuses on continuous, persistent and collaborative learning. Not only can the individual sharpen his or her expertise in the community, but also he or she will build social networks to share knowledge and experiences. Members in CoPs can then share their expertise by way of mutual engagement, joint enterprise and shared repertoire (Ardichvili, Page, & Wentling, 2003) to enable members to reveal or to develop their own meanings of engaging in the community interactions (Wenger, 1998).

The so-called "practice" implies the actual actions and the environment in which the actions are embedded (Brue & Hemingway, 2002). In other words, it embraces the professional knowledge of practical practices and the situation in which the practices take place (Brown & Duguid, 2001). In a CoP, members interact with each other not because of wanting to complete tasks, but because of being interested in particular topics (Breu & Hemingway, 2002). Members are not blind in the mission, but put their effort into understanding, reflecting and learning (Alee, 2000). Through interactions, communications and socialization, knowledge development within the CoP breaks the barriers of time and space (Lave & Wenger, 1991). This sort of organization is similar to what Bielaczyc & Collins (1999) refer to as a learning entity with a strong learning culture. Because each member is involved in a whirlpool of collective learning, each participant assumes responsibility for his or her own learning.

Some scholars suggest that CoPs can stimulate organizational learning, while others highlight the importance of constructing formal or informal CoPs to prepare valuable knowledge for the organization. Andrew, Ferguson, Wilkie, Corcoran & Simpson (2009) have conducted a research plan referring to international communities of practice organized by Glasgow Caledonian University in Scotland. By way of CoPs, novice nurses have the opportunity to talk to nursing experts who come from all over the world. CoPs not only improve nurses' individual learning but

also facilitate organizational learning. Wolff & Hart (2006) explored the relationship between communities and local universities from the perspective of CoPs. They discovered that CoPs may strengthen the relationship between the community and the local university and may construct mutual trust for both of them. The community and the local university can then go beyond the so-called “comfort zones”, and are willing to work together to build partnerships. Because the formal organization can be improved by CoPs and a CoP can also identify its own role to engage in activities during the process, this can also be viewed as an opportunity for organizational learning. Keung (2009) observed CoPs in a school and discovered that teachers’ mutual engagement enables joint enterprise to be formed. Because of these continuous interactions, some routines are gradually established to enable shared repertoires to be formed. This will then benefit individual and organizational learning. However, most of the articles do not specifically address how the particular communities form and how they facilitate organizational learning. The focus of this research is on answering these questions and also explaining why these facilitating approaches may work.

Research method

In order to understand how CoPs within insurance companies facilitate organizational learning, the researchers adopted a qualitative research method and visited CoPs in 4 insurance agencies in Taiwan in order to explore how the CoPs facilitate organizational learning. Because the researchers are trying to answer “how” and “why” questions, using a case study with the qualitative research method may be a better choice. In order to find CoPs to study, to explore members’ ways of interaction and to understand interviewees’ meaning in depth, the semi-structured interview method becomes an important tool to probe the cause of reality.

16 interviewees were recruited, while 4 insurance agencies were visited. In order to explore organizational atmosphere from different angles (the manager’s view and subordinates' views), 4 interviewees were recruited in each company including at least 1 supervisor and 1 specialist. The details of the interviewees are as follows.

location	name	sex	Age	org	position	seniority
Taipei	lan	M	39	A	supervisor	12.5
Taipei	Neen	F	28	A	junior specialist	1.5
Taipei	Gin	F	24	A	junior specialist	1.5
Taipei	iee	M	34	A	supervisor	9
Taichung	show	F	42	B	senior specialist	10.5
Taichung	shuan	M	45	B	supervisor	12
Taichung	roo	M	47	B	supervisor	15
Taichung	gen	M	22	B	junior specialist	1.2
Taipei	jen	F	44	C	senior specialist	9
Taipei	lin	F	46	C	supervisor	13
Taipei	chun	M	45	C	supervisor	13
Taipei	mei	T	50	C	supervisor	12

Taichung	ren	M	53	D	supervisor	27
Taichung	thun	M	45	D	senior specialist	12
Taichung	wen	F	26	D	junior specialist	1
Taichung	ho	F	51	D	supervisor	10

Interviews were tap-recorded and transcribed. Looking at the transcriptions, varied categories emerged to summarize meaningful sentences or paragraphs. Reading between different labels, the researchers categorized the labels by Wenger's theoretical framework referring to "mutual engagement", "joint enterprise" and "shared repertoire". Using the three factors, the researchers try to explain how CoPs in insurance agencies in Taiwan facilitate organizational learning and also to identify the reasons.

Findings and discussion

How do communities of practice facilitate organizational learning?

Using mutual engagement to form a learning culture for the organization

In the insurance agencies visited, the individual's idea can easily be delivered in an organization while the individual's problem can also be shared within the organization and be resolved by collaboration with other colleagues. In order to complete an assigned task, the individual's involvement will evoke the other colleagues' help so that CoPs may back the individual member up to complete the task. For example, in company A, different teams in a training program will virtuously compete with each other in order to gain a good reputation. When the team members are also community members, they may learn quickly. According to observation, they will try to learn from excellent colleagues to make themselves not fall behind. Members in communities seem to pay no attention to one's position in the organization, but focus only on what they are engaging in, why the problem is formed and how to find solutions. According to Mr. Chun, "... *As long as you are one of us and are facing a problem, all of us are pleased to be your teacher and try to help you. We do not care at all about who you are*" In other words, a difficult task may bring about members' efforts and trigger group dynamics to find solutions together, through which members may learn with each other and an organizational learning culture will then gradually be formed.

Using joint enterprise to link communities with the organization

In the insurance agencies, when a task is assigned to a team, team members will retrieve resources from CoPs and try to find solutions through interpersonal networks. In the particular context of insurance organizations, members work together and share experiences and feelings with each other. The CoPs they formed do not have strong orientation towards improving particular knowledge, but strong consensus on sharing feelings and gossip. "*We normally will get together and have a tea break in Starbucks on Monday afternoon. Some members who are managers in different teams also join us to talk about what had happened in their teams*" (Ms. Wen). When a difficult challenge is imposed on an individual member or on a team, the CoPs which the particular member belongs to will view the challenge as a shared problem and find solutions together. At that moment, communities' enterprises and organizational goals are associated with each other.

Using shared repertoire to establish a shared knowledge base for the organization

Because of the sharing culture, most interviewees agreed that their personal experiences can be shared within the CoPs. In the agencies visited, they create formal knowledge bases by way of a bottom-up approach to facilitate organizational learning. Some agencies use information techniques to record what they have discussed at formal or informal occasions. When an individual or a team develops a new idea or has found brilliant solutions, the ideas or solutions will be collected and put onto a shared web site to provide a reference for other members or teams. For example, company B uses an intranet to keep company documents including meeting minutes, business diaries and policy reports. The intranet knowledge base enables members in the company to gain know-how quickly. Because the insurance service is a job which is strongly associated with human beings and the shared knowledge may also benefit their customers, some of the agencies have opened shared web sites to their customers and also invite customers to join the CoPs. For example Ms. Show has her personal web site to record her feelings and knowledge derived from the activities she attends. Her team members, colleagues or even customers can then get on the internet to retrieve useful knowledge or give suggestions.

Some organizational flows, routines and cultures can be viewed as informal organizational knowledge bases, because these mechanisms deliver organizational values and members can soon detect know-how when they get used to the particular culture, routine or flow. In addition, when members face difficulties, they tend to request help from CoPs. Other colleagues who know how to sort out the problem in the same CoP will then provide ideas or offer help to solve the problem. CoPs then become an informal knowledge base where organizations can find ideas to cope with difficulties or find appropriate persons to help resolve problems.

Why may these facilitating approaches work?

Mutual engagement

Why can the mutual engagement in CoPs become a key to facilitate organizational learning? Although most of the agencies visited have formal teams to perform tasks, most of the teams are based on informal communities of practice. Team members can usually find solutions from CoPs to cope with task challenges. All the organizations visited provide only simple levels (about 4-5 levels) for promotion. For example, according to Mr. Iee, "*our company has 5 levels including representative, director, assistant manager, district manager, office manager*". Most interviewees (13 out of 16 interviewees) agreed that insurance agents do not have clear class consciousness when they communicate with each other. They can then talk about what they really think to others to form a true sharing culture. Because of the sharing culture, members in the same CoP or from different teams can mutually engage in shared tasks, discussions or knowledge exchanges, and a learning culture can gradually be formed to facilitate organizational learning.

Joint enterprise

Why can the joint enterprise in CoPs link both communities' and the organization's efforts together? For the insurance companies visited, because CoPs are the centre of team learning, practices in communities will then influence the organization's behavior to trigger organizational learning. Because a community may recruit members from different teams and an individual member may also belong to different communities, the assigned task will then involve different team members contributing knowledge from different communities. Because of the thriving communities of practice, organizational performance is associated with the community enterprise and interactions; learning developed in CoPs seems to direct organizational learning.

Shared repertoire

Why can the organizational knowledge base be established by shared repertoire in CoPs? Two knowledge bases are established to facilitate organizational learning: one is the formal knowledge base, and the other is the informal one. As far as the formal knowledge base is concerned, insurance companies use information techniques to record useful interactions. For example, in company C, useful know-how is kept in an intranet system, while company D encourages members to create personal web logs to share knowledge. Because insurance agencies are aware of environmental changes and also value the knowledge derived from interpersonal interactions, they encourage all of their members to collect useful tips, share useful viewpoints with team members and keep the valuable knowledge on some shared electronic data bases or web sites. Useful knowledge derived from formal or informal interactions will be integrated into organizational knowledge bases to enable the insurance company to use the know-how to cope with difficulties, when necessary.

As far as the informal knowledge base is concerned, because CoPs are the foundation of the insurance agencies, some shared repertoires such as routines, language and ways of dealing with tasks influence organizational behaviors. Some formal organizational flows are based on informal routines in particular communities so that the learning approaches in the formal organization are influenced by informal community practices. There are three keys to this situation. Firstly, members in the insurance companies belong to one or more CoPs, so their ways of dealing with tasks will be more or less affected by their styles of doing things in CoPs. Secondly, because community flows, routines and cultures integrate not only the efforts in one community but also varied resources from all over the organization, the community's ways of dealing with tasks can easily be known by other communities to enable different communities to learn with each other. Thirdly, because of the very smooth communication environment without class barriers, different viewpoints and ways of dealing with tasks are valued so that best practices can be adopted by other communities or the organization.

The informal knowledge base formed by CoPs is very different from the formal electronic one. The formal electronic knowledge base stores explicit knowledge, while the informal CoPs keep tacit knowledge which is embedded in the individual. Explicit knowledge is a method to keep one's knowledge and experiences. However, because most experiences are not easy to transform to explicit knowledge, the explicit form of knowledge only delivers about 20% of the meaning of the knowledge. The remaining 80% will be in a tacit form. Tacit knowledge, including personal experience and wisdom, is sometimes the key to success. Because it is valuable and not easy to be transformed to explicit knowledge, many companies try to find ways to manage this kind of knowledge. Developing CoPs is one the methods, because CoPs keep not only explicit documents but also the particular persons as well as the patterns of interaction.

There are three keys to forming CoPs as a knowledge base to facilitate organizational learning. Firstly, because CoPs get members together and strengthen interpersonal networks, the whole community will give a hand when a member needs help. Secondly, because CoPs collect varied expertise together with a common vision so that the professional knowledge can be sharpened spontaneously and continuously in a CoP, the informal community has a strong potential to develop professional knowledge. Thirdly, because CoPs store not only explicit but also tacit solutions for the organization, when the organization needs help the CoPs provide the organization with know-how and experts immediately to facilitate organizational learning.

Conclusion

CoPs within the context of organization have developed particular ways to foster the organizational learning to enable the company to adjust itself to the changes derived from external environment. Taking advantage of mutual engagement, members in CoPs will help with each other to trigger group dynamics to create learning culture for the organization. Using the idea of joint enterprise, members in CoPs will view challenges or tasks as shared problems so that communities' enterprises and organizational goals are bound together. By way of shared repertoire, CoPs create formal and informal knowledge bases for the organization to facilitate organizational learning.

Because insurance agencies value individual knowledge and try to adjust themselves to changes, they keep not only explicit but also tacit knowledge bases in CoPs. The knowledge bases enable CoPs to provide organizational teams with resources to resolve problems derived from the turbulent environment. Because of CoPs, members in the insurance companies keep developing on-going interpersonal networks, through which professional knowledge is sharpened and different viewpoints can interact with each other to create new horizons for the organization. Because CoPs are thriving, community enterprise may affect organizational performance while learning developed in CoPs may direct organizational learning. A strong learning culture within a CoP will then influence the learning culture of the company at the organizational level.

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The relationships of self-concept, academic achievement and future pathway of first year business studies diploma students

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Abstract

A student's academic achievement is impacted by various factors including the multidimensional self-concept. Students with higher levels of achievement are more likely to complete their current study and progress to the next level of study compared to their peers with lower levels of achievement. This study investigates the relationships of self-concept, academic achievement and future pathway of the first year business studies diploma students in a private university college. One hundred and forty three students participated in the study and responded to the Self Description Questionnaire II (SDQII) comprising of three academic facets (Mathematics, English and School) and four non-academic facets (appearance, physical ability, parent relation and peer relation). Multivariate analysis provided evidence that a student's academic self-concept, in particular the school self-concept, English self-concept and Mathematics self-concept strongly impact his or her academic achievement in the first semester. However, there was no significant relationship between self-concept (academic and non-academic) and a student's choice of pathway after completing the diploma programme.

Keywords: Self-concept, Academic Achievement and Future Pathway.

Introduction

Self-concept is perception of oneself about strength, weakness, state of mind, and value by social and environmental interactions (Huitt, 2004; Marsh & Craven, 1997; Slavin, 2003). According to Brinthaupt and Lipka (1994), and Purkey and Novak (1996), human behaviour can be substantially explained by self-concept, which is influenced by our sense of identity, the judgements other people make of us and perceptions of social with other people. Besides that, parental upbringing, continuous failure, depression and internal self-critic also influence the development of one's self-concept (Aziz & Jamaludin, 2009). Self-concept can be divided into two distinct factors; academic and non-academic self concepts (Marsh, 1990; Marsh & Shavelson, 1985). Academic self-concept is the perception of oneself in academic activities in relation to specific subjects, teachers and school while non-academic self-concept is about perception of oneself in non-academic activities which includes their physical self and their relations with parents, friends, and community.

Most past researches showed relentless support towards the belief that there is a significant relationship between academic self-concept and academic achievement in secondary and post-secondary students (Cokley & Patel, 2007; Gordon, 1997; Yara, 2010) but none could resolve the issue of whether academic self-concept affects academic achievement or rather academic achievement affects academic self-concept (Bryne, 1996; Hattie, 1992). Recent study by Yara (2010) on students' self-concept and Mathematics achievement in some secondary schools in Southwestern Nigeria revealed that students with good self-concept perform well in Mathematics. Cokley (2000) found that the grade point average was the best predictor of academic self-concept for students attending predominantly white colleges and universities. The meta-analysis conducted by Valentine et al. (2004) showed that the relationship is vice-versa. Marsh (1993) attested that while there is a relationship between self-concept and academic achievement, general self-concept and non-academic self concepts are not related to academic achievement.

Research Purposes

The present study aims to find the relationship between academic achievement and students' self-concept in several facets such as Mathematics, English, school, appearance, physical ability, parent relation and peer relation among first year business diploma students in a private university college. Since the literature on students' pathway after their first tertiary programme equivalence of the diploma programme in this study is scarce, the effects of these self-concepts on their chosen pathway after their study programme and the relationship between academic achievement and their chosen post-diploma pathway will also be investigated.

The population under study is the business diploma students who possessed a low level of Sijil Pelajaran Malaysia (the Malaysian equivalent to the 'O' Levels) qualification; minimum three credits in any subjects, as an entry requirement to higher education in Malaysia but they have moderate to high socio-economic status. In general, while majority are able to cope with their studies in the first semester, there are quite a number who failed more than half of the number of subjects taken. The results of this study could proffer guidance to academic planning especially in coordinating academic and non-academic activities to improve academic achievement and to boost students with low self-concept.

Conceptual Framework

The research conceptual framework was developed following from the academic and non-academic self-concept factors setting by Marsh and Shavelson (1985), and Marsh (1990). Academic self-concept is defined by the student's perception of themselves in academic competencies measured in three factors; Math self-concept (MAT), English self-concept (ENG) and college (or school) self-concept (COL). On the other hand, non-academic self-concept is defined by the student's perception of themselves in non-academic competencies in four factors; physical appearance self-concept (APP), physical ability self-concept (ABI), parent relation self-concept (PAR) and peer relation self-concept (PER).

Academic achievement is measured by the achievement score from five subjects usually taken by students in their first semester. The subjects are Accounting 1 (Acc), Introduction to Business (Bus), Computer Applications and Data Processing (Com), English 1 (Eng), and Microeconomics (Mic). After completion of the diploma programme, students have two choices of pathway; either to work (or start their own business) or continue their studies to the degree level. The conceptual model for this study is illustrated in Figure 1 below.

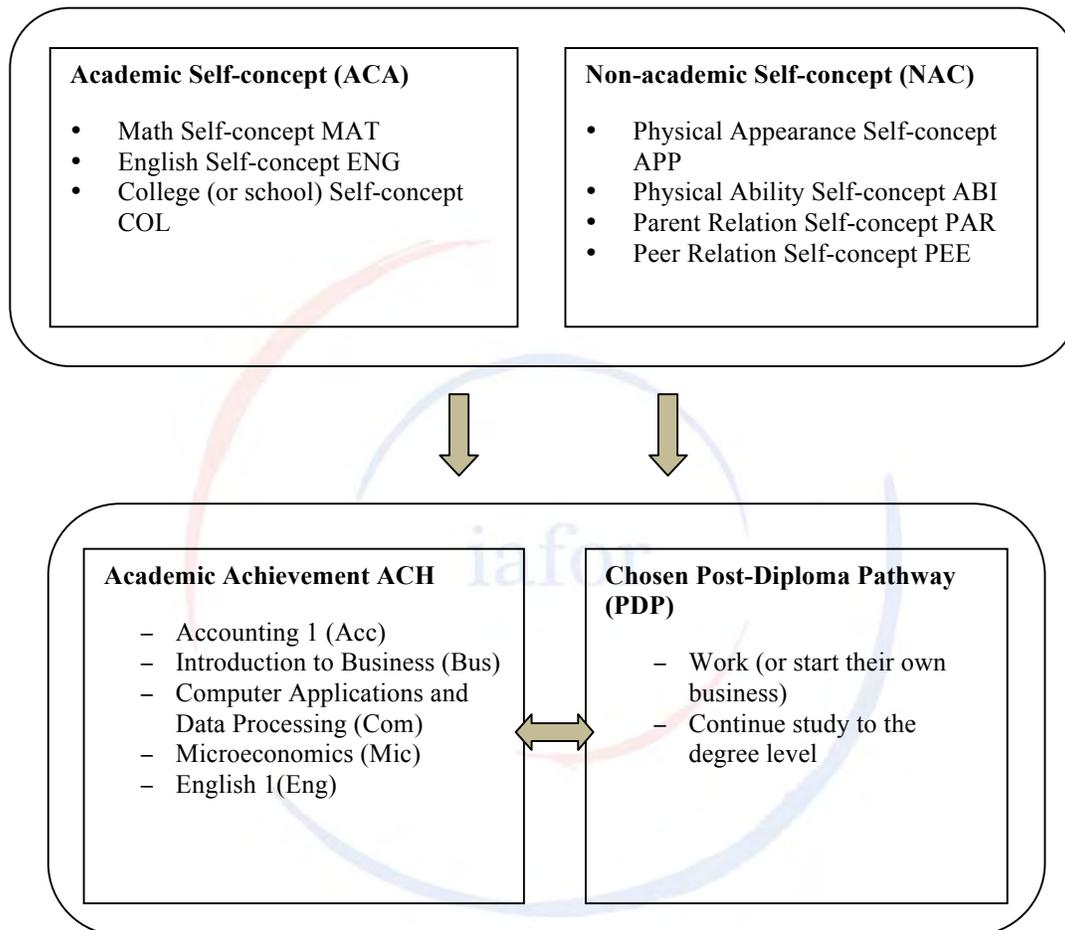


Figure 1. Conceptual framework.

Method

Research Participants and Data Collection

143 first year business studies diploma students in a private university college participated voluntarily in this study. The participants are post-secondary students whose age ranged from 18-19 years old. Permissions were obtained from the lecturers for administering the questionnaire during their tutorial classes. The participants were briefed on the purpose of the study and told of

their rights to withhold their participation during or after they had completed the questionnaire. On average, the participants completed the questionnaire in no more than 15 minutes.

Measures

A 64-item survey questionnaire comprising three academic subscales (English, Math, and School) and four non-academic subscales (Appearance, Physical Ability, Parents Relation, and Peer Relation) of the Self-Description Questionnaire II (Marsh, 1992) was used in this study. The seven subscales had several items, measuring the academic self-concept (English self-concept, Math self-concept, and school self-concept) and the non-academic self-concept (appearance self-concept, physical ability self-concept, parent relation self-concept, and peer relation self-concept). Each item was measured on a six-point Likert scale with 1 = *False, not like me at all* to 6 = *True, very much like me*. The reliability (Cronbach's Alpha) of each subscale is 0.922, 0.860, 0.835, 0.862, 0.800, 0.880 and 0.744 respectively after removing items with *corrected item-total correlations* below 0.3.

The participants were also asked to report their year of birth, gender, student identification number and their desired future pathway after completing their diploma course. They were assured of the confidentiality of their responses which would be used for research and programme development purposes only and would not be used in any way to refer to them as an individual. It was emphasized that their willingness to reveal their student identification number was crucial to retrieve their academic results for data analysis.

Results

The students' performance in all five first semester subjects, namely Accounting 1 (Acc, $M = 61.92$, $SD = 16.48$), Introduction to Business (Bus, $M = 63.21$, $SD = 15.85$), Computer Applications and Data Processing (Com, $M = 61.99$, $SD = 15.48$), English 1 (Eng, $M = 56.74$, $SD = 9.50$) and Microeconomics (Mic, $M = 55.99$, $SD = 14.74$) were evaluated.

The researcher decided to separate English 1 (now, termed as English) from the other four subjects because it is lowly correlated with the rest. An examination of the correlation matrix for four subjects, Acc, Bus, Com and Mic indicated that correlation for each subject with at least one other subject is between 0.3-0.9. In factor analysis, the Bartlett's test of sphericity was significant and that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.851, far greater than 0.6. A single factor was extracted that explained 79% of the total variance in the four subjects. The composite reliability (CR) value was 0.937. Thus a summated score (mean) was taken to represent the student's academic achievement (ACH) (Hair et al., 2006). To ease computations, the data in each subscale were reduced to one factor in Factor Analysis and the summary results in Table 1 below shows that the extraction of one factor from each self-concept is justified.

Table 1
Factor analysis for each self-concept

Self-concept	Final number of items in subtest	KMO measure of Sampling Adequacy	Bartlett's Test of Sphericity	Total variance explained	Factor loadings	Internal reliability (Cronbach's Alpha)
Math (MAT)	7	0.908	.000	69.24%	0.652-0.917	0.921
English (ENG)	5	0.863	.000	68.52%	0.709-0.906	0.880
College (COL)	5	0.816	.000	62.54%	0.751-0.872	0.849
Appearance (APP)	6	0.849	.000	60.16%	0.642-0.877	0.862
Physical Abilities (ABI)	6	0.790	.000	51.07%	0.527-0.866	0.800
Parent Relation (PAR)	8	0.892	.000	54.97%	0.604-0.817	0.880
Peer Relation (PER)	4	0.749	.000	57.84%	0.666-0.843	0.751

Pearson Correlation Analysis (see Table 2) revealed that there is a significant negative relationship between Math self-concept and English self-concept where $r = -.299, p < .05$. It was found that a significant positive relationship exists between Math self-concept and school self-concept ($r = .245, p < .05$). Similarly, the relationship between English self-concept and school self-concept is also significantly positive ($r = .211, p < .05$). Results of the correlation analysis indicate that higher Math self-concept scores are related with higher school self-concept scores but lower English self-concept scores. Meanwhile, higher English self-concept scores are associated with higher school self-concept scores.

As for the non-academic self-concepts, each of them has a significant positive relationship with any one of the other non-academic self-concept. Therefore, a high score in one non-academic self-concept is associated with a high score in another non-academic self-concept. However, there is no significant relationship between Math self-concept and Appearance self-concept, between English self-concept and parent relation self-concept, and between English self-concept and peer relation self-concept.

40.6% of the participants expressed that they would like to work or start their own business after completing their business diploma programme while 59.4% want to continue their study in the degree programme. The means and standard deviations of academic achievement and English score for different chosen pathways are given in Table 3.

Given that Levene's test has a probability greater than .05, we can assume that the population variances are relatively equal. Therefore, we can use the t -test to test for equality of means in the students' academic achievement and English score for different chosen pathways. The two-tail significance for the academic achievement and English score in Table 4 indicate that $t(141) = -.198, p > .05$ and $t(138) = 0.449, p > .05$ respectively. Therefore, we conclude that academic achievement and English score respectively do not differ significantly with differences in student chosen pathway.

Table 2
Correlations between self-concepts

		Math (MAT)	English (ENG)	College (COL)	Appearance (APP)	Phy. Ability (ABI)	Parent Rel. (PAR)	Peer Rel. (PER)
Math (MAT)	Pearson Correlation	1	-.299**	.245**	.072	.181*	.241**	.230**
	Sig. (1-tailed)		.000	.002	.198	.016	.002	.003
English (ENG)	Pearson Correlation	-.299**	1	.211**	.330**	.258**	-.042	.061
	Sig. (1-tailed)	.000		.006	.000	.001	.310	.237
College (COL)	Pearson Correlation	.245**	.211**	1	.274**	.145*	.250**	.365**
	Sig. (1-tailed)	.002	.006		.000	.042	.001	.000
Appearance (APP)	Pearson Correlation	.072	.330**	.274**	1	.245**	.215**	.150*
	Sig. (1-tailed)	.198	.000	.000		.002	.005	.037
Phy.Ability (ABI)	Pearson Correlation	.181*	.258**	.145*	.245**	1	.157*	.152*
	Sig. (1-tailed)	.016	.001	.042	.002		.031	.036
Parent Rel. (PAR)	Pearson Correlation	.241**	-.042	.250**	.215**	.157*	1	.139*
	Sig. (1-tailed)	.002	.310	.001	.005	.031		.049
Peer Rel. (PER)	Pearson Correlation	.230**	.061	.365**	.150*	.152*	.139*	1
	Sig. (1-tailed)	.003	.237	.000	.037	.036	.049	

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

Table 3
Academic achievement (4 subjects) and English score for different chosen pathways

	Chosen Post-Diploma Pathway (PDP)	N	Mean	Std. Deviation
Academic achievement (ACH)	Work/start business	58	60.46	14.041
	Continue to study	85	60.93	13.862
English score (Eng)	Work/start business	58	57.17	9.480
	Continue to study	82	56.44	9.556

Table 4
Independent samples tests

		Test for Equality								
		Variances (Levene's Test)				Means (<i>t</i> -test)				
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Conf. Int. of the Diff. Lower Upper	
Academic Ach. (ACH)	Equal var. assumed	.004	.950	-.198	141	.844	-.469	2.373	-5.161	4.223
English score (Eng)	Equal var. assumed	.003	.959	.449	138	.654	.733	1.634	-2.498	3.965

Logistic regression is employed to run a model predicting the outcome variable, post-diploma pathway (PDP), using academic achievement (ACH) and English score (Eng). The aim is to associate the chosen pathway with academic achievement and English score. It is assumed that a linear relationship between the transformed outcome variable PDP and the predictor variables, ACH and Eng. Since there are multiple categories, a base category is chosen as the comparison group. Here, continue to study (pathway = 1) after completing the diploma programme is chosen.

The likelihood ratio test (see Table 5) indicated that the chi-square value of 0.398 with a *p*-value of more than 0.05 tells us that the model as a whole does not fit significantly.

A comparable statistic to *R*-squared does not exist in logistic regression analysis. This is because the model estimates are maximum likelihood estimates generated through an iterative process and they are not calculated to minimize variance. Hence, the ordinary least squares (OLS) approach to goodness-of-fit does not apply and pseudo *R*-squared can be used to evaluate the goodness-of-fit of the logistic model. These are "pseudo" *R*-squareds because they range from 0 to 1, just like the *R*-squareds, with higher values indicating better model fit. However, their interpretation differ from an OLS *R*-squared because different pseudo *R*-squareds can arrive at very different values. In this study, three measures of pseudo *R*-squared yielded very low values; Cox and Snell's = 0.003, Nagelkerke's = 0.004 and McFadden's = 0.002 and these confirmed that the data do not fit into the logistic model.

Table 5
Model fitting

	Model Fitting Criteria		Likelihood Ratio Tests	
	-2 Log Likelihood	Chi-Square	df	Sig.
<i>Model</i>				
Intercept Only	188.560			
Final	188.163	.398	2	.820
<i>Effect</i>				
Intercept	188.487	.324	1	.569
Academic achievement (ACH)	188.356	.194	1	.660
English score (Eng)	188.502	.340	1	.560

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

The likelihood ratio tests results in Table 5 show that both the academic achievement and English score are statistically insignificant. Therefore, a student's choice of post-diploma pathway does not depend on their academic achievement or their English score.

Linear regression is employed to determine the contribution of the academic and non-academic self-concepts to students' academic achievement and English score respectively in the first semester of their business diploma programme, and whether they are salient predictors. As the researcher decides in which order to enter the independent variables into the model based on past research, hierarchical multiple regression is used. The set of academic self concepts were entered first (read as block 1) and then followed by the set of non-academic self-concepts (read as block 2). Forced entry was selected for the first block and a stepwise method for the second block since there is a lack of research in the effects of non-academic self-concepts on academic achievement.

Table 6 shows that the academic self-concepts on their own contribute 39.6% and 24.2% of the variance in academic achievement and English score respectively (see models 1 and 3). However, for the final models (models 2 and 4), these values increase to 42.3% and 27.9% variation in academic achievement and English score respectively. Therefore, whatever *significant* variables (using stepwise linear regression) enter the model in block 2 account for an extra 2.7% of the variance in academic achievement which is highly significant as indicated by the *F*-value of 24.559 (see Table 7). Similarly, an additional of 3.7% of the variance in English score was also significant with *F*-value 12.86. The adjusted R^2 gives us some idea how well our model generalises and ideally we would like this value to be the same, or very close to, the value of R^2 . The difference in the final model for each of the academic achievement (model 2) and English score (model 4) respectively is a fair bit (.423-.406, or 1.7% and .279-.257, or 2.2%). This shrinkage means that if the model for academic achievement and model for English score were derived from the population rather than a sample, it would account for approximately 1.7% and 2.2% respectively less variance in the outcome.

The Durban-Watson statistic is calculated to test the correlation between errors. The test statistic can vary from 0 to 4, with a value of 2 meaning that the residuals are uncorrelated. As a conservative rule of thumb, Field (2009) suggests that values less than 1 or greater than 3 are definitely cause for concern. The closer the value to 2, the better and for these data (see Table 6), the value is 1.51 for dependent variable academic achievement and 1.64 for English score, indicating that the assumption of independent errors is tenable for both cases.

Table 6
Model summary for academic achievement and English score using hierarchical linear regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.629	.396	.383	10.96778	.396	29.535	3	135	.000	
2	.650	.423	.406	10.76199	.027	6.212	1	134	.014	1.51
3	.492	.242	.225	8.360	.242	14.265	3	134	.000	
4	.528	.279	.257	8.185	.037	6.797	1	133	.010	1.64

Model 1: Dependent Variable: ACH, Predictors: (Constant), COL, ENG, MAT

Model 2: Dependent Variable: ACH, Predictors: (Constant), COL, ENG, MAT, PER

Model 3: Dependent Variable: Eng, Predictors: (Constant), COL, ENG, MAT

Model 4: Dependent Variable: Eng, Predictors: (Constant), COL, ENG, MAT, APP

Table 7
ANOVA for academic achievement and English score

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10658.361	3	3552.787	29.535	.000
	Residual	16239.445	135	120.292		
	Total	26897.807	138			
2	Regression	11377.863	4	2844.466	24.559	.000
	Residual	15519.944	134	115.820		
	Total	26897.807	138			
3	Regression	2990.953	3	996.984	14.265	.000
	Residual	9365.405	134	69.891		
	Total	12356.358	137			
4	Regression	3446.291	4	861.573	12.861	.000
	Residual	8910.067	133	66.993		
	Total	12356.358	137			

An examination of *t*-values in Table 8 indicates that the Math self-concept, English self-concept, college self-concept and peer relation self-concept contribute significantly to the students' academic achievement. The appearance, physical ability and parent relation self-concepts failed to meet the selection criteria. As for English score, all the academic self-concepts and appearance self-concept are the salient predictors. The *b* values tell us about the relationship between the dependent variable and each predictor, and to what degree each predictor affects the outcome if the effects of all other predictors are held constant. If the value is positive we can tell that there is a positive relationship between the predictor and the outcome whereas a negative coefficient represents a negative relationship. Thus, for the data in this study, as Math self-concept and college self-concept increase, academic achievement improves. However, as English self-concept and peer self-concept increase, academic achievement decreases. On the other hand, as each of the academic self-concepts of English and college (school) increases, English score also increases but high appearance self-concept will result in low English score. Hence, school self-concept and English self-concept had greater impact than the other two significant predictors for both the academic achievement and English score.

Table 8
Hierarchical linear regression models for academic achievement and English score

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
		<i>b</i>	Std. Error	Beta	<i>t</i>		Tolerance	VIF
1	(Constant)	60.949	.930		65.513	.000		
	MAT	1.727	1.033	.124	1.671	.097	.817	1.223
	ENG	-5.877	1.025	-.419	-5.735	.000	.836	1.196
	COL	6.611	1.004	.476	6.585	.000	.855	1.169
2	(Constant)	60.972	.913		66.788	.000		
	MAT	2.136	1.027	.153	2.079	.039	.797	1.255
	ENG	-5.769	1.007	-.412	-5.732	.000	.834	1.199
	COL	7.391	1.034	.532	7.150	.000	.777	1.287
	PER	-2.464	.988	-.178	-2.492	.014	.844	1.185
3	(Constant)	56.743	.712		79.733	.000		
	MAT	-.007	.793	.000	-.009	.993	.811	1.233
	ENG	3.607	.787	.380	4.585	.000	.824	1.213
	COL	2.305	.774	.243	2.977	.003	.851	1.175
4	(Constant)	56.743	.697		81.440	.000		
	MAT	.251	.783	.026	.320	.749	.798	1.253
	ENG	4.269	.811	.450	5.264	.000	.743	1.345
	COL	2.650	.769	.279	3.444	.001	.826	1.211
	APP	-1.996	.766	-.210	-2.607	.010	.834	1.199

Models 1 & 2, Dependent Variable: ACH

Models 3 & 4, Dependent Variable: Eng

Tolerance and the Variance Inflation Factor (VIF) are the two collinearity diagnostic statistics used to assess multicollinearity. A small tolerance value indicates that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. The VIF is $1/\text{tolerance}$ and takes a value greater than or equal to 1. It measures the impact of collinearity among the independent variables in a regression model. According to O'Brien (2007), a tolerance of less than 0.20 or 0.10 and/or a VIF of 5 or 10 and above indicates a multicollinearity problem. In this study, all independent variables involved have acceptable tolerance and VIF values as shown in Table 8, indicating the problem of multicollinearity does not exist.

The scatterplots of residuals against predicted values for academic achievement and English score respectively in Figure 2 show that there is no clear relationship between the residuals and the predicted values, consistent with the assumption of linearity.

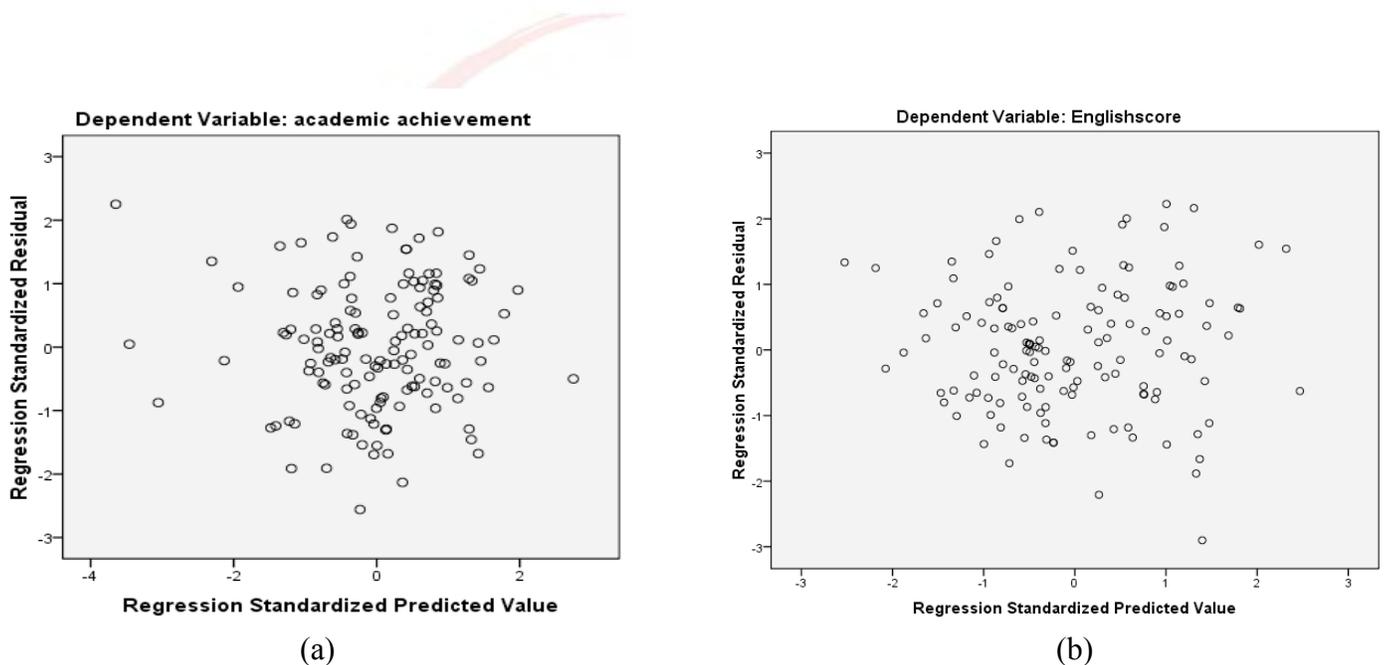


Figure 2. Scatter plots.

Both the normal plots of regression standardised residuals (see Figure 3) for the academic achievement and English score respectively indicate a relatively normal distribution for each.

The likelihood ratio tests from logistic regression analysis in Table 9 revealed that all the academic and non-academic self-concepts are not significant predictors of students' choice of pathway upon completion of their business diploma programme.

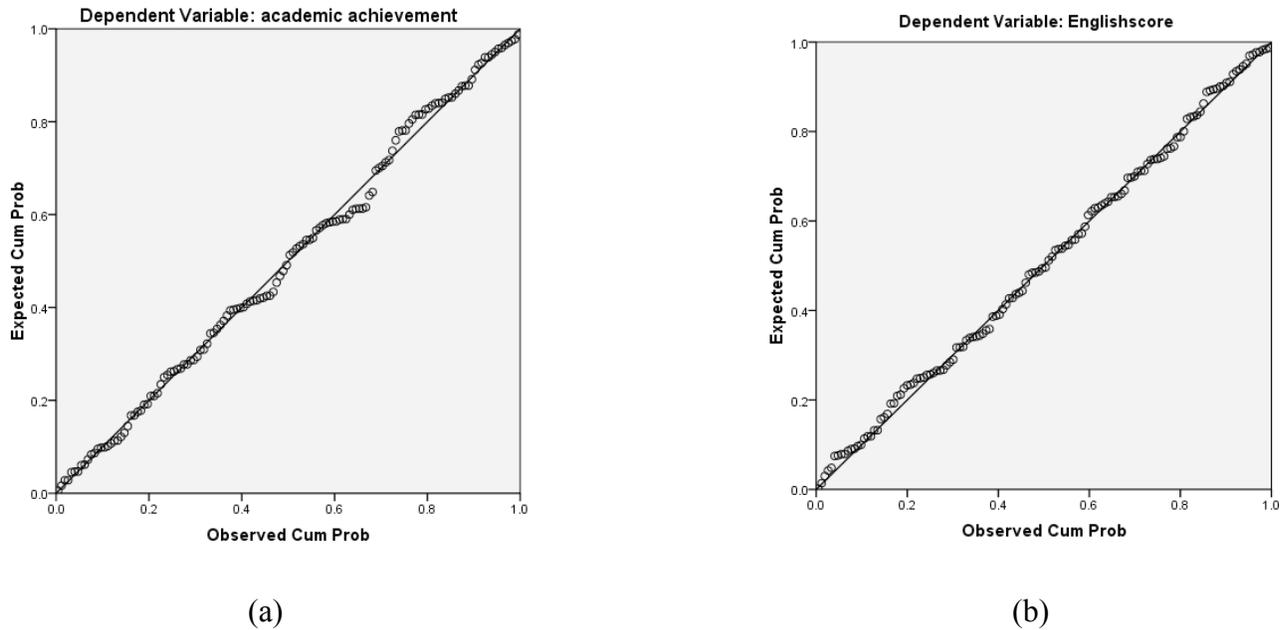


Figure 3. Normal P-P Plots of Regression Standardized Residuals.

Table 9
Likelihood ratio tests

Effect	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.	
Intercept	184.385	6.463	1	.011	
MAT	179.212	1.291	1	.256	
ENG	177.952	.030	1	.862	
COL	179.975	2.053	1	.152	
APP	180.740	2.818	1	.093	
ABI	178.280	.358	1	.549	
PAR	179.920	1.998	1	.157	
PER	177.964	.042	1	.838	

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Discussion

Multivariate analysis provided evidence that a student’s academic self-concept, in particular the college self-concept, English self-concept and Math self-concept strongly impact his or her academic achievement in the first semester. Like many other countries, in Malaysia, a student develops his or her academic achievement from young and continuously develops it in the

education system for a long time. It is important that the college creates a supportive environment for student to continuously improve their self-concept which would promote higher academic achievement. In addition, each of the non-academic self-concepts; peer relation self-concept and appearance self-concept affect academic achievement for non-language subjects and English scores respectively. This is supported by the importance of non-academic self-concept in student's real life (William, 1993) in adjusting to adulthood. Peer relation self-concept is an important social factor during class and out-of-class. While this may enhance learning among peers but the negative relationship between academic achievement and peer relation self-concept in this study may be explained as overly dependent on peers in doing group assignments or coursework will daunt independent learning and encourage social loafing. On the other hand, students who perceived themselves as better looking than others (higher appearance self-concept) may be over confident and neglect the academic aspects when doing verbal presentations in individual and group works which contribute largely to the English coursework.

It is recommended that school administrators and lecturers organise activities to improve student positive self-concepts. In the classroom, the lecturers play an important role in reflecting student's performance and activity both in academic and non-academic areas. Praises and constructive feedback help increase the student self-concept. Studies by Hay (2005), and Roberson and Steward (2006) attest to the beneficial results of using reflection method. Similarly, Sommer and Baumeister (2002) pointed out that persistence following failure is likely to lead to improved performance in academic and professional situations. Their study findings concurred with Dodgson and Wood (1998), and Greenberg et al. (1992) that a positive self-concept is beneficial for poor performance following failure and disappointment. This is particularly true for participants of this study who had only minimum qualification to enter the current study programme. Hence, a positive self-concept will promote better academic achievement and future success.

Furthermore, students look up at their lecturers as role models in their demeanour and interest for the subject. Lecturers who are able to incorporate self-attribution and motivational strategies in their lessons can influence students' learning persistence which will in turn boost student achievement. Lecturers who act as mentors can play a more active role in assisting students with low self-concepts who are at risk and can contribute to their graduating and progressing to their chosen pathway by building a relationship with them. These are imperative criteria in selecting lecturers to teach in the diploma programme. As for non-academic activities, group activities which encourage real social interactions among the students and with lecturers are essential for self-concept enhancement. However, the level of difficulty in activities must be appropriate to encourage active participation from all students and to avoid social loafing.

Non-significance of relationship between self-concept (academic and non-academic) and a student's choice of pathway after completing the diploma program and non-dependence of student's choice of post-diploma pathway on their academic achievement or their English score may be typical among diploma students. Students who enrolled in the business diploma programme may have made up their mind on the pathway after diploma due to parental or peer influence. Hence, the future pathway of diploma students is not affected by their academic achievement or self-concepts. Thus, it is recommended that activities in relation to career services and conversion initiatives should be organized and targeted to the correct group. The

participants should be chosen based on their future pathway and not according to academic capability.

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**ADULT LITERACY-RELATED LEARNING, LANGUAGE USE AND
MULTILITERACIES:
*A Case of Uganda***

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Abstract

This paper evaluates literacy learning and language use within the Government of Uganda's Functional Adult Literacy (FAL) programme implemented through its line Ministry of Gender, Labour and Social Development, and intended to become a tool for socio-economic empowerment, especially for rural women.

Research findings from a qualitative case-study approach by Hasaba (2009) reveal the apparent impact of language use on the literacy learning and cultural identity of these women. Also there are gaps between the women's language use, adult literacy-related learning in the classes and the socio-economic challenges they encounter in their communities as they attend the three stages of the adult literacy programme whose delivery emphasizes instruction and learning in the local community language as well as the English language which is introduced in stage three.

In documenting the rural women's first-hand experiences of adult literacy-related learning and language use, the study highlights the role of local mother tongue in adult literacy learning and what the place of multi-literacies may be especially with the case of rural women's interest in learning the English language. How does adult literacy-related learning influence the context of women's lives especially in relation to their cultural identity formation and self expression? Beyond the two local village research sites, the study seeks to take into account wider community and national contexts, social and cultural practices, and links between the individual participant lives and global changes.

Aspects such as redesigning the FAL programme: to support adult learning as social practice; to build collaboration between local communities and literacy providers so as to enhance multi-literacies; and to promote local language use as a way to strengthen cultural identity at community and national levels are essential.

KEY WORDS: ADULT LITERACY-RELATED LEARNING, LANGUAGE AND MULTI-LITERACIES

Adult Literacy-related learning, Language use and multiliteracies: *A case of Uganda*
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Introduction

The Functional Adult Literacy (FAL) programme, implemented through the Ugandan Government's Ministry of Gender, Labour and Social Development (MGLSD), has its roots in the functional version of literacy introduced and promoted by UNESCO, and is intended to become a tool for socio-economic empowerment, especially for rural women. UNESCO played a big role in the re-introduction of this FAL programme, including through a "number of planning workshops held in 1983, 1987 and 1989, co-financed by the Government of Uganda and UNESCO" (Okech et al 1999: 12).

This literacy discourse places emphasis on individuals' motivation for obtaining skills that would enable them actively to improve their lives. The Ministry defends this functional view of literacy as a 'participatory approach' vital in improving learners' lives:

A participatory approach that would motivate learners to continue searching for knowledge and skills that would help them to improve on whatever activities they were engaged in for the betterment of their lives and the communities where they lived. (MGLSD 2001: 1-2)

Against this backdrop, Hasaba (2009) in a qualitative case study research set out to document participant views of the programme - from policy maker and implementer views, to the instructor and rural women's first-hand experiences of the literacy classes in two rural villages. The interviews, with the adult learners particularly, together with systematic observations of their village literacy classes, enabled a central research focus on the women's interests in learning and using English, and on exploring the potential interconnections between women's literacy learning, poverty reduction and empowerment. Reasons the women gave for wanting to learn English included to speak with visitors to their village; and to become part of the elite group in the community.

Brief overview of women's status in Uganda

During the current presidency of Museveni (from 1986 to date) the Government has committed itself to creating an enabling environment for women to engage in literacy learning opportunities. Opportunities like the Government's Functional Adult Literacy (FAL) programme and also the introduction of the 1.5 point as an affirmative action policy for all girls joining Government Universities in Uganda are some of the ways of reducing the percentage of women without higher education or literate skills. However, although women now have more opportunity to share the educational platform with men, their access to educational opportunities continues to be greatly restricted by traditions and cultures in Uganda. Hansen & Twaddle (1998: 137) highlight the impact of cultural custom on women in Uganda.

Cultural custom in Uganda continues to undermine women's potential and limits their participation and contribution to national development. Culture has been used to justify keeping women subordinate. Gender inequality, manifesting itself in prejudices,

stereotypes and discriminatory practices, is still justified by cultural and religious explanations.

Despite the effects of culture and custom, women are still interested in literacy learning opportunities, as the women participants from two Ugandan village literacy classes, who became involved in Hasaba's (2009) research study, made abundantly clear. Both villages were in the same rural district of Mpigi. The first class, Ku Muti class, was chosen partly because of a local adult literacy competition that was jointly organized by the Office of Community Development and the World Vision field office in the Sub-county of Kituntu. This class won the competition. The second class of Ku Kanisa village was chosen because their literacy instructor has been with the class since the start of the FAL programme in the community in the year 2000.

The interviews with the women learners in the two classes represent intricately different viewpoints and experiences. Selections below highlight, first of all, views on literacy/education expressed by women from the Ku Kanisa class. These are followed by understandings of the English language and learning English, mentioned by women interviewed in the Ku Muti literacy class.

Learners' understanding of literacy and education

Ku Kanisa class

Women from the Ku Kanisa class shared their perceptions of 'a literate and educated person'. The three women quoted below speak of obvious differences between "literate and illiterate" or "educated and uneducated" individuals. They do not differentiate between "literate/educated" and "illiterate/uneducated", but express strong emotions through words such as "respect", "cherished", "desire" and "inspiration". One learner, Samalie says she respects educated people as "learned" compared to the uneducated, who are commonly "labelled stupid".

I accord lots of respect to anyone who is educated. I think they can even talk with God because they are learned ... But since time immemorial, the uneducated has been labelled stupid in all things [how 'stupid'?] They are always ridiculed, "Do they also have knowledge! What advice could that illiterate give?"

Socially, Samalie thinks highly of educated/literate people and that being literate or educated has even spiritual advantages. She also believes that the uneducated or illiterate individuals are less thought of because they do not possess the same level of knowledge as educated/literate people.

In Suzan's view, educated people are a source of inspiration.

Educated people used to inspire me before I joined the FAL programme. I would be compelled to tell someone, "Could you instruct me?" I copied letters a lot, which is to say that by the time FAL came, my heart had long cherished the idea of learning. For the illiterate, I wish them all well. I always encourage them to at least learn how to write their names and villages because thumb-printing among people using pens to sign their names is embarrassing ...

The ability to write one's name is an act of identity recognition. Suzan does not include herself in the category of people who do not know how to read and write. There is a level of prestige and admiration for those considered educated and literate.

Ann Mary says "when I see an educated person who knows English, I admire them. The uneducated I would advise to come to FAL to learn to read and write". The issue of learning and speaking the English language re-surfaces here, as it does with Jasmine from the Ku Muti class, on the next page. The women in the two village classes value this learning opportunity offered by the FAL programme: learning the English language, and, reading and writing their names stand out as major reasons and achievements for women as adult learners. These are some of the examples that illustrate how multi-literacy is affective and can be value-laden. Also how women choose to use language. We will use reflections by the Ku Muti village participants to exemplify the women's valuing of opportunities to learn and use English, during their time in the literacy class.

So, what are some of the language use and multi-literacy opportunities and aspirations of the women learners?

Ku Muti class

Jasmine, a learner in the Ku Muti literacy class, mentions coming to the literacy class to learn how to count and to speak in the English language.

I did not know a word of English, but now I do. Like welcoming, "you are most welcome" ... that thrilled me ... when I understood what it meant. Now if I get a guest who knows only English, I could say that to them ... I really want to improve my English language so that I know what I am talking about.

Jasmine's claim that she learnt words of English from the FAL class is significant, as adult learners want to learn how to communicate in the English language. In Uganda English is one of the most commonly used business languages. Though the women in this class expressed their desire to learn more of the English language, it was more so that they can speak with me (Hasaba) and other people especially visitors to their community who only communicated in English.

As Hasaba remembers - from my first visit to this class, one woman who had dropped out of the literacy class, was also interested in learning the English language. This is what I wrote in my notes leading to her mention of the English language.

The second lady (who was a one-off) with whom I walked quite a distance, while she was taking her sick child to the health centre, also seemed to agree that by primary two, in the days gone by, pupils knew how to read and write letters. ... she seemed to be either in her late thirties or early forties. She strongly wanted to be able to learn to read and write in English. She envied Jasmine a learner in the class, the only one who she says can say and write a few sentences in English.

She also wanted to be able to read and write in English, read to her children and help them with their homework. A mother of seven children, she said although her hands were full with looking after the home and the children, she hoped that one day she would be able to express herself in English. Learning and speaking the English language would enable the women to become more

engaged in their children's school work and also have a chance to understand their progress reports. English is the language of instruction in formal schools.

About English language usage in Uganda:

Kwesiga (1994) writes in the context of Uganda mentioning that, "... English still remains highly restricted to a few ... and it is a language essential for the urban elite that continues to confer upon them both political and economic power and of course foreign cultural practices ..." (cited in Barton 1994:60). Furthermore, Kwesiga mentions that

because of the educational system Uganda has had, the ability to speak English is the envy of every Ugandan. It ushers one into the world of the educated and civilized. A colleague who voluntarily helps adults to learn to read and write was ... overwhelmed when a group of illiterates insisted that they wanted to learn writing and reading in English. (Cited in Barton 1994b: 61)

It is a clear emphasis that adult literacy learners place high value on learning the English language. Historically, the English language has been the more dominant language of instruction in formal schooling in Uganda. Therefore, individuals who miss out on formal schooling also miss out on "joining the category of the elite in society".

Robinson-Pant (2000: 57) writes in "the context of literacy programmes, English is perhaps a more "political" issue than mother tongue teaching, because of the assumed link with modernization and foreign aid jobs". Within the FAL programme, women learners have a chance of learning basic English for functional use when they get to stage three. This in itself has linguistic challenges and also these women stand lose their basic knowledge of the English language if they do not practice within themselves or with other English speaking people in the community.

In this case, the learning of the English language is linked to identity formation. In a discussion about language and identity, Norton (1997: 411) develops the concept of investment

to signal the socially and historically constructed relationship of learners to the target language and sometimes their ambivalent desire to learn and practise it ... [A]n investment in the target language is also an investment in the learner's own social identity, which changes across time and space.

In another example, Norton (2005: 347) cites an article in Uganda's newspaper about women's participation in local Government.

On 26 October 2004, Uganda's leading newspaper, The New Vision published a brief article on women's participation in local government. The article indicates that most women local counsellors in the country have difficulty using English, which in turn hinders their ability to communicate and document records; further, the "gender unfriendly" organizational culture of councils, as well as socio-economic constraints like lack of transport, further compromise women's ability to participate in political decision-making.

Prior to 1986, it would not have made so much difference publicly if women were not competent in reading, writing, listening and speaking in the English language. But since President Museveni's Government allowed women to participate in public including in politics, a chance to know and speak English – the business language meant that women were keen to learn and speak the English language. This is one way of opening up themselves to another world of experience and engagement.

Hasaba's (2009) research highlighted the challenges of learning in the local language, acquiring another language, and the emergent role literacy and language learning play in the women's identity formation, self expression and agency. For instance, when Hasaba visited the homes of the learners during the interviews, she did not notice any print materials, any calendars, posters or books available for reading. This kind of situation poses multi-literacy challenges for the women as they cannot develop their own everyday uses of reading and writing skills in their native language or any other language. Reading and writing in English becomes an even bigger task. Also it makes it difficult for the women to even think of multi-literacy in the context of their own adult learning experiences. If their learning environment does not support their quest to learn and be literate in their mother tongue, the road to achieving multi-literacy is still a far fetched reality.

Way forward for the FAL programme

Beyond the two local village research sites, the study sought to take into account wider community and national contexts, social and cultural practices, and links between the individual participant lives and global changes. Research findings concern the apparent need of adult literacy learners to learn the English language and use it in their daily practices on the one hand and the existing disconnections and gaps within their literacy-related learning in the classes, programme delivery and emphasis on the role of language in literacy attainment.

The length of time that the FAL programme has been operating surpasses that of earlier failed mass literacy campaigns in Uganda. This achievement gives literacy implementers the opportunity to review and re-construct some aspects of the FAL programme, especially to update the curriculum content, for example of literacy primers and reading materials currently in use, to meet the pressing adult literacy learning, language use as well as the emerging multi-literacy challenges of local communities and global trends. In turn such changes could substantiate the women's belief that the FAL programme has the potential to enable them to achieve the same level of competency in reading and writing, not only in their local language but also in English, as the students in a formal school system.

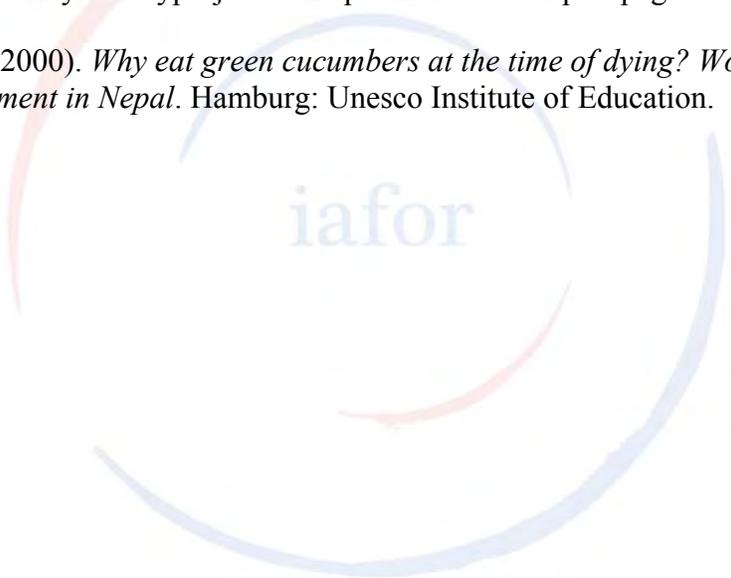
Hasaba's (2009) research concludes that significant redesigning of the FAL programme is essential in order to make the literacy programme receptive to the actual challenges within local communities and the emerging adult learners' needs. When adult literacy learning takes place in the everyday contexts of these women's lives; bearing in mind the language uses and challenges that these women as learners face, it makes it easier to identify the limitations. Also, the FAL programme should be able to draw on the wider social and community resources, to develop and sustain literacy purposes, language uses and personal resources in adult literacy learning.

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The logo for the International Association for the Study of Adult Education (iafor) is centered on the page. It features the lowercase letters 'iafor' in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of several overlapping, semi-transparent arcs in shades of blue and red, creating a sense of motion or a globe.

**The Development of the Evaluation Model for Internal Quality Assurance System
of Nursing Colleges under Praboromarajchanok Institute, Thailand**

by

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The Development of the Evaluation Model for Internal Quality Assurance System of Nursing Colleges under Praboromarajchanok Institute, Thailand

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Abstract

The purposes of this research were to develop an evaluation model for internal quality assurance (IQA) for the Nursing Colleges under the Praboromarajchanok Institute and to evaluate the quality performance of the IQA evaluation model. There were three sampling groups in the research; (1) sampling group for evaluation model development, (2) sampling group for testing the IQA evaluation model of nursing colleges, and (3) sampling group for evaluating of the effectiveness of the IQA evaluation model of nursing colleges. Data collection method included document review, uses of questionnaires and interviews. Analytical approaches included quantitative analysis by use of descriptive statistics and qualitative analysis by use of content validity examination.

Research findings include the following.

1. The evaluation model for internal quality assurance system of nursing colleges of Nursing Colleges of the Praboromarajchanok Institute consists of 7 focus areas namely; (1) assessment objectives, (2) assessment of the IQA indicators, (3) indicators and assessment criteria, (4) assessors, (5) assessment duration, (6) assessment methodology, (7) assessment reporting and recycling of evaluation results for system improvement.
2. The testing of the IQA evaluation model reveals the model is of high utility, feasibility, propriety and also high on accuracy standards.

Keywords

Evaluation model, Internal Quality Assessment (IQA), Quality Control, Quality Auditing, Quality Assessment

This paper is part of the Ph. D. dissertation at the School of Educational Studies, Sukhothai Thammathirat University, Thailand.

Statement of the Problems

Praboromarajchanok Institute is an institution under the Office of Permanent Secretary of Ministry of Public Health in charge of developing and producing qualified public health personnel for all public health organizations, both within and outside the Ministry and its agencies. Out of a total 37 academic institutions under a supervision of Praboromarajchanok Institute, 27 of which are nursing colleges with long history of nursing practices and development. An internal quality assurance system (IQA) has been continuously developed and inspected by Thailand Nursing Council to ensure and maintain the quality of undergraduate nursing education of all colleges to meet national and international standards.

IQA is a crucial part of academic management process. It comprises of 3 parts: Quality Control, Quality Auditing, and Quality Assessment. The internal quality assurance process must be audited, monitored and

assessed in accordance to the quality performance indices. This applies to all inputs, processes and outputs or outcomes with a purpose to achieve the quality assurance performance targets (Mehralizadeh, Y., Pakseresht, M.J., Baradaran, Y and Shahi, S., 2007). To ensure a maximum quality output of the educational system, a performance evaluation of IQA is therefore required with an aim to apply the evaluation result to continuously improve the system efficiency. Until now, there has not been any mechanism to evaluate and assess the entire IQA system; equality control, quality auditing, and quality assessment, existing in the Praboromarajchanok Institute.

Accordingly, this research is purposed to develop an evaluation model of IQA to be used as a tool for auditing and assessment. The information from the assessment can then be brought to continuously improve the IQA system efficiency to meet its educational quality target which is to produce qualified graduates. The newly developed model will be very beneficial for management and quality assurers of the institute to effectively evaluate the IQA.

The concept used in the development of the evaluation model is a collective assessment by members of the quality assessment committee of the college and the use of a self-checklist. The researcher engaged all directly involved stakeholders, users in particular, starting from evaluation process planning, data gathering, data analysis and reporting (Nevo, 2001). This collective approach was intended not only to get all stakeholders chances to maximize the knowledge gained from the study, but also to continuously improve the quality assurance process sustainably. In addition, external advisors were invited to participate and act as assessment committee members who provided valuable advices and non-biased assessment. This significantly helps improve the evaluation efficiency and the outcome is considered of high-value. (Christie, C. A., Ross, R. M. & Klein, M. B., 2004)

Research Objectives:

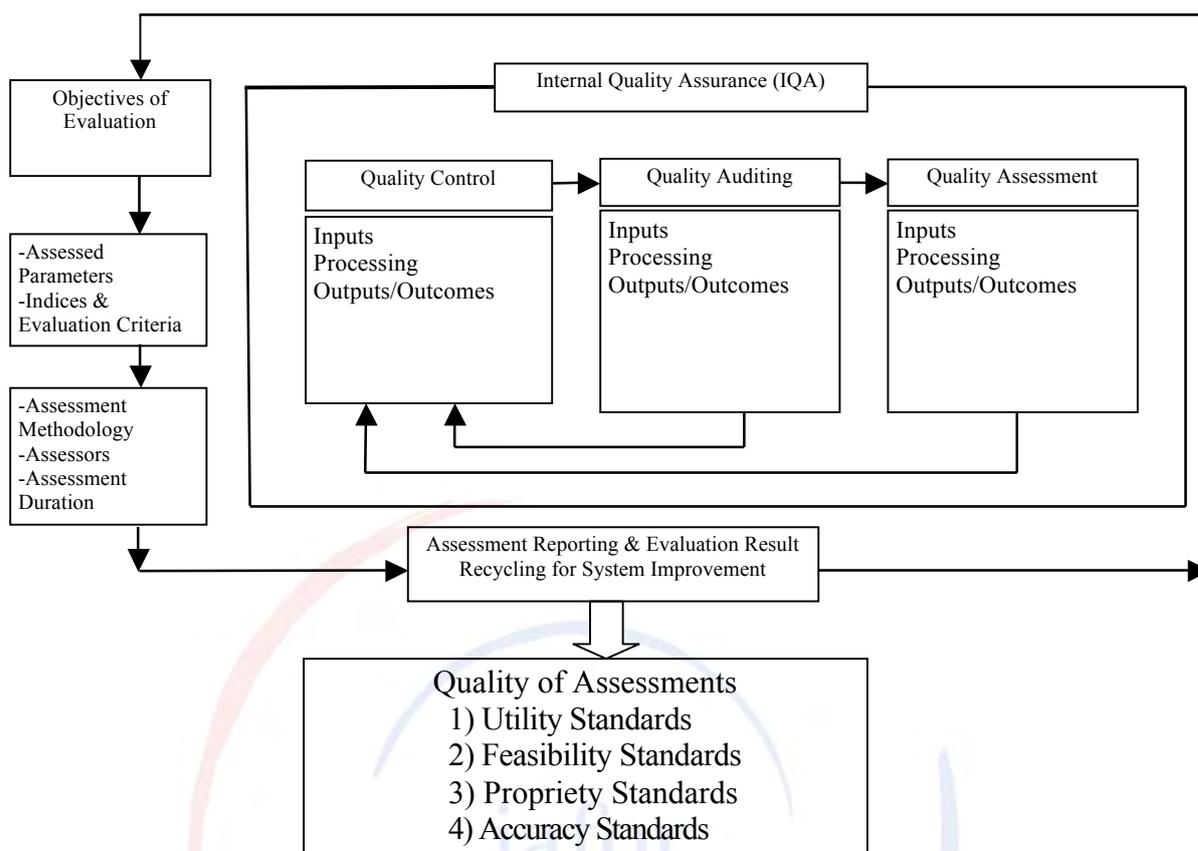
1. To develop an evaluation model for IQA for the Nursing Colleges under the Praboromarajchanok Institute.
2. To evaluate the performance of the IQA evaluation model.

Research Conceptual Framework

Researcher had applies a total IQA concept comprising of 3 processes: Quality Control process, Quality Auditing process, and Quality Assessment process. Each of these processes is then systematically evaluated from data inputs, processing, through to outputs and outcomes. This systematic process is indeed the conceptual framework for the development of the IQA evaluation model for the Nursing Colleges of the Praboromarajchanok Institute. The assessment standard of Stufflebeam (2000) is adopted which consists of 4 aspects:

1. Utility Standards, focusing on specific parameters or outcomes so that the results can be directly applicable to the needs of the user
2. Feasibility Standards, focusing on developing realistic assessment application
3. Propriety Standards, focusing on developing the assessment practice having no impact on any involved parties
4. Accuracy Standards, focusing on developing the assessment that yields accurate and reliable results

The diagram illustrates the research conceptual framework.



Research Methodology

Research methodology can be divided into 4 stages as follows:

Stage 1: Literature review and analyses of existing IQA of the Nursing Colleges of the Praboromarajchanok Institute

The literature review and analyses of existing IQA were made in 3 different aspects:

- 1) Reviews of documents of IQA on historical concepts, theories pertaining to educational quality assurance system, set of criteria and indicators for existing IQA system of colleges under the Praboromarajchanok Institute, certification standard for institutes under Thailand Nursing and Midwifery Council, as well as indicators and assessment scoring criteria for external quality assurance (EAQ).
- 2) Interviews with the Advisors of the Praboromarajchanok Institute.
- 3) Investigations of the physical evidence from real situations of the Nursing Colleges only those with good practice in quality assurance of the education system.

Researcher then conducted content analysis on data from these 3 aspects to conceptualize the development of the evaluation model and the end results and key parameters of the IQA evaluation model.

Stage 2: Developing IQA evaluation model for the Nursing Colleges of the Praboromarajchanok Institute

- 1) Researcher developed an interviewing format constructed from the conceptual framework and key parameters of the IQA evaluation model. Nine (9) experts

were invited for the interview. The interviewing results were later analyzed and synthesized for structural details and key criteria for the development of the evaluation model, key indicators, assessment standards and assessment instruction. A draft for the evaluation model was generated.

- 2) The draft of the evaluation model, along with key criteria and key indicators were then presented to 13 different experts to help check the scope coverage, content and propriety of the subjects, subject clarity, scoring criteria, and contextual precision of the assessing factors. The quantitative data were then analyzed for correlations between the questions and Item Objective Congruence (IOC). Suggestive data were reviewed by content analysis.
- 3) Researcher took the draft of the evaluation model, only those of specific indicators and assessment criteria, to check for propriety and feasibility by testing with executives and internal quality assurance board members within 4 departments of the Nursing Colleges, each with 4 different assessors, totally 16, plus 1 who is the Institute's Quality Assurance Department Head. The content propriety and the feasibility of the indicator application were derived from the mean average, taking only those results with average values equal to or above 3 on both ends. The contextual precisions were determined from those results with consistency above 80% and suggestive data were reviewed by content analysis.

Two sets of questionnaire were designed and used, culturally based questionnaire on quality management in the college and leadership based questionnaire on quality management. A degree of confidence was confirmed by testing these questionnaires with 40 nursing instructors and professors from other colleges, not in the target list of testing but also under the Praboromarajchanok Institute. Out of 40 sampling size, 36 was returned yielding reliability with Alfa factor of .93 and .94 respectively.

The results of the entire Step 2 were compiled and reconciled into a pilot manual for the IQA evaluation model for Nursing Colleges of the Praboromarajchanok Institute. The evaluation model consists of 7 sections; 1) Assessment Objectives, 2) Assessment Focuses, 3) Indicators and Assessment Criteria, 4) Assessors, 5) Assessment Methodology, 6) Assessment Duration, and 7) Assessment Reporting and Evaluation Results recycling to System Improvement. The testing was scheduled for Stage 3.

Stage 3: IQA evaluation model testing

Testing of the IQA evaluation model was conducted at a nursing college which is not the target college for final testing but willing to assist and cooperate for the success of the research and the thorough understanding on how to apply the evaluation model, indicators and assessment criteria. The assessment was executed by a committee comprising 2 internal members appointed by the college and another external member. These 3 assessors shall be qualified and certified by the Office of the Higher Education Commission (MUA) or by colleges with MUA standards. There were 5 steps in the testing implementation.

- Step 1 Create acceptance and organize a meeting to explain the evaluation model and the manual instruction
- Step 2 Organize a meeting for assessment committee to develop assessment plan
- Step 3 Collect IQA assessment data
- Step 4 Analyze the IQA assessment results
- Step 5 Prepare assessment report and recycle the evaluation results back to the beginning to complete the continuous improvement cycle.

Following the testing, an internal IQA performance evaluation was conducted by the researcher. This was made by additional questionnaires and additional inputs by interviews from selective focus groups, those who will directly involve in the application. These sets of questionnaire were constructed by the researcher based on Stufflebeam's (1999) 4 conceptual standards; 1) Utility standards – focusing on end results for direct uses, 2) Feasibility standards – realistic assessment practice, 3) Propriety standard – assessment practice specific for future study development, and 4) Accuracy standard – yielding result accuracy and reliability with complete and precise information. These questionnaires were reviewed by 5 experts for contextual accuracy by analyzing for correlations between the questions and Item Objective Congruence (IOC).

Stage 4: Quality performance evaluation of IQA evaluation model

At this stage, the researcher took the testing results to perfect by certain modifications and launched the real assessment with 2 nursing colleges which are in the target list. These 2 nursing colleges are totally different in contextual structures and sizes. The assessment was conducted independently by the assessment committee appointed by the colleges, as stipulated in the assessment manual. The researcher was not part of the assessment but only responsible for coordinating activities. After completion, the researcher could then step in to assess the evaluation model by having focus groups responding to questionnaires on how they perceived to the quality assurance evaluation model. Interviews were also made to identify problems and obstacles on the testing and recommendations on application.

Research Conclusions

Research findings include the following.

1. IQA evaluation model of Nursing Colleges of the Praboromarajchanok Institute consists of:
 - 1) Assessment Objectives
The objectives are to develop and improve IQA, and to provide accurate and reliable information for the development of workforce involved in the IQA processes within the Nursing Colleges of the Praboromarajchanok Institute
 - 2) Assessment Focuses
Assessment of the IQA indicators in 3 parallel systems; Quality Control, Quality Auditing, and Quality Assessment, beginning from inputs, through to processes, and outputs/outcomes.
 - 3) Indicators and Assessment Criteria
Indicators used in IQA cover all 3 systems; Quality Control, Quality Auditing, and Quality Assessment, including inputs, processes, and outputs/outcomes. There are 9 components and 39 indicators in total as follows.

3.1 Quality Control – there are 3 components with 26 indicators with descriptions shown below:

Component	Indicator
1. Quality Control Inputs	<ol style="list-style-type: none"> 1. Components & Indicators 2. Resource readiness for IQA 3. Database and specific information for the QA 4. Human resource development for the QA 5. Quality education development plan 6. Management culture in colleges 7. Quality leadership
2. Quality Control Processes	<ol style="list-style-type: none"> 1. Quality control process management 2. Academic curriculum management 3. Instructors and instructor development plan 4. Teaching and learning management process 5. Management of support staff; admin, materials, logistics and others 6. Study grade determination and evaluation 7. Student development activities 8. Research and innovation management system and mechanism 9. Research and innovation knowledge management system and mechanism 10. Academic service quality control for social contribution 11. Culture preservation quality control 12. Human resource development 13. Institutional development toward knowledge-based 14. Integration of risk management and educational management systems 15. Effective budgetary and expenditure controls
3. Quality Control Outputs/Outcomes	<ol style="list-style-type: none"> 1. Graduate production quality 2. Research and academic record quality 3. Academic service quality for society 4. Culture preservation quality

3.2 Quality Auditing – there are 3 components with 6 indicators with following descriptions:

Component	Indicator
1. Quality Auditing Inputs	<ol style="list-style-type: none"> 1. Readiness of internal quality audit system 2. Internal quality audit committee 3. SSR (Self Study Report)
2. Quality Auditing Processes	<ol style="list-style-type: none"> 1. Internal quality auditing process 2. Quality auditing corrective and monitoring measures
3. Quality Auditing Outputs/Outcomes	<ol style="list-style-type: none"> 1. Internal quality auditing report

3.3 Quality Assessment – there are 3 components with 7 indicators with descriptions shown below:

Component	Indicator
1. Quality Assessment Inputs	1. Readiness of internal quality assessment system 2. Internal quality assessment committee 3. SAR (Self Assessment Report)
2. Quality Assessment processes	1. Internal quality assessment process 2. Implementation of the evaluation results on the quality development of the colleges
3. Quality Assessment Outputs/Outcomes	1. Internal quality assessment report 2. Effectiveness of quality development plan

Assessment criteria includes both for individual indicator and for the overall IQA system. Checklist was used as assessment tool, with scoring system from 1 to 5. Individual indicator assessment criteria are of 2 types:

- 1) For input/output – scoring to be made by item
- 2) For processes – scoring to be made by use of scoring rubrics and under the PDCA process standard

A score will be given for each completed item. A zero score would be given for any incomplete item. Scoring definitions are as follows:

- Score of 0.00 – 1.50 means urgent improvement is required for IQA system
- Score of 1.51 – 2.50 means certain improvements are required for IQA system
- Score of 2.51 – 3.50 means fair consideration for IQA system
- Score of 3.51 – 4.50 means good consideration for IQA system
- Score of 4.51 – 5.00 means excellent consideration for IQA system

4) Assessors

Assessors are members of the IQA committee appointed by the College Director. The assessing committee comprises at least 2 members from the assessed college and 1 external member. These 3 assessors shall be qualified and certified by the Office of the Higher Education Commission (MUA) or by colleges with MUA standards.

5) Assessment Methodology

The methodology includes 9 component and 39 indicators data gathering, document reviews, in-depth interviews, observations and questionnaires. Data sources are director, deputy directors, QA committee, college QA department, professors, officers, students, and other stakeholders.

6) Assessment Duration

IQA assessment should be conducted at least once a year or whenever there is a change of the internal quality assurance system, with assessment duration of 2-3 days.

7) Assessment Reporting and Recycling of Evaluation Results for System Improvement

QA committee is in charge of providing unofficial overall results in the meeting. This overall result includes and involves evaluated departments, teams, disciplines and colleges. Open questions and answers are encouraged. Then QA committee is to generate official report for IQA assessment, which includes assessment results, outstanding points, rooms for improvement, and recommendations for improvement plan and good practices.

2. The testing of the IQA evaluation model reveals the model is of high value, or high utility. There is a high probability, or high feasibility, to physically launch the model for real use. The model is suitable for continuous improvement, or high propriety, and is also high on accuracy.

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Producing Dynamical Graphs for Online (Hyperbolic) Geometry Course with No Experience



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Topic: GeoGebra, Hyperbolic Geometry, Dynamic Graph, Online course

Producing Dynamical Graphs for Online (Hyperbolic) Geometry Course with No Experience

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ABSTRACT

There is no doubt that visual component such as dynamic graph is one of the most important tools for students' success in online Geometry course. On the other hand most instructors lack the resources and skills for web publishing, and most web-publishing applications are time consuming and have a steep learning curve in order to become proficient. GeoGebra is a freely available open source program supporting multiple platforms (Windows, Mac OS X, Linux), and can assist instructors in the publishing of web page with dynamical geometric figures without the need to become proficient in HTML. Students can use this dynamic worksheet both on local computers and via the Internet to work on the given tasks by modifying the dynamic figure. In this paper we will illustrate how to produce dynamical graphs for online activity models with customized tool buttons for the Poincaré Disk model of Hyperbolic plane.

I. Introduction

“Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances student’s learning.” (NCTM, 2000)

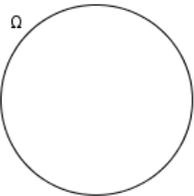
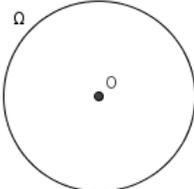
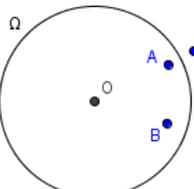
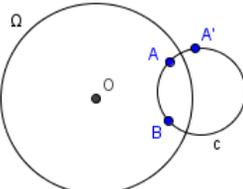
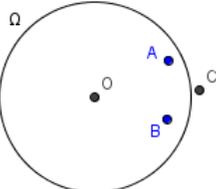
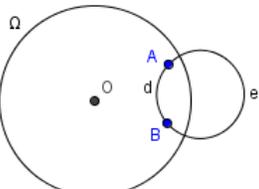
As the demand on online teaching grows the need for instructors who have technology skills are also increased tremendously. But the technology skill and the content knowledge are irrelevant, and that is the one of main reason why so many great teaching modules for classroom teaching haven't delivered for online teaching. Even though we may find some good teaching modules in online, they were designed and presented in a certain way so other instructors can't use them in the way they want to deliver the content to their students. So it is very critical as an instructor to have technology skill to produce (or at least modify other's) teaching modules for online teaching.

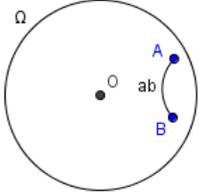
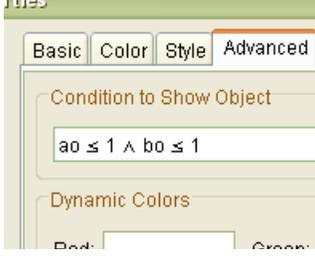
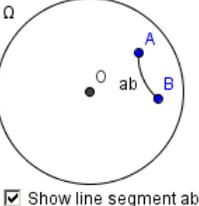
GeoGebra (<http://www.geogebra.org>) is free dynamic mathematics software which was created for providing active hands-on learning environment both in classroom and distance learning of mathematics. This software makes it very easy to create dynamic figures as learning and/or teaching tools. In this article we will discuss about (II) how to create dynamic figures, (III) how to use the Navigation bar - one of great features in GeoGebra -, (IV) how to make/handle tool buttons and tool bar, and (V) how (easy) to create dynamic worksheet for web pages using GeoGebra.

GeoGebra files and dynamic worksheets to accompany this article can be found on the author's webpage, <http://blue.utb.edu/tyi/Conference/ACE10/home.htm> for the conference.

II. Creating Dynamic Figure

The worksheet at <http://blue.utb.edu/tyi/Conference/ACE10/PDLineSegment.html> allows students to observe a line segment in the Poincaré Disk model of the hyperbolic plane. We will show how to create this dynamic figure step by step.

1	<p>Type $x^2+y^2=1$ into the input field at the bottom of the GeoGebra window and hit Enter-key. Use Right-Click>Rename to open the Rename window. Then change the name of the circle (say C) to Ω by selecting Ω from the list of the Greek symbol window in the Rename window. # If necessary, use the mouse wheel to change the size of the circle (make it smaller than the half of the window size) and unselect View>Axes to hide the axis.</p>	
2	<p>Select the tool “Midpoint or Center”  in the “New Point”  tool group, then click the circle Ω to show the center of the disk. Change the name of the point (say A) to O.</p>	
3	<p>Select the tool “New Point”, then click anywhere inside the disk to make a point A. Repeat this for another point B. Select the tool “Reflect Point about Circle”  in the “Reflect Object about Line”  tool group, then click the circle Ω and the point A to make a point A'.</p>	
4	<p>Select the toll “Circle through Three Points”  in the “Circle with Center through Point”  tool group, then click the points A', A and B (in that order) to make the unique circle (say c) orthogonal to Ω containing those three points.</p>	
5	<p>Select the tool “Midpoint or Center” , then click the circle c to show the center C of the circle c. Hide the circle c by unselect Right-Click>Hide Object. Repeat this for the point A' to hide it.</p>	
6	<p>Select the tool “Circular Arc with Center between Two Points”  in the “Circle with Center through Point” tool group, then click the points C, A, B (or C, B, A) in the counterclockwise to make an arc (say d) which is inside the circle Ω. Repeat this by clicking C, B, A (or C, A, B) to make another arc (say e) which is passing through the circle Ω.</p>	

7	<p>Type $ab=lf[d<e,d,e]$ into the input field and hit the Enter-key. Hide the point C and the arcs d and e. Type $ao=Distance[A,O]$ then hit Enter-key. Repeat this with $bo=Distance[B,O]$. #If necessary, resize the circle Ω to fit into the window.</p>	
8	<p>Select Right-Click>Object Properties ... on the arc ab to open the Object Properties window, then type $ao \leq 1 \wedge bo \leq 1$ and hit the Enter-key under the Advanced tab. Close the window. # Use the second drop down menu in Condition to Show Object in the window to get the symbol \wedge. # \leq will be changed to \leq when you hit the Enter-key.</p>	
9	<p>Select the tool "Check Box to Show/Hide Objects" in the "Slider" tool group, then click anyplace on the drawing window to open the 'checkbox' window. Type any title for the Caption (say 'Show line segment ab') then click on the arc ab on the drawing window. The checkbox will be appeared by clicking 'apply' button.</p>	

Students can move the independent points A and B and observe what happens to the curve ab . Since the orientation of the arc AB (or BA) is involved in the construction of the arc in GeoGebra, Step 6 and 7 are necessary to get the arc we want always. To confirm it move the point A or B before the construction of the arc e in Step 6. Step 8 is for the case that no point exists except the inside of the disk Ω in the Poincaré Disk model. Step 9 shows how to make 'checkbox' for show/hide objects.

III. Dynamic Figure with Navigation Bar

There are some difficulties in a typical traditional classroom setting that teachers deliver their lectures by hand writings and drawings on the board. First, those writings and drawings are not consistent and usually are not accurate. Second, the drawings are static ones so they cannot be changed. So many times teachers need to draw another one to compare them, and it is difficult for students to see the connection between them. Even though there are web sites which provide active hands-on learning environment using dynamic figures (such as Figure 1 and 2) and try to give some choices to select on it (as in Figure 3), it usually is not matching with each teacher's needs or style to deliver the content to their students. It is also not enough for step-by-step explanation both in classroom and distance/self learning of mathematics.

GeoGebra comes with the 'Navigation bar' which appears at the bottom of the drawing window by selecting View>Navigation bar for construction steps, and the 'Construction Protocol' window which will be opened by selecting View>Construction Protocol. The Navigation bar allows teachers to reuse the dynamic worksheet for step-by-step explanations, especially for geometric constructions. Using play buttons on the Navigation bar the figures and texts will be shown and disappeared according to the construction steps

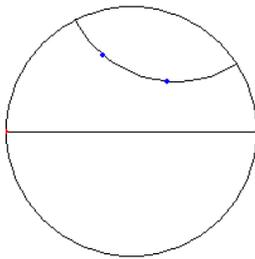


Figure 1

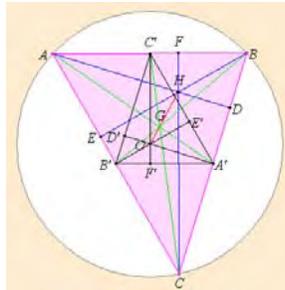


Figure 2

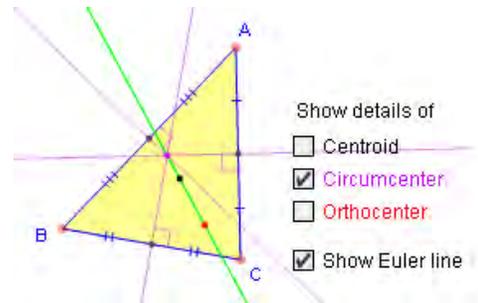


Figure 3

Figure 1 - <http://www.geom.uiuc.edu/~crobles/hyperbolic/hypr/modl/pncr/pncrjava.html>

Figure 2 - <http://aleph0.clarku.edu/~djoyce/java/Geometry/eulerline.html>

Figure 3 - <http://www.mathopenref.com/eulerline.html>

of the drawing manually and automatically whenever you want. Using the Construction Protocol, even after finishing the whole construction, you can not only change the construction steps among figures, but also insert new construction steps at any position. Leave the Construction Protocol window open while you create a new object. This new construction step is immediately inserted into the selected position of the Construction Protocol. Another benefit of the Construction Protocol is that, using the ‘Breakpoint’ column in it, you can group several objects together. So, when you navigate the construction, each assigned group appears at the same time. That is, teachers can rearrange the order of the construction of the entire figures on the file, and skip unnecessary steps.

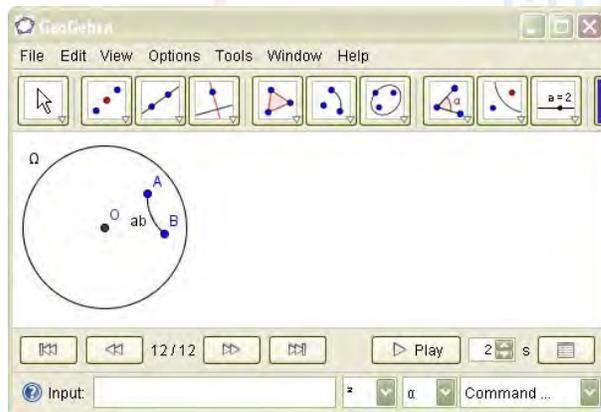


Figure 4

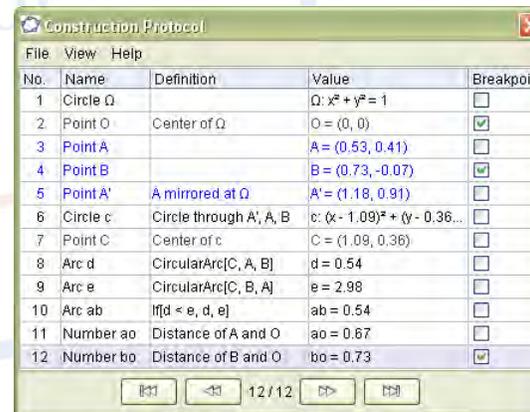


Figure 5

Because of this, teachers can produce different teaching modules for the same content as many as they want according to different ideas to deliver the content and/or students’ learning levels. Since students can also check all of these different explanations, and manipulate the construction with the explanation designed by their teachers, they should get much better insight and understanding of the content, especially the relation among the figures.

IV. Customizing Tool bar (with New Buttons)

GeoGebra program (GeoGebra 3.2.45.0 – Java 1.6.0_18) comes with total 58 tool buttons under 11 groups of tool buttons. By clicking the small upside-down triangle on the bottom

right in each main button you can see all the buttons in the group and you can activate the button you want to use by clicking it. GeoGebra allows you to rearrange those tool buttons according to the content or students' level. Select Tools>Customize Toolbar... to open the 'Customize Toolbar' window. After select the button in Toolbar/Tools use 'Insert' and 'Remove' to remove/add tool buttons from/to the Toolbar. By the 'Up' and 'Down' you may arrange the buttons in the Toolbar. Click 'Apply' to assign the setting to the program. The last one in the Figure 8 below shows the rearranged buttons for the construction with Euclidean Tools: straightedge and compass. You may find the worksheet for this at <http://blue.utb.edu/tyi/Conference/ACE10/4EConstruction.html>. Each GeoGebra file can be saved with its own customized Toolbar setting.

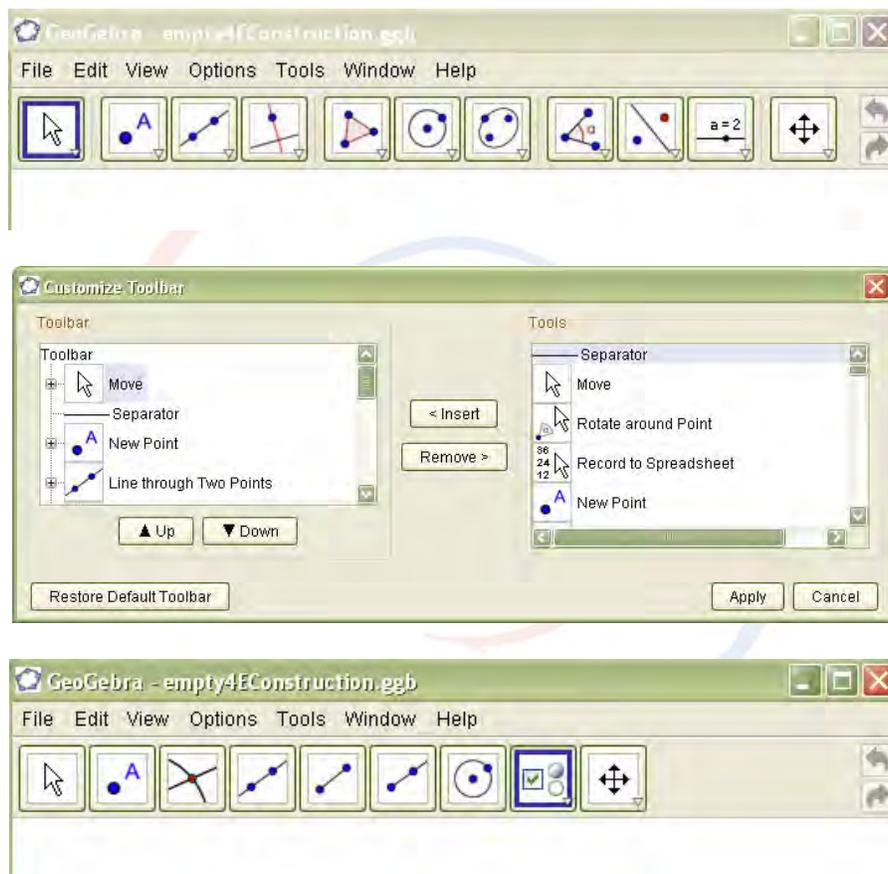


Figure 6

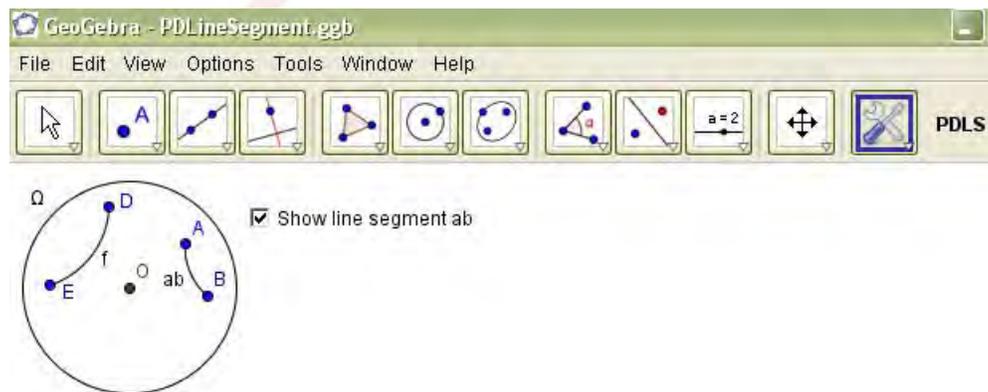
GeoGebra also allows you to create your own tools based on existing constructions. Once created, your custom tool can be used both with the mouse and as a command in the *Input Bar*. All tools are automatically saved in your GeoGebra file.

Example: We will show how to create a new button for Line Segment in Poincaré Disk model of the hyperbolic plane.

1. First, create the construction your tool should be able to create later on. We will use the 'PDLinesegment' file made in the chapter II. Creating Dynamic Figure.
2. Select Tools>Create New Tool in order to open the corresponding dialog box.

3. In the drop-down menu in the 'Output Objects' tab, click 'Arc ab : If[$d < e, d, e$]' which will be shown at the window below the drop-down menu after the click. You may find that 'Circle Ω ', 'Point A' and 'Point B' are already in the window in the 'Input Objects' tab. You may change the order of these objects if you want.
4. Type 'PDLs' (or whatever you want) as the Tool name in the 'Name & Icon' tab. You can see the same name is given in the Command name as you type in. 'Show in Toolbar' is already selected. You may skip assign a picture for the Icon, and create it with the screen capture program (such as Jing) later.
5. Click 'Finish'.

Now you will find the new button, PDLs, added in the Toolbar. To construct a line segment in Poincaré Disk model of the hyperbolic plane represented by the circle Ω in the file, make two new points, say D and E, inside the circle Ω . After select the new button PDLs click the circle Ω and the two points in that order. This order should follow the order in the 'Input Objects' tab. You will see the new line segment between the two points.



You can save the new custom tool so you can reuse it in other GeoGebra constructions. Select 'Manage Tools' in the 'Tools' menu. Select the new custom tool to save from the drop-down list, and then click 'Save As' in order to save the new tool on your computer.

If you open a new GeoGebra interface using File>New, after you created a custom tool, it will still be part of the GeoGebra Toolbar. However, if you open a new GeoGebra window by using File>New Window, or open GeoGebra on another day, your custom tools won't be part of the Toolbar any more. The new user defined tools are displayed in the Toolbar of a new GeoGebra window after saving the setting using Options>Save Settings menu. You may restore the default settings by selecting Options>Restore Default Settings menu. The author has created 18 new tools for the Poincaré Disk model of the hyperbolic plane (see Figure 7 below). You can get this GeoGebra file by double clicking on the applet in the webpage at <http://blue.utb.edu/tyi/Conference/ACE10/myPDMModel.html>.

In the near future those missing features (compare to original buttons in GeoGebra) for the Poincaré Disk model of the hyperbolic plane, such as 'Segment with given length from point', 'Tangent to a circle', 'Regular n-gon', 'Angle with given size', 'Distance', 'Area', etc, will be added to this GeoGebra file.

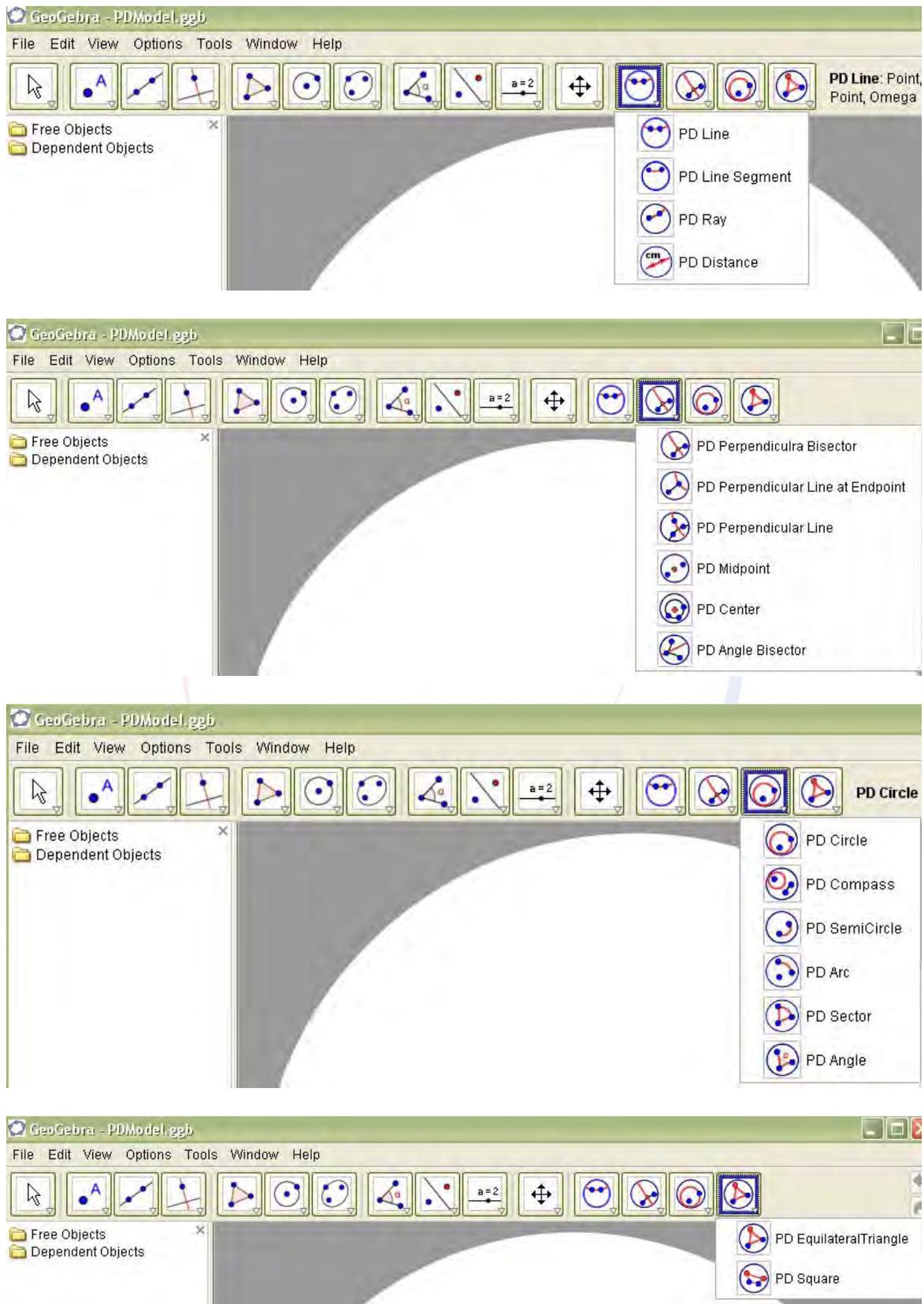


Figure 7

V. Creating Dynamic worksheet

A dynamic worksheet is an interactive web page that consists of an interactive applet with corresponding explanations, questions and tasks. GeoGebra can easily create and export dynamic worksheets as html files. Students can use them on local computers and/or via the internet to work on the given task by modifying the dynamic figure.

After creating the dynamic figure using GeoGebra select File>Export>Dynamic worksheet as webpage (html) to open the ‘Export’ window. You may type the title and/or text for the webpage under the ‘General’ tab according to your plan for delivering the content. Then click the ‘Export’ button to save the worksheet into the folder you choose.

If you want to see the Navigation bar on the webpage, it must be shown on the GeoGebra file before starting the ‘export’ procedure above. You may also select several choices which shows/hide the features in the dynamic figures. Here are some features you may want to choose for the dynamic web page:

- ‘Show icon to reset construction’ shows the reset button on the top right side of the dynamic drawing window and you can reset the figure to the original setting after messing around it.
- ‘Double click opens application window’ makes the dynamic drawing window ‘alive’. That is, even without installing the GeoGebra program into the computer, students can open the GeoGebra program by double clicking the dynamic window in the webpage, and save the file with their work together for homework submission.
- ‘ggb Files & jar Files’ will creates several files with the extension “.jar”. By keeping these files including “.html” and “.ggb” files you can use the dynamic webpage at the classroom and/or at home without an internet connection.

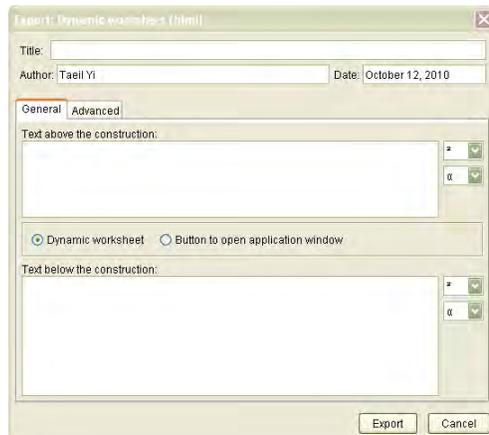


Figure 8

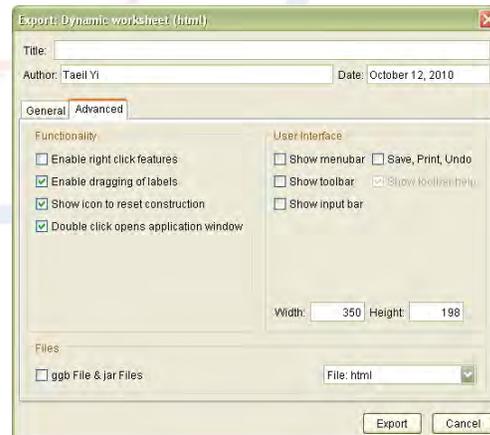


Figure 9

You may also export the Construction Protocol as a separate webpage. You can choose whether or not you want to include a picture of the Graphics View and the Algebra View. You can also choose ‘Colorful Construction Protocol’ which allows that the names in the Construction Protocol will match the color of the corresponding figures in the construction.

VI. Concluding Remarks

Many institutes and instructors are interesting on distance learning and/or providing extra help for their students through web pages, but there are many obstacles for them to go to that direction. The instructor's technology skill to transform their teaching modules designed for classroom teaching to online teaching is one of them. We have demonstrated how easily a novice instructor can produce dynamic worksheets with GeoGebra for their classroom and/or on-line teaching, as well as several custom designed buttons for the Poincaré Disk model of the hyperbolic plane. It is just an example among many other features in GeoGebra, and we strongly believe that GeoGebra is one of the best tools for mathematics instructors to start with to develop on-line teaching modules for mathematics courses.

The author has introduced GeoGebra with other softwares to students (mainly high school mathematics teachers) through a couple of Teacher Quality programs and several graduate courses designed for educators. We have developed teaching modules for Algebra, Geometry and Calculus with GeoGebra, and the teachers have used those teaching modules in their class teaching. The following is a collection among their testimonies about GeoGebra after the programs and courses.

"I really enjoyed everything we did. I am thinking of so many lessons I can do to help teach my class and 'show' the math better than just paper and pencil. I really believe students will also really try to want to learn how to do this also and in turn this will help them want to learn the concept more to understand how to manipulate the math. I believe a lot of students at my school believe they have no hope in future education and I think this may turn them on to something that will be used a lot in the future."

"... I saw the teaching of Geometry in a whole different light! Simple diagrams that I would use have come to life with GeoGebra and even when not using GeoGebra, I saw different ways to teach certain topics...."

"GeoGebra was very helpful for me to use in the class to help student understand much better with visualization."

"... The fact that the software was free really helps. ..."

"So much materials and a diversity of ways to present it to the students to help in the development of their interest in math and science."

"... the technology I was introduced to was eye opening and I hope to incorporate it in my daily lessons ..."

"... All subject will be able to use it because it will allow the students to see it and modify it, so they can better understand the problems assigned to them ..."

"... I was already using technology in the classroom and this will enhance my lessons from now on. I also liked the discovery approach that was used and that I can use when I teach Geometry."

“I really liked the GeoGebra software. I will definitely integrate it this upcoming school year.”

“It is a very useful tool in teaching geometry and algebra.”

“It has been a tremendous tool in helping visualize concepts that otherwise would be lost without the help of technology. With software like GeoGebra, students would be able to visualize concepts and get a more concrete grasp on more abstract concepts.”

“... Geometry is a difficult topic to display on the board. With this handy software, students and teachers can benefit to achieve better results.”

“... I come from “old” school where technology is very new to me and I would have liked to have showed down using the program. I think the GeoGebra is awesome ...”

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Non-Cognitive Variables: A Key to College Success for Impoverished Minorities in the U.S.?

by Dr. Marius Boboc (Cleveland State University) and
Dr. R.D. Nordgren (National University)

Success in college supports a growing interest in determining how students transition successfully to college, based on a complex analysis of cognitive and non-cognitive characteristics allowing them to do well in high school. An emphasis needs to be placed on the non-cognitive aspects of school life, coupled with relevant correlations to school curricula supportive of such variables expected to contribute to high school graduation and access to college. Given the increasing diversity of student body both at the high school and college levels, determining student success needs to look beyond the traditional assessment tools – standardized tests, Graduate Point Average, etc. There is a growing body of research centered on variable that what it takes a college student to meet and exceed expectations of academic performance. Some factors relate to non-cognitive aspects of school life (Kaufman, Agars, and Lopez-Wagner, 2008; Ransdell, 2001; Schmitt et al., 2009). Accurate measures of student progress rely on a clear depiction of students' knowledge and skills applied to a variety of contexts (Sedlacek, 2004). This study examines non-cognitive variables at a Midwestern urban high school with an African-American student population five times the national average and in an impoverished city. An instrument designed and validated to predict success of impoverished minority students in college was administered to 47 students (45 were Black or "mixed race") in a college exploratory program. The results outline possible implications high school curricular plans may have on the successful transition to college for students from low-income families.

Theoretical approach

William Sedlacek (2004) designed and validated the Non-Cognitive Questionnaire (NCQ) to predict the college success of minority and impoverished high school graduates. The two researchers used this instrument with a group of students at a local high school featuring high levels of student body diversity and low levels of socio-economic status these students come from. The 47 respondents could be categorized in terms of gender and race as follows: 23 male and 24 female students; 40 African-American (17 male and 23 female students); 2 White students (both male); 4 multi-racial (3 male and 1 female); and 1 American-Indian student.

The Non-Cognitive Questionnaire features several variables whose analysis indicates the likelihood of success in college for respondent high school students. These variables are listed and briefly defined below:

- **Positive self-concept:** student demonstrates confidence, strength of character, and independence.
- **Realistic self-appraisal:** student recognizes and accepts any strengths and deficiencies, especially academic, and works hard at self-development; recognizes the need to broaden his or her individuality.

- **Successfully handling the system:** student exhibits a realistic view of the system on the basis of personal experience of racism; committed to improving the existing system; takes an assertive approach to dealing with existing wrongs, but is hostile to society and is not a “cop-out;” able to handle racist society.
- **Preference for long-term goals:** student is able to respond to deferred gratification; plans ahead and sets goals.
- **Availability of strong support person:** student seeks and takes advantage of a strong support network or has someone to turn to in a crisis or for encouragement.
- **Leadership experience:** student demonstrates strong leadership in any area of his or her background.
- **Community involvement:** student participates in a variety of activities in his or her community.
- **Knowledge acquired in a field (of study):** student acquires knowledge in a sustained and culturally related way in any field (of study).

Results

A breakdown of the data collected from the 47 respondents is presented below (by non-cognitive variable):

- **Positive self-concept:** Out of range - Female students above national median, male students below; African-American females and multi-racial females above; African-American males, White males, and multi-racial males below.
- **Realistic self-appraisal:** Out of range - Male students below national median; African-American males, White males, and multi-racial females below.
- **Successfully handling the system:** Out of range - Female students above national median; African-American females, White males, and multi-racial males above; American-Indian male and multi-racial female below.
- **Preference for long-term goals:** Out of range - Male students below national median; African-American males, White males, and multi-racial female below.
- **Availability of strong support person:** Out of range - Male students below national median; African-American males, White males, and African-American females below.
- **Leadership experience:** Out of range - Female students above national median; African-American females and multi-racial females above.
- **Community involvement:** Out of range - White male students below national median.
- **Knowledge acquired in a field (of study):** All populations in range of national median.

The analysis of our data indicates that the participating female students tend to be at or above the national norm in terms of most of the non-cognitive variables, while there is greater fluctuation within the male corresponding group. While these findings suggest several areas of improvement in school curriculum, it is equally important to further the investigation into the wide range of areas of support these students seem to turn to in environments outside their school. The most obvious outcome would have to take into

account the great importance school-home environment relationships with regard to student success.

These findings correlate with earlier work related to how these non-cognitive variables impact student success in college. The researchers' intent is to use the same factors in an attempt to strengthen high school curriculum designed to ensure a successful transition to college for its graduates.

Implications

These findings have supported concerted efforts by university representatives and students, staff, and administration from the local high school (chosen as a site for the research project). Each student who participated in the study received a profile of his or her non-cognitive variables (in terms of performance compared to national norms), based on which he or she was able to engage in planning sessions with teachers and school counselors aimed at strengthening the school curriculum for the remainder of his or her 3rd and 4th year in high school. Concurrently, the university representatives collaborated with their counterparts at the high school to discuss appropriate ways in which to update the existing curriculum or develop new curricular content to reflect the need to boost students' non-cognitive characteristics by engaging them in relevant learning opportunities.

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Cover Page

 **Title:**

Gender Differences in Computer Experience and Computer Self-efficacy among High School Teachers

 **Key word:**

computer experience, computer self-efficacy

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Gender Differences in Computer Experience and Computer Self-efficacy among High School Teachers

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Abstract

This study aims to investigate gender differences in computer experience and computer self-efficacy. The study has used the randomly stratified sampling method to select 248 teachers from 15 high schools in the central region of Taiwan. This study examines the influence of five types of computer experience on computer self-efficacy. Results indicate that there is a significant relationship between computer experience and computer self-efficacy. Teachers with more computer experience play more with computer self-efficacy. Gender differences have been found in computer experience and computer self-efficacy. Male teachers have more computer experience than female teachers, and therefore show a more positive computer self-efficacy than female teachers. The results offer useful insights for future research to enhance computer self-efficacy.

Keywords: computer experience, computer self-efficacy

1. Introduction

Computers and Internet access are becoming increasingly common in schools. Originally intended as an approach to provide individualized instruction to students, such information technologies are now often used to support collaborative learning in a classroom environment (Littleton & Light, 1999). As a classroom tool, the rapid growth of information technology has captured the attention of today's educators and educational community. The ability to use technology is becoming increasingly important. Despite signs of progress in gender equality over the past few years, computer use remains a heavily gendered space. There is still a significant gap between men and women.

Some studies indicates significant gender differences among students' computer use at home and at school, and these effects are likely related to gender, technology and computer learning (Volman & van Eck, 2001). However, having lower computer confidence in their abilities and lower interest in computers may lead female students to avoid experiences that could help them develop computer competence. Several other reasons to explain gender differences in computer attitudes and use among students may include: (1) a perception of computers as akin to any other machine, meaning that the computer world is the domain of men and boys; (2) a lack of encouragement from teachers and parents to support girls in computer related courses; and (3) a lack of female role models in the computer field (McGrath & Thurston 1992). Surprisingly, gender has not been identified as a factor of computer self-efficacy. A previous study found that Computer experience was a greater predictor of computer self-efficacy than gender (Sam Othman, & Nordin, 2005). Therefore, gender differences might have an influence on computer use.

Research on self-efficacy theory has powerful effects which are embedded in social cognitive theory, positing that confidence in completing behaviors of interest will lead to achievement of those behaviors (Bandura, 1986). Social cognitive theory is applied today in many different areas. The primary focus of social cognitive theory and related research in educational technology has been on self-efficacy (Anderson & Maninger, 2007; Niederhauser & Perkmen, 2008) According to social cognitive theory, self-efficacy influences an individual's interests, goals, and ultimately performance. In this theory, self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (Bandura, 1986, p. 391). In other words, social cognitive theory provides a solid theoretical foundation for the concept of computer self-efficacy.

Past research on computer self-efficacy indicates that user's computer experience

has a significant positive relationship with computer self-efficacy beliefs (Potosky, 2002). Computer self-efficacy refers to an individual's self-efficacy specifically toward using computers (Murphy, Coover, & Owen, 1989). Computer self-efficacy has been identified as a key determinant of one's computer-related ability and usage in organizational contexts (Madhavan & Phillips, 2010). However, several studies in the past have examined factors affecting computer self-efficacy beliefs (Busch, 1995; Harrison & Rainer, 1992; Hasan, 2003; Potosky, 2002). Computer self-efficacy is a key factor that may determine teacher success in computer teaching and learning.

The definition of computer experience becomes evident in that most researchers have focused on objective measures of computer experience, i.e., computer use (Garland & Noyes, 2004). Computer experience has also been used as a correlate for computer self-efficacy beliefs. Hasan (2003) examined the relationship between computer experience and computer self-efficacy in the use of computers among 151 part-time and non-traditional students enrolled in multiple sections of computer information system courses at a four-year public institution. The results indicated that computer experience had strong and significant effects on computer self-efficacy beliefs. People with a perception of strong computer self-efficacy would rate themselves as more experienced than they actually were, consistent with Bandura's social cognitive theory (Wilfong, 2006). Berner (2003) studied the relationship between computer uses in the classroom. His study found that the faculty's belief in their computer competence was the greatest predictor of their use of computers in the classroom. On the other hand, Karsten and Roth (1998) examined the relationship computer experience, computer self-efficacy, and performance in IS courses. Their study found that computer experience had no significant influence on computer self-efficacy beliefs.

Social cognitive theory also posits that male and female behavior is different because society enforces differences through the process of socialization (Bandura & Bussey, 2004). Reinen and Plomp (1997) carried out an extensive study of gender and educational computer use in a number of countries. They found that female students knew less about information technology than male students, enjoyed using computers less and perceived more problems with the software. Gender differences in computer use have been associated with the differential socialization of boys and girls, made manifest in such places as the home where fathers and brothers use computers the most, or on television where males are often portrayed in computer related roles in programs and commercials (Sanders, 1993).

Furthermore, this study aims to investigate gender differences regarding computer experience and computer self-efficacy. Based on the literature mentioned above, it

can be assumed that computer experience might be related to computer self-efficacy. In order to understand the relationship between computer experience and computer self-efficacy, this study aims to investigate the status of Taiwan's high school teachers with regard to their perception toward computers. Therefore, the objectives of the study include: (1) examining the relationship between computer experience and computer self-efficacy and (2) examining the gender difference in computer experience and computer self-efficacy.

2. Method

2.1 Sample

Participants in this study were randomly selected from 15 high schools in the central region of Taiwan. For each school, the number of female teachers exceeded that of male teachers. The final sample included 248 high school teachers, which accounted for 82.67% of the sample. Missing responses were found on questionnaires from 52 teachers. The average age of participants was 32.1 years ($SD=2.91$) with a range of 25–52 years. The average tenure at the school was 12 years. The sample cohort was highly educated: 42.6% had bachelor's degrees, 55.9% had master's degrees and 1.5% had PhD degrees.

2.2 Procedures

In order to develop a valid and reliable questionnaire, several items and indicators were formulated based on related literature and on previous studies in this study. The questionnaire consisted of two sections. The first section was about demographic information. The second section consisted of 5 items concerning the Computer Experience Scale (CE), and 7 items relating to the Computer Self-efficacy Scale (CS). All scales comprised 5-point Likert-type items. The final section contained 12 items. The average time for completing each questionnaire was 20–25 minutes.

2.3 Measures

2.3.1 Computer Experience

The Computer Experience Scale was assessed on a 5-item scale, where respondents rated their own know-how when it comes to using a computer, ranging from 1 (no experience) to 5 (very experienced) (Bozionelos, 2004). A high score on the Computer Experience Scale indicated that a respondent clearly understood how to use computers. Sample items included “Using a word-processing package on a computer” and “Using computer packages such as spreadsheets or data management software.” Internal consistency reliability estimate for this scale was $\alpha = .87$.

2.3.2 Computer Self-efficacy Scale

The Computer Self-efficacy Scale implemented in this study was developed on the basis of many relevant studies (e.g., Compeau & Higgins, 1995; Kao & Tsai, 2009; Sang et al., 2009). Owen (1986) suggests that self-efficacy could be measured reliably and validly measured, such measures might be used to assess a composite of affect, cognition, and performance. Sample questions were presented using a 5-point Likert scale (1=strongly disagree to 5=strongly agree). Sample items included, “I have adequate ability to operate a computer” and “I am confident that I can use computer as a tool to teach new subject knowledge.” Higher scores indicate more self-reported computer self-efficacy. In the present study, the internal consistency reliability of this scale was $\alpha = .92$.

2.4 Data Analysis

Teachers completed the questionnaire in their own time there was no set time limit. The data were analyzed using descriptive statistics, Pearson’s correlation coefficients, and hierarchical regression analysis. In consideration of the aims of the study, descriptive statistics were applied for sample description. Then, correlation analysis was used to find the relationship between computers experience and computer self-efficacy. Hierarchical regression analysis was used to predict male and female teachers’ computer self-efficacy.

3. Results

3.1 Descriptive Statistics

Results from the questionnaire were analyzed under the four sections of teacher background, such as gender, school, tenure, and hours of computer use per week. Table 1 illustrates the demographic profile of the participants, where 48.4% of the respondents were male and 51.6% were female. Of the respondents, 59.7% were in public schools and 40.3% were in private schools. More than 70% of the respondents were experienced instructors with more than 10 years of teaching experience. Over 60% of the respondents used computers more than 10 hours per week.

Table 1. Profile of the respondents

Demographic profile	Frequency	Percentage
<i>Gender</i>		
Male	120	48.4%
Female	128	51.6%
Total	248	100%
<i>School</i>		
Public	148	59.7%
Private	100	40.3%
Total	248	100%
<i>Tenure</i>		
Under 5	20	8.0%
6-10	53	21.4%
11-15	76	30.6%
16-20	37	14.9%
21 and above	62	25.1%
Total	248	100%
<i>Hours of computer use per week</i>		
Under 5	32	12.9%
6-10	50	20.2%
11-15	67	27.0%
16-20	58	23.4%
21 and above	41	16.5%
Total	248	100%

n=248

3.2 The Relationship between Computer Experience and Computer Self-efficacy

Table 2 presents the means, standard deviations, and correlations among the independent variables and dependent variables. Word processing and Internet browser familiarity are rated as most experienced. The lowest reported experience is graphical editing software. Word processing was not significantly correlated with computer self-efficacy. Therefore, the results of this analysis show that computer experience has been used as a correlate for computer self-efficacy. Hasan (2003) indicated there was a significant relationship between the two and have found computer experience to be the precursor of computer self-efficacy beliefs in many previous studies.

Table 2. Means and standard deviations

Variable	M	SD	Correlation with CSE
Word processing	2.89	0.61	0.23
Spreadsheet programming	1.87	0.76	0.32**
Internet browser familiarity	2.87	0.84	0.24**
Operating system familiarity	2.35	0.72	0.26**
Graphical editing software	1.59	1.03	0.31**

n=248, ** $p < .01$

3.3 Gender Differences in Computer Experience and Computer Self-efficacy

Hierarchical regression analysis was used to predict the influence of the independent variables on computer experience and computer self-efficacy. The results of this analysis are shown in Table 3. Table 3 illustrates the gender differences in computer experience and computer self-efficacy. Computer self-efficacy was marginally related to males' computer self-efficacy. Low computer self-efficacy was negatively related to males' self-efficacy. When this study entered computer experience for male teachers, the effects of computer self-efficacy diminished and only spreadsheet programming, Internet browser familiarity, and operating system familiarity were significant. However, Internet browser familiarity was related to female teachers' computer self-efficacy.

Table 3. Summary of hierarchical regression analysis for variables predicting male and female computer self-efficacy

Variable	Male			Female		
	B	SE B	β	B	SE B	β
<i>Step 1</i>						
CSE	-.235	.133	-.169*	-.162	.171	-.092
<i>Step 2</i>						
CSE	-.012	.132	-.008	-.082	.156	-.049
Spreadsheet programming	.142	.133	.095*	.133	.149	.233
Internet browser familiarity	.298	.131	.192*	.448	.142	.265*
Operating system familiarity	.125	.024	.332*	.139	.038	.312

n=248, ** $p < .01$

4. Discussion

This study aimed to investigate gender differences in computer experience and computer self-efficacy. The aspects of computer experience examined in this study were related to: word processing, spreadsheet programming, Internet browser familiarity, operating system familiarity, and graphical editing software. The first result found that there was a significant relationship between computer experience and computer self-efficacy. Teachers with more computer experience played more with computer self-efficacy. The results indicated that there was sufficient evidence to support a relationship between computer experience and computer self-efficacy. From a theoretical perspective, this finding provides support for Bandura's (1986) proposition that prior experience, especially with respect to difficult and unfamiliar tasks, represents the most significant determinant of self-efficacy. However, the positive correlation of computer experience and computer self-efficacy was in accordance with Hasan's (2003) and Wilfong's (2006) studies. It appeared that computer experience played an extremely important role in the success of teacher learning.

The second result revealed that male teachers had more computer experience than female teachers, and therefore showed more positive computer self-efficacy than females did. In this study, male teachers tended to have more positive self-efficacy toward computers compared to female teachers. The results of this study indicated that male and female teachers' computer self-efficacy is very different. As Bimber (2000) argued, the gender difference may come from a fundamentally socioeconomic status issue which limits women's frequent use of the Internet. This supports the results of Roy, Taylor and Chi (2004), Vekiri and Chronaki (2008), and indicates that males had more positive computer self-efficacy than females. Vekiri and Chronaki (2008) examined relations between boys' and girls' computer experience, social support for using computers, and motivational beliefs, to explore possible causes of gender differences in students' self-efficacy and value beliefs. Results showed that boys had more positive self-efficacy and value beliefs about computers compared to girls, and were more likely to engage in computer activities such as programming and Internet search. Previous studies have also mentioned the same results. For example, Hattie (1990) suggested that males feel that they are in greater control when using a computer, in comparison with females. However, this study also confirmed a significant gap in prior experience of using computers between males and females. Yates and Chandler (1991) showed that if a student has a wide range of prior knowledge and experience, this may contribute to his or her confidence in learning to use computers.

5. Conclusions

This study examined the relationship between computer experience and computer self-efficacy. The results of this study have shown that there was a significant relationship between computer experience and computer self-efficacy. However, teachers with more computer experience played more with computer self-efficacy. Gender differences were found in computer experience and computer self-efficacy. So far, research on the gender gap concerning computer use has mainly focused on gender differences in computer attitude, computer anxiety, computer use and so on. Gender stereotypes typically are communicated by parents, peers, teachers and they may work against institutional interventions that aim at providing equal opportunities to males and females (Vekiri & Chronaki 2008).

There are several limitations to this study. Quantitative data from this study were collected using self-report measures, which may have led to a common-method bias, a situation that may inflate the true associations between variables, resulting in spurious significant findings. Therefore, there was likely some social desirability bias that may have affected the present results. In addition, data were collected from 248 high

school teachers in Taiwan. Future studies should attempt to increase the sample size and incorporate more high schools. With regard to the directions for future research, this study investigated the relationship of computer experience and computer self-efficacy. According to the factors mentioned above, there are other factors that influence computer use by teachers. Future studies need to examine more variables such as computer competence, teacher motivation, individual satisfaction, and teachers' attitudes toward computers.



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Conceptual metaphor awareness on English phrasal verbs teaching and learning for adolescents in Taiwan

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Abstract

The components of English phrasal verbs comprised opaque relationship make them complicated to be processed by second language learners. The present study aims to apply mainly conceptual metaphor awareness method (hereafter, CMA) to facilitate adolescents' phrasal verbs learning. The literature conducts empirical teaching experiments on adult learners due to their cognitive mature and higher language proficiency. By contrast, the present study employs junior high school students with basic English proficiency as participants. The research questions underlying the study are (1) Whether or not teenagers will benefit from CMA method on phrasal verbs teaching? (2) Does the experimental group, taught by CMA method, outperform the control group, guided by memorization, on vocabulary retention? (3) As for interpreting unfamiliar phrasal verbs test, does the experimental group have better performance than the control group? The results, on the whole, confirm CMA's positive effect to aid participants on learning English phrasal verbs. However, only on the performance of unfamiliar phrasal verbs test does the experimental group have distinctively better performance. The results show little evidence that CMA will foster participants' phrasal verbs on memory retention. The reason for the negative effect on phrasal verbs' memory retention is related to participants' learning experience, who only rely on memorization and are only taught before by memorization, which being a dominant "strategy" to learn phrasal verbs among adolescents in Taiwan. Some pedagogical suggestions and alternative teaching material will be reported to help language learners overcome the difficulty that phrasal verbs accompanied.

Key words: conceptual metaphor awareness, phrasal verbs, cognitive linguistics

1. Introduction

Many second language acquisition researchers develop numerical approaches and methods to aid learners to acquire a foreign language. Vocabulary teaching is a notorious area that many language learners suffer (Kövecses & Szabó 1996; Boers & Demecheleer, 1988; MacLennan, 1994). This situation alone makes it worthwhile for researchers to apply cognitive linguistics, especially its subfield cognitive semantics (hereafter, CS), which is suggested to facilitate teaching and learning of vocabulary

(MacLennan, 1994; Andreou & Galantomos, 2008; Kövecses & Szabó, 1996; Side, 1990).

The present paper aims to apply conceptual metaphors into English phrasal verbs teaching for junior high school students in Taiwan. The notion of conceptual metaphors embeds the two other CS mechanisms, polysemy and family resemblance, which viewed as the building blocks for conceptual metaphors. Phrasal verbs are defined here as a structure that “combines a verb and invariable particle that function as a single unit both lexically and syntactically” (Liao & Fukuya, 2004:196). Phrasal verbs are regarded as dead metaphors with arbitrary and unrelated system (Side, 1990; Verspoor 2008). However, if one applies the cognitive CS to this field, one can derive insightful and meaningful learning. For example, CS researchers (Ygihashi, 2003; Csabi, 2004; Kövecses & Szabó, 1996; Boers, 2000) conduct the empirical teaching experiments with prosperous findings. However, they all recruit adult learners due to their cognitive mature and participants’ language proficiency is intermediate to high with enough ability of language manipulation; on the contrary, the present study employs junior high school students with basic English proficiency as participants to evaluate whether or not applying CMA approach into phrasal teaching will aid their learning.

The structure of the paper is as follows. First, the previous empirical studies on applying CS into English teaching will be reviewed. Second, the methodology including participant’s background, the procedure and the design of the experiment, and items that evaluate participant’s performance will be reported. Third, the results to the research questions are shown. Fourth, the discussion section is elaborated by L1 transfer, alternative teaching material, and pedagogical implications. Finally, the conclusions remarks close the paper.

2. Literature review

This section unfolds how the previous literature employs CS mechanisms to facilitate vocabulary learning. Besides, we will further delve into the application of polysemy, family resemblance, and conceptual metaphors mechanism to assist phrasal verbs teaching and learning.

Kövecses & Szabó (1996) report an experimental classroom study that teaching the strategy of CS mechanisms fosters the learning speed of phrasal verbs. Yagihashi (2003) utilizes the metonym, metaphorical extension and polysemic concept to speed up English vocabulary acquisition for Japanese learners. Gibbs (1993) claims phrasal verbs should be analyzed due to their compositional and motivated characteristics. Boers (2000) reports enhancing learners’ metaphorical awareness will facilitate their vocabulary retention. These researchers all suggest the advantages of utilizing CS approaches into English phrasal verbs teaching and learning.

With respect to the application of prototype and family resemblance into teaching and learning phrasal verbs, the particle is the notion of polysemic formation (Side, 1990; Lakoff, 1987; Kövecses & Szabó, 1996). A polysemic word is defined that “a word has multiple senses related in the same phonological structure” (Yagihashi 2000: 31). For example, Side (1990) analyzed the related senses of *up* are *in an upwards direction, increasing, growing, and improving*. The typical member in a category is called “prototype”. In the category of *up*, the prototype is *in an upwards direction*, and based on this notion is extended to refer to other meanings such as *increasing, growing, and improving*. Meanings are shifted from the prototype to peripheral ones, and this is the network called “family resemblance”. This concept is crucial for phrasal verbs teaching and learning because it accounts for the related senses of *up* like *blow up* (increasing), *bring up* (growing), *cheer up* (growing) and *business is looking up* (improving). These meanings of phrasal verbs can be taught at one time with the prototype and family resemblance so as to make English phrasal verbs learning more efficiently.

As regards conceptual metaphor, the principle of *motivation* defined by Lakoff (1987: 448) as “the relationship between A and B is motivated just in case there is an independently existing link L, such that A-L-B fit together. L makes sense of the relationship between A and B”. The meaning extensions are motivated by conceptual metaphors. Conceptual metaphor brings two domains of knowledge into correspondence; one is source domain and the other is target domain. The logic of the source domain is mapped onto the target domain, that is, the source domain is typically applied to provide understanding about the target domain (Lakoff & Johnson, 1980). For example, Kövecses (1986) has shown English contains enormous expressions to describe anger and those are motivated by conceptual metaphors. For example, *Anger as a hot fluid in a container* may give rise to some expressions such as *anger welled up inside me, I am boiling with anger, simmer down, and he blew up at me*. These idioms and expressions can be learned in an organized group at one time to consolidate learning process.

From these CS mechanisms, we realize that idioms are not completely arbitrary or unrelated. Instead, looking deeply at the formations of idioms, we know they are conceptual, motivated, and related, in nature. Thus, it is worthwhile to teach the phrasal verbs by CS methods.

The present study seeks to answer the following research questions. (1) Whether teenagers with basic foreign language proficiency will benefit from CMA method on learning English phrasal verbs? (2) Does the experimental group outperform the control group in vocabulary retention? (3) Does the experimental group have better performance than the control group while interpreting unfamiliar phrasal verbs?

3. Methodology

This section focuses on participants' background, where their age and language derivation will be discussed and compared to previous literature. Then, the procedure and design of the experiment will be elaborated. Eventually, items that evaluate participants' performance will be reported in an attempt to seek out the results of research questions.

3.1 Participants

The experiment recruits thirty eighth-grader junior high school students in Tainan city, Taiwan. All of them are at the age of 13 or 14 whose language proficiency is basic. Participants are divided into two groups, namely, control group and experiment group, each with fifteen. The reason why they are chosen is to make the differentiation with prior studies. The prior studies (Ygihashi, 2003; Csabi, 2004; Bower, 2000; Kövecses & Szabó, 1996) focus on applying cognitive mechanisms on adult learners who are with intermediate language proficiency. Boers (2000: 563) suggests intermediate English proficiency learners will benefit through CMA teaching. Since beginners are impeded by a short of vocabularies; thus, many figurative expressions are not known by them. On the other hand, advanced learners, they tend to be more inhibited and hesitated to transfer idioms. With respect to age, Andewou & Galantomos (2008) suggest adults are more sensitive to comprehend CS mechanisms due to their analytic ability and mature process. The present study hypothesizes teenagers with basic language proficiency will have beneficial merits on learning phrasal verbs through CMA method.

3.2 Experimental process and design

The number of English phrasal verbs is quite large, and we decide to cope with the adverbial particles *off* and *up*. Before the experiment, all participants will be taught twelve phrasal verbs with *off* and *up*, six with *off* particles and six with *up*.

However, the teaching procedures are different for two groups. For control group, the researcher wrote down twelve sentences with phrasal verbs and their Chinese translation (see Appendix 1). Learners were instructed to memorize these phrasal verbs. For experimental group, the researchers apply CS to explain the meanings of twelve phrasal verbs (see Appendix 2). For example, the researcher will teach participants the concept of being *finished* or *complete*, is commonly understood in terms of the concept *up*. Then, it leads to orientational metaphor *completion is up* such as *broke up*, *make up*, and *eat up*. Another orientational metaphor *stop is up* such as *give up*. These phrasal verbs are instructed by the combinations of conceptual metaphors, polysemy and family resemblance.

After the lecture, participants are left fifteen minutes to digest all the phrasal verbs. Then, learners in both groups are given ten minutes to fill twelve questions,

filling in *up* or *off* (see Appendix 3). Six of the items are taught in the lecture, and the other six are new for them.

3.3 Items that evaluate participant's performance

After the participants have done the test, the researchers measure the effectiveness of learning methods for control and experimental group by calculating (1) the correct rate of overall responses (2) the correct rate of taught phrasal verbs for questions 1, 3, 6, 9, 11, 12 (3) the correct rate of unfamiliar phrasal verbs for questions 2, 4, 5, 7, 8, 10. The rationale to ask learners to fill in the same questions lies in that we attempt to figure out which group has better vocabulary memory retention. The purpose of questioning the other six new questions is to test the ability of logic inference; that is, the effect of CS application to untaught phrasal verbs automatically.

4. Results

In this section, we will estimate the effectiveness of the control and experimental group's lectures by answering the three research questions.

4.1 Performance of the overall test

The overall performance, based on the percent of correct answer (see Table 1), the experimental group obtains 79.44%. This is considerably higher than the control group whose correct rate is 73.88%. Participants in the experimental group can figure out the meanings of idioms based on the related senses, so they can link a literal word to idiomatic meaning. This confirms the research question that the group who is trained through CMA does facilitate phrasal verbs learning.

Table 1 The average of correct rate on each question for the control and experimental group.

Question	control group performance	experimental group performance
1	12/15 (80%)	13/15 (86.67%)
2	8/15 (53.3%)	10/15 (66.67%)
3	14/15 (93.33%)	12/15 (80%)
4	6/15 (40%)	8/15 (53.3%)
5	8/15(53.3%)	10/15 (66.67%)
6	13/15 (86.67%)	12/15 (80%)
7	9/15 (60%)	11/15 (73.33%)
8	11/15(73.33%)	13/15(86.67%)
9	15/15 (100%)	14/15(93.33%)
10	11/15(73.33%)	12/15(80%)
11	14/15 (93.33%)	13/15(86.67%)
12	13/15(86.67%)	15/15(100%)

1~12	73.88%	79.44%
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4.2 Performance of memory retention

With respect to the research question two, the experimental group who is taught by conceptual metaphor awareness do not benefit their vocabulary memory retention (see Table 2). The experimental group obtains 87.77% correct rate. The control group scores 88.88%.

Table 2 The correct rate for taught phrasal verbs.

Question	control group performance	experimental group performance
1	12/15 (80%)	13/15 (86.67%)
3	14/15 (93.33%)	12/15 (80%)
6	13/15 (86.67%)	12/15 (80%)
9	15/15 (100%)	14/15(93.33%)
11	14/15 (93.33%)	13/15(86.67%)
12	13/15(86.67%)	15/15(100%)
average	88.88%	87.77%

CMA shows no positive effect on the memory retention test. From the participants' self-report learning phrasal verbs experience, by memorization is the dominant "strategy" for phrasal verbs acquisition. That is, participants are used to learning phrasal verbs by memorizing English vocabulary along with the Chinese translation. For the control group, the strategy that they carry out is memorization because we only provide phrasal verbs in a sentence with the Chinese translation. As for the experimental group, they are instructed by the "innovative" teaching method that they feel strange about CMA method. The tasks that they work on not only realizing phrasal verbs but also applying new strategy to explain every phrasal verb. It seems that their learning burden is heavier than the control group who pays all the focus on memorization. Thus, it is not verified that the experimental group outperform the control group in vocabulary retention.

4.3 Performance of CS mechanisms application

As regards the unfamiliar phrasal verbs, the experimental group scores 71.1% comparing to 58.88% for the control group (see Table 3). The results suggested successful application of CMA to cope with untaught phrasal verbs. The experimental group does better on the test, which lies in CMA method as a beneficial strategy to infer and grasp the meanings of unfamiliar phrasal verbs. They have learned the polysemous concept of *up* and *off* and carried out the knowledge to interpret new phrasal verbs.

Table 3 The correct rate for unfamiliar phrasal verbs.

Question	control group performance	experimental group performance
2	8/15 (53.3%)	10/15 (66.67%)
4	6/15 (40%)	8/15 (53.3%)
5	8/15(53.3%)	10/15 (66.67%)
7	9/15 (60%)	11/15 (73.33%)
8	11/15(73.33%)	13/15(86.67%)
10	11/15(73.33%)	12/15(80%)
average	58.88%	71.1%

However, although the result shows experimental group outperformed, learners' self-reports question the teaching method. Three participants from the experimental group said the teaching method is very complicated because they don't think they can grasp the phrasal verbs until they memorize all the metaphorical usages of *up* and *off*. Then, they said by CMA teaching burden their process. They think they have to spend extra time to familiar with conceptual metaphors and then go on the acquisition of phrasal verbs. Although researchers induct the conceptual metaphors empirically from languages, the participants do not believe the effect of conceptual metaphors naturally exist in their mind. The researchers account for this discrepancy due to participants' insufficient sense of language and given seldom chance to practice thought and logic in the educational context. Most important of all, the intensity of metaphor awareness they received is insufficient. For example, according to their self-report on learning phrasal verbs experience, for both control and experimental group, they wrote down "by memorization". They are never triggered the power of conceptual metaphors; thus they need more time to familiar with the system and more evidence to be persuaded. With respect to examples of more persuasive evidences will be elaborated in the discussion section by alternative teaching material.

5. Discussion

In this section, we discuss the effect of positive and negative L1 transfer on phrasal verbs learning. Then, the improvement of teaching material is suggested, which is motivated from participants' self-report. Finally, pedagogical implications are proposed for educational context.

5.1 L1 transfer

It is suggested that learners' ability to process and apply phrasal verbs are heavily influenced by their knowledge of their native languages (Side, 1990). Interlanguage interfere not only learners' linguistic realization, but also conceptual transfer. The reason why question 8 (bring up) and 10 (break up) possessing the highest correct rate have something to do with L1 positive transfer; for example, Mandarin Chinese has

up for *increasing* or *growing* in *Zhang jia*, 漲價, ‘up price; price rises’, and *wen du zeng gao*, 溫度增高, ‘temperature up; temperature increases’. *Up* conceptualizes as *completion* such as *kao shang xue xiao*, 考上學校, ‘examine up school; being admitted to a school’ and *mai guang*, 賣光, ‘sell up’. The Mandarin Chinese conceptual metaphors of *off* have similar concepts as English listed in the lecture and test sheet. The concept of distance in space is *off* such as *li kai*, 離開, ‘leave’, *yuan li*, 遠離, ‘away from’ The concept of disconnection is *off* such as *dian lu zhong duan*, 電路中斷, ‘electricity broke up; out of electricity supply’ *qie duan wang lu*, 切斷網路, ‘cut off the Internet’.

However, both the control and experimental group are native speakers of Mandarin Chinese, but why dose the experimental group attain the benefits exclusively? Boers (2000), Kövecses & Szabó (1996) claim that people need to be triggered by the CS mechanisms before they can put them to use. That is, people who are not aware of the existence of CS mechanisms; they do not have deep understanding about CS mechanisms, not mention of application of CS mechanisms to the language process.

The negative L1 transfer also has some impact on the test sheet performance; that is the reason why question 4 (end up) get the lowest correct rate. Mandarin Chinese conceptualizes *up* for *continuing* and *keeping doing* such as *shang gong*, 上工, “ up work; start to work”, *shang zu liang xiao shi*, 上足兩小時, “up fulfill two hours; work for two hours” instead of *stopping* in English. The preliminary finding we proposed it is more difficult for learners to apply conceptual metaphor awareness on those phrasal verbs which have conflicted interpretation to their native language.

5.2 Alternative teaching material

The rational of teaching material employed to the experimental group is to trigger their metaphorical awareness by providing conceptual metaphors, polysemy, and family resemblance that the phrasal verbs manifest. A few participants complain they require spending extra time to familiar with CS mechanisms and then work on the acquisition of phrasal verbs. However, if the teaching material, conceptual metaphor awareness, introduced by Chinese examples, would they believe conceptual metaphors do dwell in their mind? Since some equivalent conceptual metaphors are found in Chinese, the future study can explore the application of Chinese conceptual metaphors as triggers to English phrasal verbs.

5.3 Pedagogical implications

Even though three participants question the effect of conceptual metaphor, these three participants’ performance scores around the average rather than lay behind. The advantages of applying conceptual metaphor awareness into phrasal verbs learning in the language context are as follow. It provides a solution for learners to cope with

unfamiliar phrasal verbs. The reason that contributes this positive outcome is that learners process learning with logical and analytical strategies. Conceptual metaphor reveals the hidden relationship that operates behind phrasal verbs. In addition, conceptual metaphor offers an opportunity to categorize phrasal verbs. That is, learners do not learn individual phrasal verbs by context to context, but acquire a group of phrasal verbs in groups.

The importance of metaphor awareness is suggested from the researchers Boer 2000, Andreou & Galantomos 2008, who claim conceptual metaphor mechanism lies in people's deep mind and they are functioned covertly and subconsciously. Thus, the mechanisms are not triggered automatically, but need to be motivated. This is confirmed by the research question 3; the experimental group benefits from the metaphor awareness teaching. The curriculum design should pay much attention to motivating learners' metaphor awareness so as to make learning meaningful and logical.

6. Conclusion

We address the positive effect of applying conceptual metaphor to teaching phrasal verbs by CS awareness method. The overall performance and metaphor awareness receive confirmations from the results. However, the memory retention offers no support by employing CS awareness teaching method. The present study suggests the possible effect of L1 transfer by comparing English and Mandarin Chinese conceptual metaphors. Moreover, it advises the improvement of motivating metaphor awareness by offering alternative teaching material based on participants' suggestions and complaints. Most noticeably, the present study breaks through the constraint about learners' age and language proficiency suggested by the previous studies (Boers, 2000; Andewou & Galantomos, 2008). It proves that adolescents with basic language proficiency will benefit from the application of CS to phrasal verbs learning.

There presents some limitations in the present study. First, conceptual metaphors remain "unsettle issue" (Li, 2004:199) as how to explain the mapping relationship of a certain expression. The explanation may be different from people to people. Thus, one teacher comes up with the conceptual metaphor for a particular expression; on the other hand, other teachers may have distinct interpretations for the same expression. Then, this unstable and various explication may confuse learners and burden their language process. Second, conceptual metaphor is not omnipotent to generalize to all phrasal verbs. Some phrasal verbs are cultural-specific which are shared by a particular cultural community. Thus, conceptual metaphor should be regarded as a complementary mean (Boers, 1999) instead of omnipotent method.

Although conceptual metaphor constitutes some insurmountable obstacles, there

are still many phrasal verbs deserved the interpretation of conceptual metaphor and analysis so as to assist phrasal verbs learning.

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Appendix 1 The instruction for the control group.

- | |
|--|
| 1. My car broke up again- I will have to fix it.
我的車又壞了，我必須修裡它。 |
| 2. These ten stories make up the whole book.
這十篇故事組成一本書。 |
| 3. My brother's room is dirty. He never picks up the garbage.
我弟弟的房間很髒。他從來不撿垃圾。 |
| 4. Don't eat up the food. You should leave some for others.
不要把全部食物都吃光。你應該要留一些給其他人吃。 |
| 5. We blow up balloons to decorate our living room.
我們吹氣球用來布置房間。 |
| 6. I want to give up the science test because I can't understand it.
我想要放棄自然考試，因為它實在太難了。 |

- | |
|---|
| 7. He calls off because he is sick.
他打電話請假因為他生病了。 |
| 8. Our school is there. Let's get off the bus.
我們學校到了。我們下車吧。 |
| 9. I turned off the light and went to bed.
我要關燈然後去睡。 |
| 10. Come and see me off at the airport.
來機場送我離開。 |
| 11. We put off the trip until next summer.
我們的旅行延期到下个暑假。 |
| 12. The area was fenced off due to the construction.
因為施工的關係，這個區域用籬笆圍起來了。 |

Appendix 2 The instruction for the experiment group.

(1) The phrasal verbs for *up*

INCREASING OR GROWING IS UP. <i>up</i> for increasing, growing	1. We blow up balloons to decorate our living room. 我們吹氣球用來布置房間。 2. My brother's room is dirty. He never picks up the garbage. 我弟弟的房間很髒。他從來不撿垃圾。
COMPLETION OR FINISH IS UP. <i>up</i> for completion,	1. My car broke up again- I will have to fix it. 我的車又壞了，我必須修裡它。 2. These ten stories make up the whole book.

being finish	這十篇故事組成一本書。 3. Don't eat up the food. You should leave some for others. 不要把全部食物都吃光。你應該要留一些給其他人吃。
<i>STOPPING IS UP.</i> <i>up for stopping</i>	1. I want to give up the science test because I can't understand it. 我想要放棄自然考試，因為它實在太難了。。

(2) The phrasal verbs for *off*

<i>DISTANCE IN TIME IS OFF.</i> <i>off for distance in time</i>	1. We put off the trip until next summer. 我們的旅行延期到下個暑假。 2. He calls off because he is sick. 他打電話請假因為他生病了。
<i>DISTANCE IN SPACE IS OFF.</i> <i>off for distance in space</i>	1. Come and see me off at the airport. 來機場送我離開。 2. Our school is there. Let's get off the bus. 我們學校到了。我們下車吧。
<i>DISCONNECTION IS OFF.</i> <i>off for disconnection</i>	1. I turned off the light and went to bed. 我要關燈然後去睡。
<i>SEPARATION IS OFF.</i> <i>off for separation</i>	1. The area was fenced off due to the construction. 因為施工的關係，這個區域用籬笆圍起來了。

Appendix 3 The performance sheet

<ol style="list-style-type: none"> 1. Fifty students make _____ the class. 2. Because of the heavy rain, the plane took _____. 3. Our classroom is fenced _____. No one can approach it. 4. The movie is ended _____. Let's go out. 5. The store is very busy today. We're almost selling _____. 6. I call _____ for the work because I have something important to do. 7. My mother doesn't allow me to use the phone, so I have been cut _____. 8. I was born and brought _____ here. 9. The building is blown _____ and will be built a new department store. 10. Jason has broken _____ with his girlfriend. 11. Let's switch _____ the TV and go to bed early. 12. I saw John _____ at the train station.
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Exploring the use of English and Bahasa Malaysia in

English as a Second Language classrooms

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Exploring the use of English and Bahasa Malaysia in English as a Second Language classrooms

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Introduction

Van Weijen (2009) examined writers' L1 use while writing in their L2 in a multiple-task-per-writer design, focussing on a single genre, argumentative essays. His findings showed that writers' use their L1 while writing in their L2. He suggested that future research should examine multiple texts and several different types of texts. Rolin-Ianziti and Varshney's (2008) study on students' views regarding L1 use in a target language classroom showed that the L1 use helped students access meanings of words, and facilitated memorization and understanding of grammar. They further suggested that their findings should be researched within the task-based approach to language learning (Long and Crookes, 1992), which focuses on use of L1 as a tool or a resource to teach knowledge about the target language.

In the study discussed in this paper, I have included task-based learning (TBL) (Willis, 1996b) by employing several task types and several tasks which were designed using Cummins' (1984) theory of language and cognitive development. Through this framework, I explored how a group of English language (L2) learners used their L1 to master the socially and academically challenging aspects of the L2 needed for task success and language learning. I looked at their experiences and achievements in task-based communicative activities which involved them with language use in pair work tasks. These learners share the same L1, Bahasa Malaysia (BM) which is the language used as the primary medium of social communication in the setting of the study (the university). English is treated as an additional language and as a subject for the students in this university setting.

The language situation in Malaysia

Malaysia consists of different ethnic groups resulting in the existence of different native languages and dialects in the country. However, the citizens share a common language, Bahasa Malaysia (BM), which is legislated as the official and national language of Malaysia, and plays a significant role as a social language in the life of Malaysians (Haji Omar, 2002). English is a second language, which is taught in schools and universities. This is because the Malaysian government recognizes the fact that English is the major lingua franca in the world and therefore its use is close to indispensable in business, science and technology. Abu Bakar (2002) argued that Malaysians need to have the ability to communicate equally in English and BM to enable them to gain marketable skills, additional knowledge, elevation of status, better employment opportunities and better earning power (Rafik-Galea and Hj Hassan, 2003).

As a requirement to enter public universities in Malaysia, pre-university students (those students sitting for the examination taken at the end of upper secondary education '*Sijil Tinggi Persekolahan Malaysia-STPM*', and students in matriculation and diploma programs in public and private universities) are required to sit for an English test called the Malaysian University English Test (MUET) which was introduced in 1999 (Nalliah and Thiyagarajah, 1999). The stated aims are: 1) to bridge the gap in English language needs between secondary and tertiary education, and 2) to consolidate and enhance the English proficiency of students preparing to enter Malaysian public universities (Lee, 2004). There are four components of the test – reading (45%), writing (25%), listening (15%) and speaking (15%). Although MUET is compulsory for all pre-university students, they are not required to pass it to be eligible to enter public universities. MUET is conducted by the Malaysian Examination Council and the results are in the form of scores that explains an individual's command of the language. Performance on the

test is reported in terms of an aggregated score with respect to six levels of achievement, referred to as Bands 1 to 6, Band 1 being the lowest band and Band 6 the highest.

Previous studies

Recent use of the mother tongue in task-based additional (second) language learning classrooms has shown a positive contribution to social and cognitive functions (Carless, 2008). The use of the first language (L1) has been proven to maintain students' attention, interest and involvement, and has been associated with elaborated expression of meaning, identity and humour (Carless, 2008), has assisted learners to gain control of the task, work at high levels in tasks, as well as enabled learners to provide each other with definitions of unknown words directly and successfully (Storch and Wigglesworth, 2003). However, use of the L1 may result in students' failure to practise and communicate using the target language, thus requiring a specified yet flexible view of mother tongue use in task-based classrooms (Carless, 2008). There are positive and negative consequences of using the mother tongue in task-based classrooms (Carless, 2008). Positively, the L1 has social and cognitive functions, and relates to learner identity. Negatively, too much reliance on the L1 may undermine the psycholinguistic rationale for task-based interaction as stretching student interlanguage through the process of engaging in a communicative task (Skehan, 1998).

Within a sociocultural framework, learners' interaction in their L1 functions as a psychological tool: learners analyse language cognitively and work above their L2 proficiency level unless constrained to sole use of the L2 (Anton and DiCamilla, 1998). Anton and DiCamilla's (1998) finding showed that learners use their L1 to scaffold assistance. Cook (2001) re-examined the use of L1 in the classroom and found that students can use the L1 to explain tasks to each other, negotiate roles they are going to take, or check their understanding or production of language against their peers. Cook (2001) stated that all these uses fit with the overall rationale of the task-based learning approach as it can foster the students' natural collaborative efforts in the classroom.

The L1 is useful in eliciting language, checking comprehension (Prodromou, 2002; Atkinson, 1987; Schweers, 1999), giving instructions, promoting cooperation among learners, promoting discussions of classroom methodology, encouraging presentation and reinforcement of language, checking for sense, testing and also developing useful learning strategies (Atkinson, 1987). Other uses include raising confidence (Schweers, 1999), explaining the rationale of language learning activities, error analysis, or vocabulary clarification (Prodromou, 2002; Schweers, 1999). Cole (1998) states, students' L1 learning experience can also be used by teachers to increase their understanding of L2. Studies (Juarez and Oxbrow, 2008; Ferrer, 2005; Shweers, 1999) on the use of L1 and translation in an ESL classroom showed that the use of L1 and translation could also enhance second language acquisition processes.

Thoms, Liao and Szustak (2005) studied L2 learners' L1 use in a collaborative jigsaw task (an L2 on-line chat activity). Their study showed that the L1 functions to move the task along, to focus attention, and for interpersonal interaction (Swain and Lapkin, 2000). They assumed that students used a higher percentage of L1 while doing the jigsaw activity due to their motivation towards the task, lack of L2 exposure, low proficiency level, and overall ability in the L2. Swain and Lapkin (2000) found that in jigsaw and dictogloss tasks, students made use of their L1 most frequently for task management purposes. Other uses of the L1 in such tasks were to develop an understanding of the story and make sense of the requirements and content of the task, to focus attention on language form, vocabulary use, and overall organization, as well as to establish the tone and nature of their collaboration. Swain and Lapkin (2000) also found that learners used their L1 to complete a writing task that they found difficult to carry out in the L2.

The study

The Research Problem

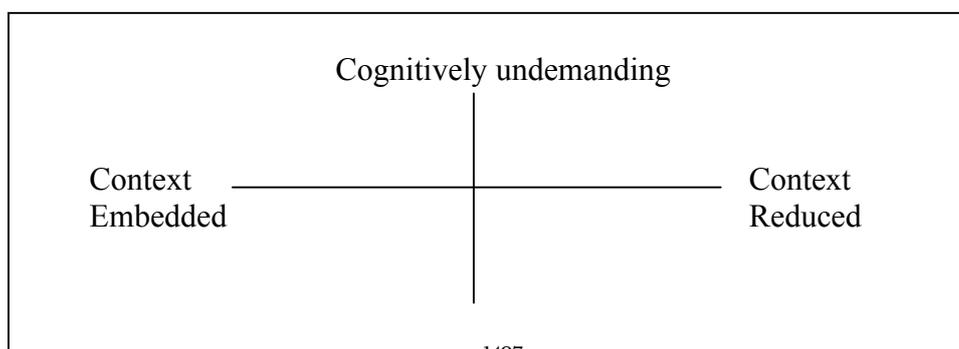
The reason for studying the problem is to understand what occurs when the instructor provides opportunities for L2 learners to complete selected aspects of diverse L2 tasks in a language that is familiar to them, the L1: Bahasa Malaysia (BM). Although in the dominant approach to language teaching is Communicative Language Teaching (CLT), which emphasizes use of the target language (L2) in the classroom, the work of researchers such as Cook (2001) and Swain and Lapkin (2000) show that the L1 is not a language to be forgotten. Students' language choice depends on the tasks that are given to them. Tasks can vary according to their content, context and cognitive challenge; and students' language proficiency level may affect task performance. The key issue in the study is to look at what task features contribute to students' choice of language (BM or English) and how those features affect learners' task achievement and second language learning.

Aims

This paper discusses learners' use of BM in a range of English communicative classroom tasks: jigsaw, information gap, problem solving, decision making and opinion exchange (Richards, 2001: 162). The tasks were designed based on Cummins' (1984) theory of language development as I aim to test this framework in a classroom context. Swain and Lapkin (2000) implied that when used in a pedagogical context, different task types may create greater or lesser needs for different uses of the L1. In this study, I designed four tasks for each task type, aiming at different context, content, and cognitive challenge designed to reflect the dimensions of Cummins' (1984) framework. The term L1 is used to refer to Bahasa Malaysia (BM) and L2 to English.

In designing the tasks, I referred to Cummins' (1984) theory of language development: This elaborated version of the theory is based on Cummins' (1984) theory of language development. It lays out in more detail ways of relating conversational fluency (Basic Interpersonal Communicative Skills - BICS) in the second language and use of language in decontextualized academic situations (Cognitive Academic Language Proficiency - CALP). BICS deals with language needed for day to day living, including conversations with friends and informal interactions. It is context embedded - often involving face-to-face conversation, and offers many cues to listeners; and cognitively undemanding - language is easy to understand, deals with everyday language and uses simple language structures. CALP deals with language necessary to understand and discuss content in the classroom. It is context reduced - uses language of the classroom, fewer non-verbal cues, language use is difficult; and cognitively demanding - has abstract concepts, specialised vocabulary and uses more complex language structure.

His elaborated model of language development (Figure 1) has proved helpful in identifying and developing appropriate tasks for bilingual students. Students need both these aspects of proficiency to engage in successful social communication and participation in content classrooms as students' language assessment becomes problematic if they only perform well in social conversations but do poorly on academic tasks (Cummins, 1980).



Cognitively demanding

Figure 1: Cummins' (1984) theory of language development

This framework was used in this study to identify the level of difficulty and challenge of the tasks prepared for the students. The tasks, as shown in Figure 2, were designed within the continuum of the four dimensions of the framework. It is numbered from the easiest (1) to the most difficult (4) (refer to Figure 2). However, no task was designed to suit quadrant D due to students' low level of English proficiency. In relating Cummins' framework and L1 use, I explored whether BM may be used more or less in varying tasks. There are many possibilities for this exploration which are discussed further in the findings.

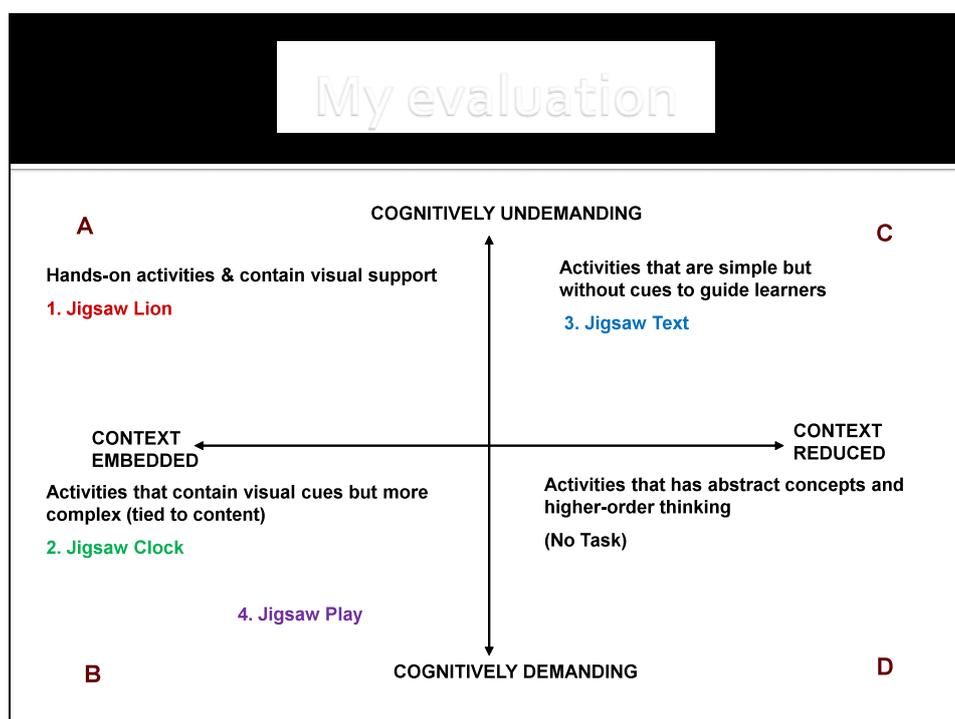


Figure 2: My task evaluation based on Cummins' (1984) framework

In the context of this study, the use of BM and English are regarded as language tools for students to complete different tasks types. I explored how students' choice of language can help them in completing the tasks and in their English language learning. As the study is on-going research, I am only discussing one task type, the jigsaw task. Thus, in this paper, I present whether BM can support L2 learning in a task-based instructional design. This refers to how students are able to convey meanings using their choice of language (BM) in order to complete the English tasks given to them.

The participants

Eight first (six females and two males) year university students participated in this study. They were aged between twenty and twenty-one, from a language faculty in the university. All shared the same L1, BM and came from various schools around Malaysia. Generally, participants had been exposed to English classes since primary school, totalling eleven years of schooling. They had all completed upper secondary education (Form 6 or matriculation) and had sat for the MUET. They were chosen because they had achieved MUET band 1 ('extremely limited user': having poor command of the language, unable to use language to express ideas, little or poor

understanding of language and contexts, and hardly able to function in the language) or 2 ('limited user': limited command of the language, lacks expressiveness, fluency and appropriacy, limited understanding of language and contexts, and limited ability to function in the language). All the participants completed the four jigsaw tasks prepared for them in the EPC.

The instructional design

Since this study is exploratory, I investigated whether (and if so, how) BM can be a useful resource for the ESL classroom. I designed my own instructional class, called the English Preparatory Class (EPC), which employed communicative task-based lesson (TBL) within five task types. A communicative task is "a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form" (Nunan, 1989: 10). According to Edwards and Willis (2005: 15), TBL proposes the use of tasks as a central component in the language classroom because they provide contexts for activating learner acquisition processes and promoting L2 learning. The definition of task used in this study is taken from Bygate, Skehan, and Swain (2001): "a task is an activity which requires learners to use language, with emphasis on meaning, to attain an objective" and Willis (1996b: 53): a classroom task is 'a goal-oriented activity in which learners use language to achieve a real outcome'.

The tasks were designed for students to interact communicatively in pairs. I observed and recorded their actual discussion while carrying out each task. I wanted to identify when and how students used BM in the tasks and whether their use of BM helped them in achieving the task goal or target language learning. Students worked in pairs and were given four jigsaw tasks. Richards (2001, p. 162) defines jigsaw task as tasks that involve learners in combining different pieces of information to form a whole. The tasks used in this study were (1) Jigsaw Lion (Klaus, 2007, p. 35), (2) Jigsaw Clock (Swain and Lapkin, 2000), (3) Jigsaw Text (English Language Support Programme 3 Teacher's Module, 2008), and (4) Jigsaw Play (Paramasivam, 2009) (Appendix A-D).

For tasks 1 and 2, each student received four picture strips. They were required to arrange the pictures into a story by communicating to their partner, who has the other four strips of pictures, while not showing the pictures to each other. The story is complete when all the eight picture strips are arranged in a logical order. I evaluated Jigsaw Lion as the easiest task as the picture and story presented few cognitive challenges and were well supported through contextual cues, which links to Cummins' (1984) dimension that context-embedded and cognitively undemanding task contain visual support, while Jigsaw Clock was evaluated second easiest as the pictures and story were more cognitively challenging, and thus relates to Cummins' (1984) context-embeddedness and cognitively demanding tasks as there are visual cues which are tied to content.

In Jigsaw text, each pair was given ten sentence strips (five sentence strips per student). They were required to arrange the pictures into a story without showing the sentences to each other. I evaluated this task as the third easiest as students were given sentences in English, thus I expected that it would be easy for students to complete the task. In the fourth task, each pair was given six picture strips (three pictures per student). They were required to arrange these pictures in order (like task 1 and 2). However, this was evaluated as the most difficult as there were fewer picture clues than in tasks 1 and 2, and in task 4 the pictures were closely related to the context of the story rather than to the students' lives. My ranking of the tasks in relation to Cummins' (1984) framework is shown in Figure 2.

The method

The research instruments used in this study were questionnaire, reflective journal, task evaluation

and interviews. Participants made journal entries after they completed each task to reflect upon the tasks designed for them in the lesson: identifying the easiest and most difficult task and describing how they achieved the task goal, and reflecting their use of the L1 in the tasks to complete task requirement and dealing with the L2 learning. Participants took part in pair interviews after they completed all the four jigsaw tasks to gather detailed responses received from their reflective journals and task evaluations. In this study, I acted as the participant-observer as I observed the students while teaching them. This enabled me to see students' actual practices in the classroom. I observed students throughout the class, recording important and relevant details by writing field notes after each class. However, only result from the reflective journals and pair interviews are discussed in this paper.

Findings

The findings focus on whether BM can support English learning in a task-based instructional design. This refers to how students are able to convey meanings using their choice of language (BM) in order to complete the English tasks given to them. The findings revealed participants' responses from two instrument types: the reflective journal and pair interviews. The reflective journals were completed individually (eight students) while the interviews were completed in pairs (four pairs).

Journal responses

The reflective journals showed participants' choice of easiest and most difficult task, their use of BM and English, how they achieved their task goal, and how the task helped them in their English learning. The easiest and most difficult tasks are identified based on Cummins' (1984) elaboration of BICS and CALP. The findings show that Jigsaw Play and Jigsaw Lion were viewed as equally easy by the participants (four students respectively), while six students chose Jigsaw Text as the most difficult task although two students chose Jigsaw Lion as the most difficult.

For the easiest task, the participants stated that they used BM minimally to understand the requirement of the task and re-explain uncertainty to their partner. This was helpful for them especially when they did not understand the words in English. For example, they used BM to understand and arrange the pictures, when they did not know what words to use in English, to explain difficult expressions, and for better understanding. The participants viewed communication and cooperation as important for them to achieve the task goals: they needed to communicate to arrange the pictures in the task, and also to understand the storyline. In terms of English language learning, the participants stated that they learned English words from their partner when they had difficulty looking for the words in English.

For the most difficult task, participants felt that they used more BM to complete more complex tasks. The participants viewed Jigsaw Text as the most difficult task because there were no pictures given as clues, and they could only use the sentence strips to understand the storyline. In this task, participants claimed they used more BM for various reasons: the task was difficult to explain to their partner in English, the task was complex as they were not familiar with the content, and they used BM for deeper comprehension and understanding. BM was also used to make the pairs complete the task easily by expressing their ideas in their own language as they had difficulty finding suitable words or explanation in English. They felt that it was difficult for them to communicate to their partner using the correct English grammar to complete the task. They claimed that if more time had been provided, they would have been able to comprehend the task requirement and achieve the task goal without use of BM. In terms of English language learning, the participants felt that although they used more BM, they managed to learn some English words from their partner and through the use of a bilingual dictionary. They felt that they

managed to practise their English by explaining words or sentences to their partner, thus making them learn the language together.

Interview response

The pair interviews showed participants' views on all the four tasks. The findings show that two pairs of participants chose Jigsaw Lion as the easiest task. Their responses for Jigsaw Clock and Jigsaw Play task were that they were equally easy (one pair respectively). The reasons given by the pairs who chose Jigsaw Lion as the easiest task are: the story in the task is like a children's story, so they used little BM to describe the pictures; and the story in the task was very familiar to them (they seemed to have seen it before). This enabled them to complete the task with little use of BM to describe the pictures and words. Another pair who gave the same response mentioned that they had seen it before, so it was easy for them to do the task. They claimed that they used a lot of body gestures instead and more English (in point form) to describe the words in the picture. The pair who chose Jigsaw Play as the easiest task responded that they used BM quite a lot, especially when they did not know what words to use in English, while the other pair who chose Jigsaw Clock as the easiest reasoned that it was a daily routine which they had experienced, so it was easy for them to complete the task. However, they claimed that they used BM only in the beginning of the task for clearer understanding.

For the most difficult task, the findings show that three pairs chose Jigsaw Text as the most difficult task, followed by Jigsaw Clock (one pair). Some of the reasons given for Jigsaw Text were: the stripped sentences given in task were confusing, it was difficult for participants to understand the sentences, and they could not understand the situations in the sentences given in task as there were no picture clues to help them. Two pairs claimed that it would have been easier for them to complete the task if pictures had been provided. The participants also agreed that Jigsaw Text was more academic or formal in terms of learning. They mentioned that they have experienced some classroom practices that deal with arranging sentences. However, with regards to the Jigsaw Text, they found it difficult as it dealt with the L2 which consisted of words, phrases or sentences that they could not understand. They also claimed that the context of the story given did not relate to their life, making it difficult for them to complete it. They used more BM in this task when they had difficulty understanding certain words, resulting in difficulty for them to sequence the sentences. Thus, they communicated with their partner in BM to explain or translate difficult English words to BM. The one pair who identified Jigsaw Clock as the most difficult task felt that the pictures given seemed incomplete making it difficult for them to do the task as they were unsure of the ending of the story from the pictures given.

Discussion

Types of task, language use and task goals achievement

The finding from the reflective journals and pair interviews show that from the four jigsaw tasks given, most participants regarded Jigsaw Lion as the easiest, and Jigsaw Text as the most difficult.

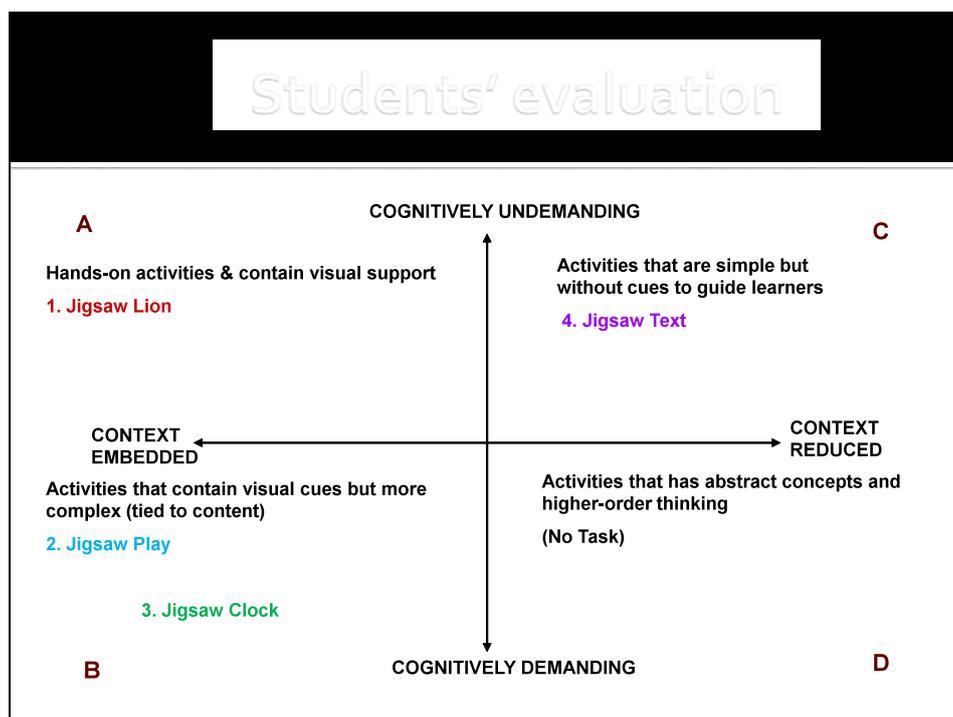
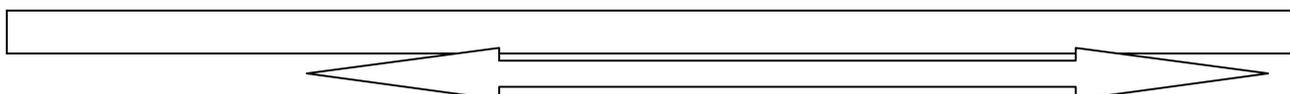


Figure 3: Students’ evaluation of the jigsaw tasks based on Cummins’ (1984) framework

Students stated that they evaluated Jigsaw Lion as the easiest as it was simple, had picture stimulus and was related to them resulting in little use of BM when doing the task with their partner. This finding contrasts with Wang and Wen’s (2002) findings that pictures may encourage more L1 use. Jigsaw Text was evaluated as the most difficult as there were no picture clues given, and that the context of the story was unfamiliar. Although the sentence strips were fully in English, participants had difficulty understanding the words and storyline resulting in more use of BM to seek clearer understanding and clarification (Swain and Lapkin, 2000; Goh and Hashim, 2006). They also felt that they had limited time to complete the task. They managed to complete the task by explaining to each other their understanding of the sentences (Cook, 2001; Behan and Turnbull, 1997; Anton and DiCamilla, 1998; Prodromou, 2002; Atkinson, 1987), by translating (Paramasivam, 2009; Juarez and Oxbrow, 2008; Ferrer, 2005; Shweers, 1999) and also with the help of the bilingual dictionary. Thus, use of BM increased in more difficult and challenging tasks (Swain and Lapkin, 2000). Again, this contradicts Wang and Wen’s (2002) findings where they found that L2 written prompt tends to induce more L2 thinking in the task-examining and idea-generating activities. For the picture stimulus Jigsaw Tasks used in my study, there is less use of BM, while in sentence structure (in L2) tasks, there is more use of BM. This shows that students resorted to the use of BM in order to achieve the English classroom tasks given.

However, with pair work tasks used in this study, participants were able to learn the L2 knowledge together, allowing them to practise and use the knowledge, and provide independent learning. The findings also show that clear and meaningful communication among participants (pairs) is important to achieve task goals regardless of what language they used. This shows that different task types may create lesser or greater need for different uses of the L1 (Swain and Lapkin, 2000). As the EPC used tasks (the TBL approach) as the central component in the classroom, participants’ managed to activate their L2 learning from the tasks (Edwards and Willis, 2005).



	The Easiest			Most difficult
Students' Evaluation:	Jigsaw Lion	Jigsaw Play	Jigsaw Clock	Jigsaw Text
My evaluation:	Jigsaw Lion	Jigsaw Clock	Jigsaw Text	Jigsaw Play

Figure 4: A comparison between my evaluation and students' evaluation of jigsaw tasks

Figure 5 shows a comparison between my evaluation and students' evaluation of the jigsaw tasks used in this study. As shown in the figure, my evaluation of Jigsaw Lion was similar to that of the students, while the other tasks were evaluated differently. I viewed Jigsaw Clock as the second easiest as the pictures were closely related to students' life, but students evaluated it as the third easiest as some of the pictures could be at different orders resulting in students' confusion to arrange the pictures. I evaluated Jigsaw Text as third easiest as it consisted of sentence strips which were already in English, but students evaluated it as the most difficult as there were no picture clues to help them, the words, phrases or sentences were difficult for them to understand, and that the story was not familiar to them.

The most obvious task order difference is Jigsaw Play. I evaluated it as the most difficult as it consisted of lesser picture clues compared to Jigsaw Lion and Jigsaw Clock, and that there were no L2 clues to help them. However, students regarded this as the second easiest of the four tasks. They stated that this was because the picture clues were easy to arrange, but they claimed that they used BM quite a lot, especially when they did not know what words to use in English. This supports my claim of the evaluation of this task as there were no L2 clues given in this task. It also supports Wang and Wen's (2002) findings that pictures may encourage more L1 use. However, this contradicts with the finding of students' claim that they used less L1 (BM) in the easiest task (Jigsaw Lion). The reason for this contradiction may vary. It provides me to look into other factors that affect the task ranking such as the quantity of picture clues given and also the context of the story. Other research instruments that are not discussed in this paper may also provide some answers to this contradiction.

Conclusion

The aim of the study was to explore the use of BM and English in the ESL classroom, specifically communicative task-based classroom. The findings in this study have shown support for L1 use in ESL classrooms. I hope that I have managed to provide pedagogic implications in using tasks in the L2 classroom to help L2 learners in communicating their ideas in an additional language and support the target language learning. If students are comfortable using their L1, there should not be a stop to it as the L1 is ever-present in their minds (Cook, 2001). Stopping their L1 use in the L2 classroom for tasks discussion may not be practical as students may not be able to complete the tasks with sufficient or satisfactory outcomes. Alternatively, they may limit their task discussion and their target language learning may not be supported. There should be some encouragement of L1 use during task-based ESL classroom as it appears to assist students to slowly achieve English proficiency in varying contexts and time. With the help of their peers, students may be able to share their L2 knowledge together, making them learn independently and become confident in their target language learning.

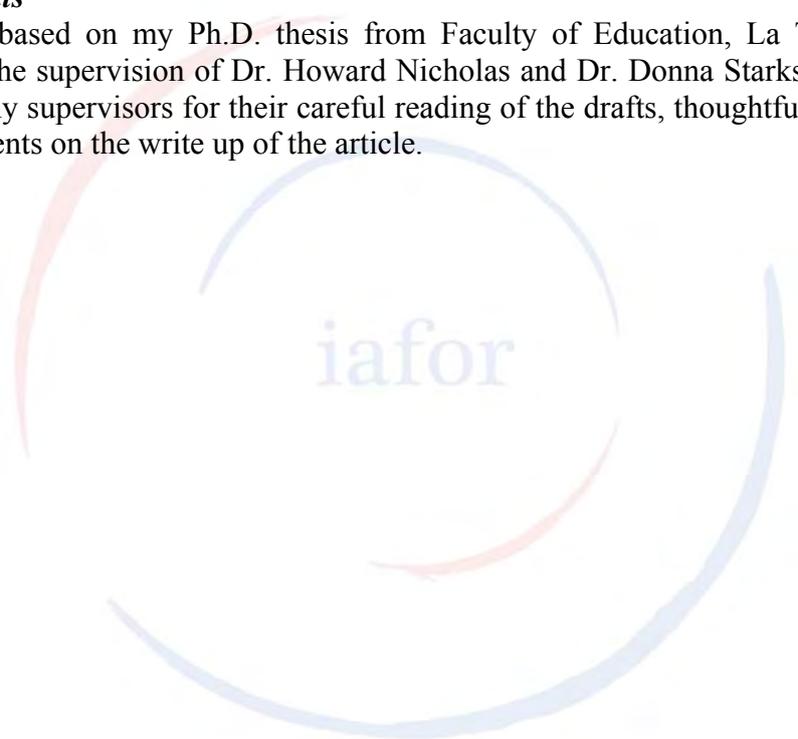
The finding also provided a reflection towards the tasks based on Cummins' (1984) theory of language development. I used Cummins' (1984) framework to develop and evaluate the tasks,

and test it in the ESL classroom: to compare my evaluation and students' evaluation of the tasks. The findings indicate students' varying views regarding each task, which allows for some careful consideration of task design, students' contextual knowledge and also students' English proficiency. Although the findings show that students used BM in the tasks, they still treated the classroom as a formal setting and tried to use the target language (English) as much as possible as a platform for them to practice the language.

From the findings in this study, I support Anton and DiCamilla's (1998) pedagogical standpoint that the study provides greater insight into the important role of L1 in group activities in the language classroom, which might be of interest to language teachers and might lead some to modify current tendencies to completely avoid L1 use in student interaction. As Anton and DiCamilla (1998) elaborate, language is the principle semiotic system that mediates our thinking, thus students need the freedom to use their L1 as a psychological tool to meet the demands of the task of learning a second language.

Acknowledgements

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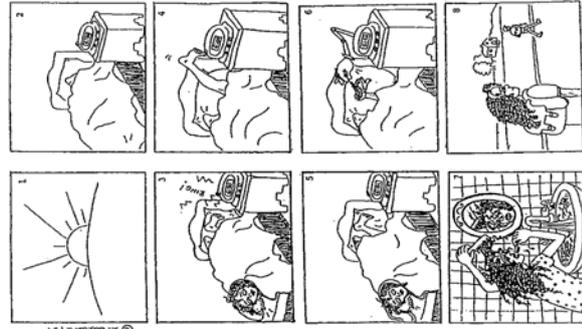
The logo for the International Association for Frontiers in Education Research (iafor) is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, swirling effect.

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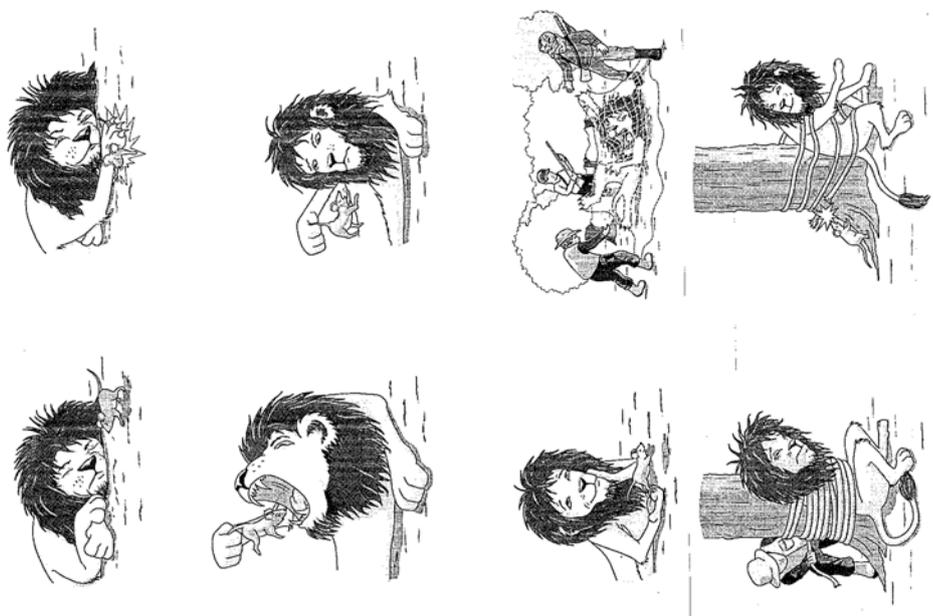
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Appendix B Jigsaw Clock



Appendix A Jigsaw Lion



Appendix C Jigsaw Text

Text A

1. An Irish woman was visiting tourist places in a Latin American city when she got a terrible headache.
2. She knew what medicine she needed, so she stepped into a local pharmacy.
3. The pharmacist was waiting on another customer when she came in.
4. The Irish woman patiently waited her turn.
5. While she was standing there, two other customers came in, then another, and then three more.
6. Each time, the pharmacist turned his attention to the new people.
7. He did not greet the Irish woman, he never said, "I'll be with you in a minute."
8. After about twenty minutes, the woman couldn't stand the pain in her head any longer.
9. "Hey, I've here a long time," she said loudly, very annoyed and insulted.
10. "Why is everyone ignoring me? I need service too!" she shouted rudely.

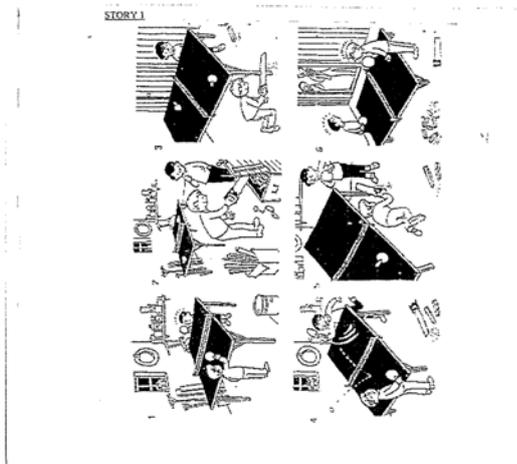
Text B

1. Middle-Eastern businessman and his brother invited an American guest to their family home for dinner.
2. The American got there on time and enjoyed the interesting conversation, the coffee, and the attention.
3. But as time passed, he got very, very hungry.
4. Finally, he asked in an impatient voice,
5. "So when do we eat?"
6. "Finally you are hungry?" answered one of his hosts.
7. "We were waiting for you to say you were ready to eat."
8. At the dinner table everything was delicious, and the American guest ate quickly.
9. He emptied his plate, and his hosts' wives put more food on it.
10. As soon as he cleaned his plate a second time, the women served him more. A
- 11.fter several plates of food, he could eat no more: he was going to burst!
12. "Please, please, please – don't give me any more food," he begged them.
13. "I can't eat another bite!"
14. "Then why didn't you leave any food on the plate?" asked the other host, surprised.
15. "We were amazed at how much you were eating!"

Text C

1. A group of international students were attending college in Europe.
2. They had a long time between semesters for travel, so they decided to hitchhike as far as they could in other countries.
3. In many places, they were successful: they put their thumbs out or pointed them backwards and smiled: friendly drivers stopped.
4. As soon as the first traveller got a "yes" answer from a driver, he motioned with his hand or fingers for his friends to come – or he held both thumbs up in an "O.K. sign or made a circle with the thumb and the next finger of one hand.
5. The young tourists saved money, saw a lot of the countryside, and had interesting conversations and experiences.
6. On the other hand, in Greece and Turkey, the visitors were not so lucky.
7. Few drivers stopped to give them rides: instead, most people ignored them.
8. Others gave them mean looks from their cars: they seemed almost insulted that the visitors were begging for rides.
9. A few drivers shouted terrible words at the travellers; two even got out of their truck and started a fight.
10. The students felt confused, afraid, and unwelcome; after a few days they took the bus back to the countries where they were studying.

Appendix D Jigsaw Play



A teaching aid for: Unified technical graphics modelling and design analysis

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Managing data interchange between graphics models and their design verification modules

The problems of interchanging graphics model data between different CAD vendors were formally resolved in 1980 by the introduction of IGES by the American Bureau of Standards (IGES 1996). Many organisations world-wide nowadays require CAD vendors to provide export and import IGES format files. This introduction, by default, recognises a discontinuity between a model's creation and the external modules needed, for example, to verify that the model meets its design requirements.

Despite the discontinuity problems being researched continually since the 1970's, some would argue (Barbosa et al. 2003) that the problems are still "not fully understood by the database community" (Hayek 1960, Kramer 2007). Barbosa proposes a solution involving the most up-to-date 'computer object modelling' techniques, e.g. MS Visual C++.net (Templeman and Olsen 2005), which enable all program modules and data, used in the combined design process, to be represented in a structured form, so that the whole appears to be one super-program system, see Figure 1 (Barbosa 2003).

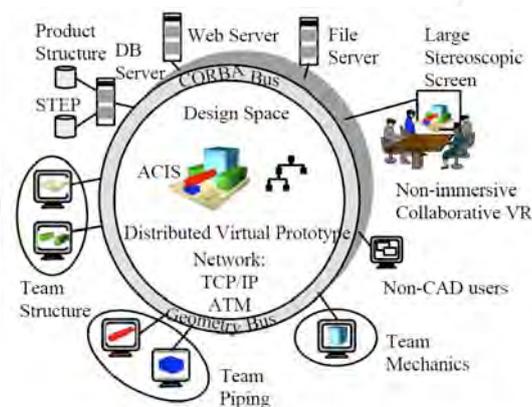


Figure 1. A distributed CAD environment

This theoretically enables any number of actions to be initiated in any part of the multi-network system at any time. The management of the timing of the actions and the distribution of data is carried out by the computer system using virtual artefact visualisation languages (Barbosa 2003, pp97). This suggests that all participants from professional designers down to costing and material technicians would need to understand the computer object modelling process (Plantanida et al. 2003). For a large number of CAD users, namely the small and medium sized enterprises (SME's) these

problem solutions could place an unrealistic burden on resources, as is clearly depicted in Figure 1.

It is suggested that a logical solution to the above problem is to provide a programming system which encompasses graphics modelling, data exchange and main stream programming capabilities. That is, a programming language system such as Java or C++. Such a system called Project Design and Graphics Modelling (PDGM) is explained and demonstrated in the remainder of this paper. The simplicity of the approach makes it ideal for a teaching environment.

Overview of PDGM

PDGM comprises a graphics modeller based on OpenGL, an Engineering Design Language (EDL) and, for the purpose of the original research, enhanced standard Pascal (Host); the latter two written as a single entity under MS Visual C++. The EDL is principally a form of descriptive geometry supported by engineering terminology, which is an alternative to the conventional form of vector geometry found in most programming languages.

PDGM enables a multi-dimensional entity to be described in textual terms using user-declared coordinate axis names as record field variables: for example, east, north, up, west, south and down. For the EDL to be formally defined and be an integral part of the Host (Welsh 1988, Mak 1991), a range of new data types were devised. Importantly, in order to dispense with the need to update a record array's index variable when using the new vector formulations, a new form of control loop was also devised.

It will be shown hereafter that the results of an application using PDGM provides a document, whose contents any graphics technician or student could follow, given programming and design knowledge *relevant to his design discipline*. On this basis a number of examples are presented which explain how parametrically defined models are created and displayed using relevant parts of input to a design module and resulting output.

Matrix representation of 3D transformations

Here we present the matrix form of the translation and rotation transformations, these are used throughout the paper (Ferguson 2001, Bourne 1993, Hoffmann 1989).

Given the coordinate point (x, y, z), the transformation

$$\begin{pmatrix} 1 & 0 & 0 & x' \\ 0 & 1 & 0 & y' \\ 0 & 0 & 1 & z' \\ 0 & 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \\ z \\ 1 \end{pmatrix} = \begin{pmatrix} x+x' \\ y+y' \\ z+z' \\ 1 \end{pmatrix}$$

moves the point (x, y, z) to the coordinate point $(x + x', y + y', z + z')$.

This is the well known translation transformation.

The transformation matrix for rotating around the z-axis through a positive angle θ (counter clockwise) is given by

$$\begin{pmatrix} \cos \theta & -\sin \theta & 0 & 0 \\ \sin \theta & \cos \theta & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

Correspondingly, the transformation matrix for rotation around the y-axis and the x-axis are given by

$$\begin{pmatrix} \cos \theta & 0 & \sin \theta & 0 \\ 0 & 1 & 0 & 0 \\ -\sin \theta & 0 & \cos \theta & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \text{ and } \begin{pmatrix} \cos \theta & 0 & \sin \theta & 0 \\ 0 & 1 & 0 & 0 \\ -\sin \theta & 0 & \cos \theta & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

The EDL equivalent to these two transformations, namely translation and rotation, are used throughout the remainder of the paper.

An introduction to some new variable types required for modelling purposes

The following source fragment depicts a typical declaration of a record containing some of the new variable types which enable the utilization of vector phrases and named control points.

```

world_coords = record
    east, north, up :      posaxis;
    west, south, down :   negaxis;
or
    est, nord, haut :     posaxis;
    ouest, sud, bas :    negaxis;

    ax, ay, az :         absaxes;
    cx, cy, cz :         cosvec;
    diam1, diam2, bend_rad: conicattr;
    source_line, vec_line,
    shape, radius, pen, style,
    colour, fill :       viewattr;
end;
p1, p2, origin, curctl: varpoint;

```

```
pnt := array [1..10, 1..3] of varpoint;
```

Fragment 1. Declaration of some new types

The **posaxis** and **negaxis** types are the names the user must give to the three positive and the negative axes of his/her three-dimensional space. These directional variables enable the user to create a 3D vector phrase. The **absaxes** type automatically records the current position of the system's control point. **Cosvec** type automatically records the direction of the current vector. **Conicattr** types keep an update of the variables used in the definition of conic shapes. **Viewattr** types keep an update of the variables used to control model appearance. The first two variables must be given as they are the index variables used during execution by the Host compiler to record the statement number and vector phrase number as mentioned above. Finally, **varpoint** types are pointers to 3D model coordinates which the user wishes to identify by variable name.

Examples of vector phrases

```
east 100 and north 200 and up 300;
```

It is normal to use the ampersand as delimiter to help reduce character density on a line.

```
west 100 & down 200 & north 300;
```

```
ouest X1 & bas Y1 & nord Z1;
```

Draw a line from current control to coordinates at vector phrase end.

```
attach (0, 0, 0): origin;
```

Attach to the (coordinate) point (0,0,0) and name it as 'origin'. The colon causes the end coordinates of the vector phrase to be assigned to the point name following.

```
attach (x, y, -z) & down 100: p1;
```

Attach to the coordinate point (x, y, -z-100) and name the point p1.

```
attach (20,0,0)
```

```
attach origin & east 20;
```

```
attach p1 & south 30;
```

Using vector phrase operators

The commonly used vector phrase operators are **to**, **at** and **allat**. Some examples with explanations follow.

```
1 attach p3;
```

```
2 north to p1;
```

```
3 attach p6;
```

```
4 north to p4;
```

```
5 north to station[6][y];
```

Fragment 2. vector phrases for Figure 2

In the above PSD fragments the first two statements, considered together, read as: ‘Move the current control point to p3 and replace the north coordinate value of p3 with the north coordinate value of p1’.

The same approach applies to the second pair of statements, namely statements 3 and 4. The fifth statement specifies that the north value of p4 will be replaced by the value of ‘station[6][y]’.

The following figure depicts the combined result of evaluating the statements in Fragment 2.

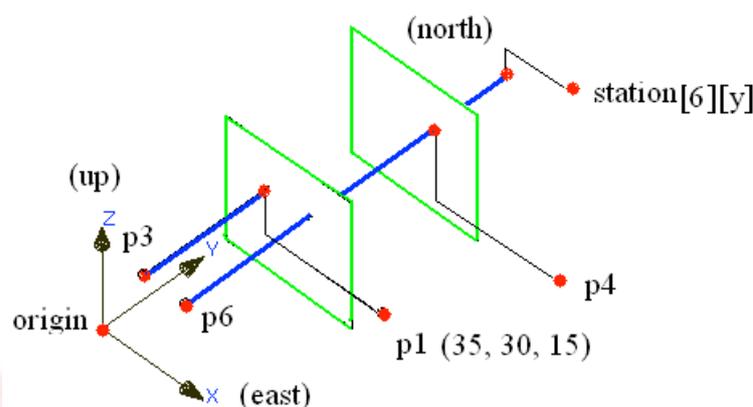


Figure 2. Axis assignments using the operator **at**

The keyword **at** should only be applied when following an axis assignment, since it requires a one-dimensional axis vector in order for PDGM to complete the necessary computations. PDGM takes the previous axis value and direction and operates on it according to the type of *trigonometry function* which follows the **at** operator.

- 1 **attach** (0, 0, 0): pnt0;
- 2 east 50 & north **at** ang(deg 60): pnt1;
- 3 **attach** pnt0;
- 4 east 40 & north 30 & up **at** tan(deg 60): pnt1;

Fragment 3. Examples using the **at** operator

Statements 1 and 2 read as:

‘**attach** (go) to the coordinate point (0, 0, 0) and label it as ‘pnt0’, then go east 50 units and (&) sweep the resulting axis vector north **at** an angle of 60 degrees about its origin, namely pnt0’. This creates the vector (25,43.3,0) to add to **pnt0**. Visually we have:

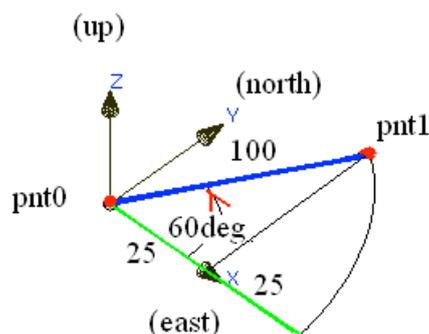


Figure 3. Model of statements 1 and 2 using the **at** operator

The third and fourth statements read as:

attach (go) to pnt0 and go east 40 units, then go north 30 units and use ‘the length of the preceding axis vector’, i.e. 30 to calculate the value in the ‘up’ direction’. This gives the vector (40, 30, 51.96) to be added to pnt0.

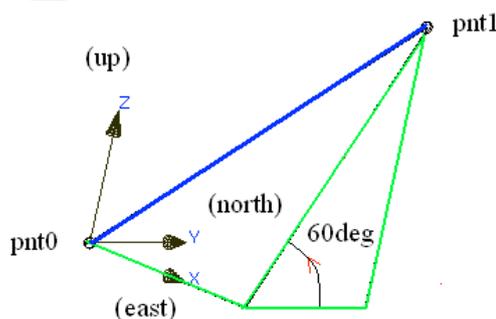


Figure 4. Model of statements 3 and 4 using the **at** operator

Axis assignments using the operator **allat**

We now consider the keyword **allat**, which causes two consecutive axis statements to be combined, e.g. vector addition. The keyword **allat** should only be applied in an axis assignment following two previous axis assignments, since it requires a two-dimensional axis vector in order to complete the necessary computations. The axis identifier preceding the keyword **allat** must not be part of any previous axis assignments in the same vector phrase.

The following vector phrases illustrate the usefulness of the **allat** operator

- 1 **attach** (0,0,0): pnt0;
- 2 east 40 & north 30 & up **allat** ang(deg 60):pnt1;
- 3 **attach** pnt0;
- 4 east 20 & north 15 & up **allat** tan(deg 60): pnt1;

Fragment 4. Examples using the **allat** operator

Referring to the above examples, the **allat** operator in the third *axis assignment* of the vector phrase in statement 2 causes the system to take the inclined vector, of length 50, derived from the first two axis assignments, and sweep it up at 60 degrees about its start coordinate point, namely pnt0. This gives a vector (20,15,43.3) to add to the vector phrase start point, pnt0.

The vector phrase in statement 4 utilises the coordinate point computed from the first two *axis assignments*, the length of which is 25, with the start point at pnt0. It then constructs the z (up) value using the tan function to yield the vector (20,15,43.3). The construction lines in Figure 5 show the sequential effects of processing the vector phrases in Fragment 4.

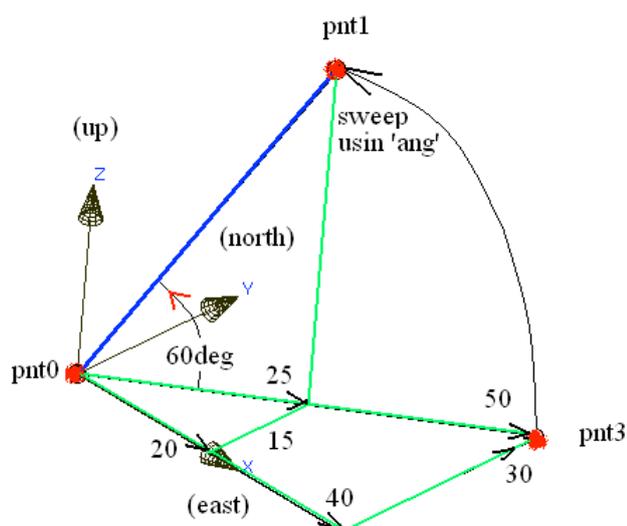


Figure 5. Model of statements 1 to 4 using the **allat** operator

A simple structural beam example

In order to facilitate the introduction of PDGM, a small example project is included to demonstrate its usability. The design and the modelling processes adopted in the example are contained within one program, called **Struct_beam**, the PSD of which is shown in Fragment 6. The procedure, **design_ub**; in line 112, enables the design of a universal (steel) beam (UB) (BCSA 2002, Baker 1984).

We must now dispense with CAD vendors notion of a *parametric* form of a graphics model (Wilson 2005, Yarwood 2007). The textual model, **model_ub**; in line 113, has been created by the user as a sub-model containing conventional variables and programming statements which may be added to a library of graphics components. Data for the current project, see lines 107 and 108, is used in conjunction with parts of the resultant computed data and assigned to the variables in the textual model which is processed by OpenGL and output as a visual graphics model, see Figure 7(A). In parallel to these operations the design of an RC beam has been carried out whose visual model is shown in Figure 7(B). The material schedules for both designs are shown in Fragment 6.

The procedure, **design_ub**;, in line 112 carries out a search for a suitable member from a selection of the UB table of beam ‘properties’ (BCSA 1986) previously initialised in statement 109 of procedure **init_ub_parms**. This procedure has been included in the file **initialise_ub_parms.sub**. The search for a suitable UB involves a comparison of the required section modulus, calculated in **design_ub**, with the available plastic section modulus of each UB contained in the UB parameter list, a typical example of which follows.

```

ub_detail[3].mass           := 82;           ub_detail[3].plas_mod := 1830;
ub_detail[3].breadth       := 191;          ub_detail[3].depth    := 460;
ub_detail[3].flg_thk       := 16;           ub_detail[3].web_thk  := 10;

```

Fragment 5. Sample of a selection of UB properties

On finding a suitable member from the list of UB properties, the program selects the required dimensions from the UB’s ‘dimensions’ section (BCSA 2002), and assigns them to the variables required for generating the graphics model as shown in statements 92 to 95 of the procedure **model_ub**. This procedure has been included in the visual PSD solely to demonstrate one of the many ways a UB can be modelled by the user. As the textual model has been fully tested, it would normally be archived in an **include** file as shown in statement 86. (Note that single line comments use the C++ notation.)

The declared variables ‘b’, ‘d’, ‘flg’ and ‘web’, see statements 92 to 95 of Fragment 6 are used, in conjunction with world axis names, for example, *east* to describe how the graphics model of the UB is formed, see statements 97 to 102 of Fragment 6. Variable ‘p1’ is a declared ‘coordinate point’ name. In this example it is assigned the coordinates which start the route taken to define the UB’s cross section, reproduced next.

97: attach (0, 0, 0) & up 1500: p1;

The EDL keyword **attach** means place current control at a point in space defined by the vector statement or vector phrase which follows it and assign the computed vector statement coordinates, in this example, to point p1. This statement forms the coordinate point (0, 0, 1500). The colon enacts the assignment to the spatial point ‘p1’.

The keyword **solid**, statement 98, is followed by a description of the route taken to describe the ‘cross section’ (face) of the UB. The keyword **extrude** causes the face to be extruded by its length, to form a solid. The cross section of the beam is shown in Figure 6.

A prime reason for designing the EDL was to enable the user to read how the model was created by following the routes of the vectors forming its lines and faces and to be able to discuss in plain language various aspects with peers. This type of facility was found by ICI (Daniel, Hall 1966) and the National Coal Board (Ranson, Daniel 1980) to be of great value on the

shop floor and on site. It should be possible for a technical person with modest structural and programming knowledge to follow the vector statements in lines 98 through to 102.



Figure 6. Cross section through UB

A 3D model of the UB is shown in Figure 7(A). Most of the parameters which resulted from executing the design procedures were used in the modelling procedures. This demonstrates the flexibility of the data exchange mechanism in PDGM (dataflow).

The `const` and `var` type declarations and the project's subroutines, other than `model_ub`, have been archived in 'include files' to reduce the amount of visible PSD, see lines 4 to 29.

The procedure `design_rc` calculates the breadth and depth of the RC beam and the sizes of the reinforcing bars. The size of concrete section, in this example, is determined by design rules (Renolds, Steedman 1981) The parameters which result from executing the design procedures also produce the schedules in [Fragment 7](#). The model of the RC (Reinforced Concrete) beam is shown in Figure 7(B).

Each statement in the following PSD is labelled and the user-defined index variable (statement number), which records this, is used almost continually during execution by the Host for administration purposes. Similarly, an *index variable* is used to record each vector phrase; this can be used, for example, in the production of schedules of various kinds. This index is not shown in the PSD. Both indices are declared by the user and he may use them as normal variables but he cannot change their value.

The key words used in PDGM are shown colour coded to improve readability.

```

2 : program Struct_beam (input, output);
4 : const include ub_constants.con;
10 : type include ub_type.typ;
29 : var include ub_variable.var;
39 : include initialise_ub_parms.sub;
61 : include design_ub.sub;
86 : //include model_ub.sub;
88 : procedure model_ub();
89 : var i,j,k: integer;
90 :      b, d, flg, web: real;

```

```

91 : begin
92 :   b:= ub_detail[ub_member].breadth;
93 :   d:= ub_detail[ub_member].depth;
94 :   flg:= ub_detail[ub_member].flg_thk;
95 :   web:= ub_detail[ub_member].web_thk;
96 :   start i:= 1 model item[i] do begin
97 :     attach origin & up 1500: p1;
98 :     solid north b; up flg; south (b-web)/2;
99 :       up d- 2*flg; north (b-web)/2; up flg;
100 :       south b; down flg; north (b-web)/2;
101 :       down d- 2*flg; south to p1; p2;
102 :     extrude east 1000*length;
103 :   end;
104 : end;
105 :
106 : begin
107 :   length:= 3.0;
108 :   total_udl:= 64.0;
109 :   init_ub_parms;
110 :   start i:= 1 model proj[i] do begin
111 :     attach (0,0,0): origin;
112 :     design_ub; design_rc;
113 :     model_ub; model_rc;
114 :   end;
115 : end.

```

Fragment 6. PSD for designing and modelling the UB and RC beams

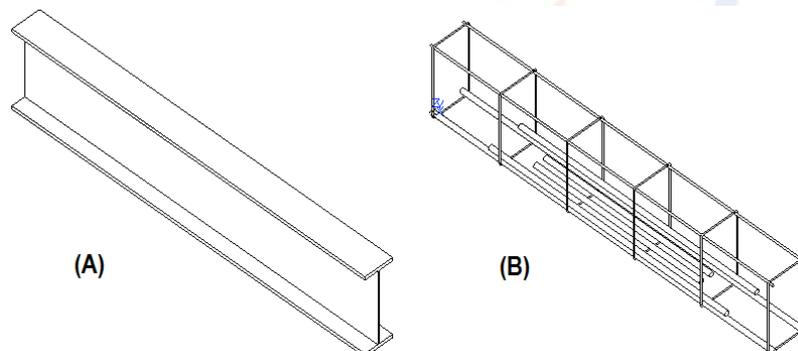


Figure 7. UB and RC model

UB Plastic Mod	Breadth	Depth	Flange and Web Thickness
11636.36	157.00	457.00	18.90 10.70

RC BEAM		BAR SCHEDULE		
Bar No.	No. off	Diameter	Length	Shape code
1	2	25	1940	20
2	2	25	2740	20
3	2	25	3940	20
4	2	10	1940	20
6	6	5	1546	60

Fragment 7. UB and RC schedules

The PSD production version of the above example would be similar to the following listing without the line numbers being shown. The procedure **model_ub()**, having been established as error free, has been included in an **include** file as shown in line 86. The required input to design a UB and equivalent strength RC beam are the beam length and the applied uniformly distributed load. It would be a simple matter to change the design routines to accommodate other loading types.

```

2 : program Struct_beam (input, output);
4 : include ub_constants.con;
10 : include ub_type.typ;
29 : include ub_variable.var;
39 : include initialise_ub_parms.sub;
61 : include design_ub.sub;
86 : include model_ub.sub;
107 :     length:= 3.0;    // user input
108 :     total_udl:= 64.0; // user input
109 :     init_ub_parms;
110 :     start i:= 1 model proj[i] do begin
111 :         attach (0,0,0): origin;
112 :         design_ub; design_rc;
113 :         model_ub; model_rc;
114 :     end;
116 : end.

```

Fragment 8. Production PSD of current example

A structural steel frame example

The following Fragment of PSD enables a 3D steel framed structure to be created, Figure 8, and for parts to be modified as the design progresses, Figure 9. UB members, in this instance, were created using one graphics primitive similar to **model_ub** used in **Struct_beam**. They were located and orientated using design rules principally based on the variables used to create the grid mechanism and the dimension and properties listed of BCSA, see Fragment 5. The angles and plates also used similar graphics primitives and were located and orientated by design rules associated with the location and orientation of the beams and columns. All members are dimensionally exact.

```

603 : struct_fl_ht           := 300;
604 : struct_east_span      := 450;
605 : struct_north_span    := 350;
607 :
608 : num_floors             := 3;
609 : num_cols_east         := 3;
610 : num_cols_north       := 3;
611 :
612 : set_default_ub_dims(ucol, 203.0, 203.0);
613 : set_default_ub_dims(ube, 165.0, 305.0);
614 : set_default_ub_dims(ubn, 171.0, 356.0);
615 :
616 : assign_struct_parms;
620 : load_ub_dims;
621 : init_struct_parms;
622 :
623 : change_ub_size(ucol, 1, 2, 1, 254.0, 254.0);
624 : change_ub_size(ube, 2, 2, 2, 152.0, 406.0);
625 : change_bay_size(ube, 2, 600.0);
626 :
627 : build_struct;
628 : add_trimmer(ubn, 2, 2, 1, 102.0, 254.0, 100.0);
629 :
630 : // add_wall_unit(door, 1, 1, 1, 165.0, 120.0);
631 : // add_wall_unit(window, 2, 1, 1, 180.0, 120.0);
632 : // add_wall_unit(window, 2, 2, 1, 180.0, 120.0);

```

Fragment 9. A method for modelling a steel frame structure

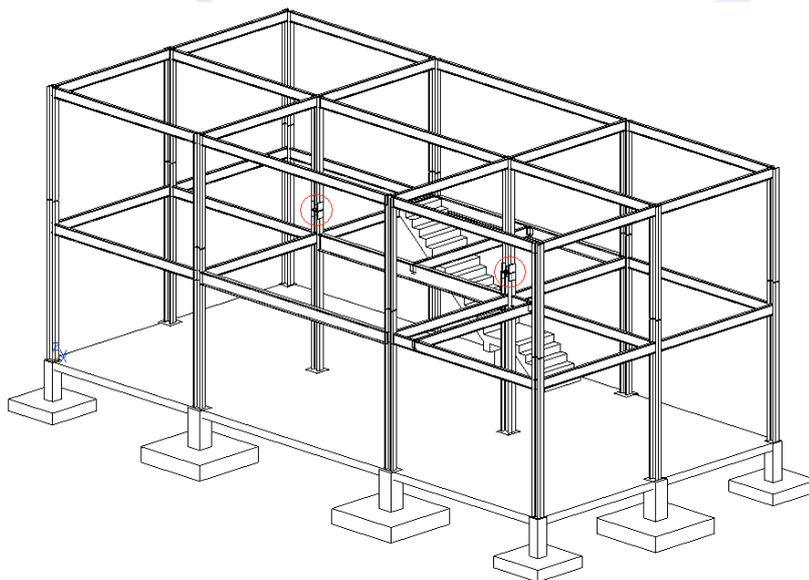


Figure 8. A steel frame generated from Fragment 6

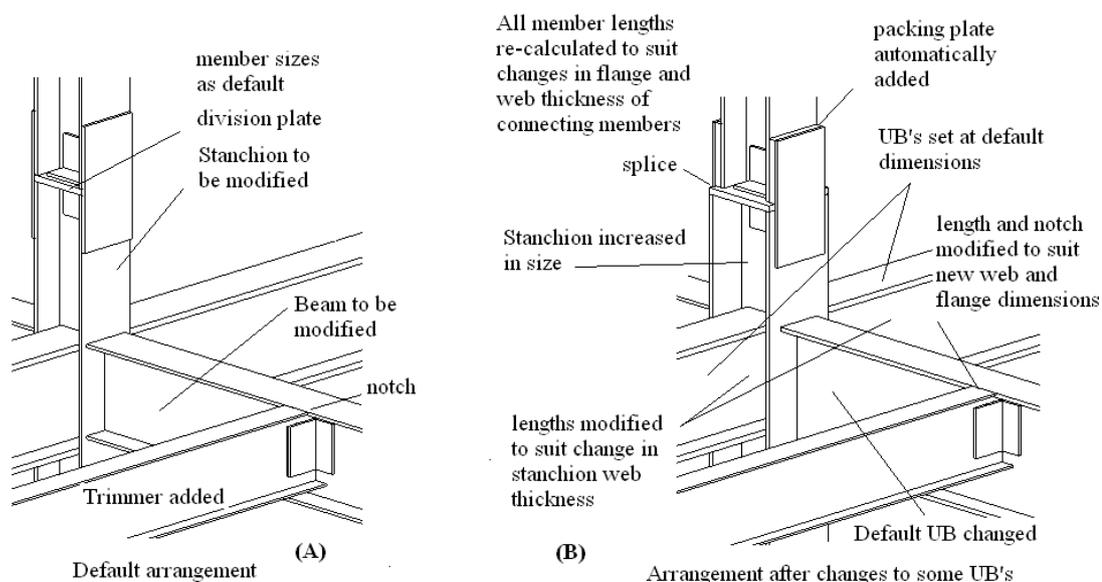


Figure 9. Results after applying lines 623 and 624

A process engineering multi-domain application

It has not been possible to obtain a Pascal process flow-sheeting program for inclusion in the current version of PDGM. This has prevented research into the automatic assignment of data from a flow-sheet directly into modules for the sizing and placement of plant items.

The main plant items and pipework of the preliminary piping and instrument diagram (P&ID) (Aveva 2007), reproduced in Figure 10 is the process engineering unit used as the basis of the application, see (Bausbacher 1993, pp 250). The process vessel sketch in Figure 12 is used specifically for creating the tower.

The graphics model, depicted in Figure 11, is the result of executing the PSD in Fragment 10, the relevant parts of which are used to explain the purpose of the project constructs. It is also used to demonstrate how parameters can be used to link to simple design analysis modules, and for the production of some manufacturing documentation (Eggersmann, Krobb 2000).

Numerical values, rather than variables, have been used in creating much of the graphics in order to make text more readable.

The pipe support structure uses the system developed in the previous section.

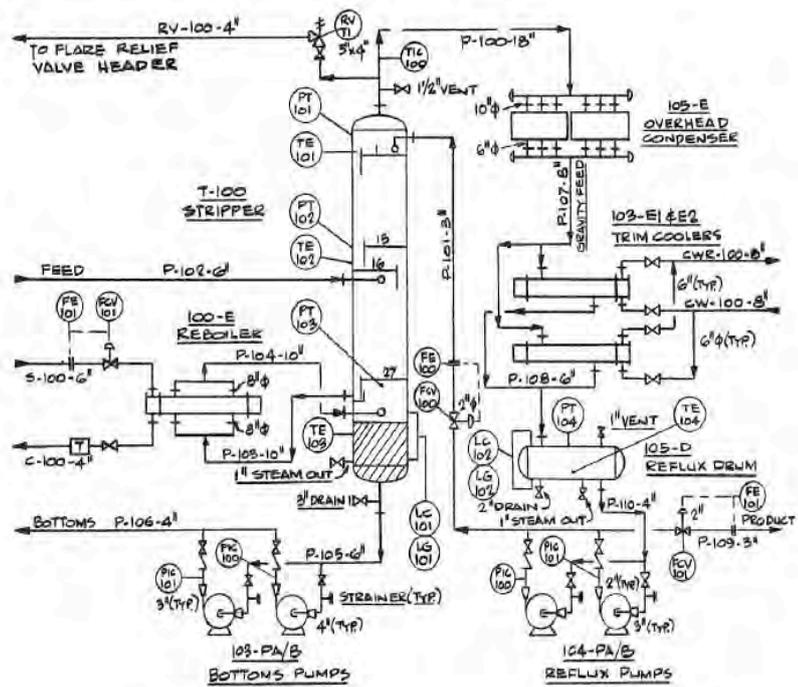


Figure 10. Preliminary P&ID

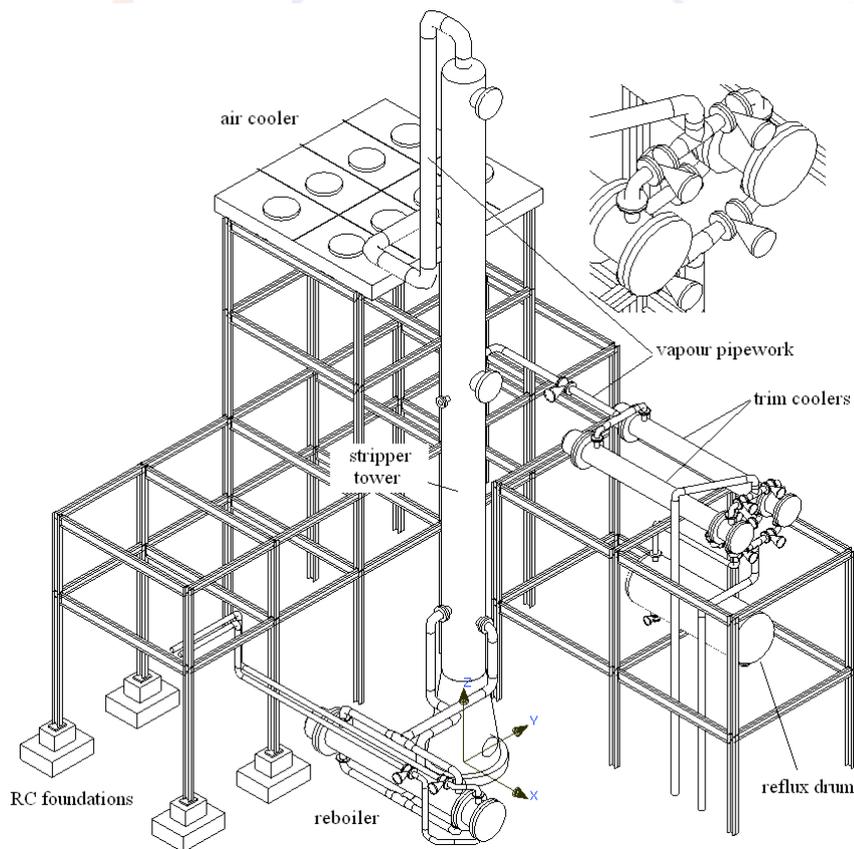


Figure 11. The graphics model created from the P&ID

```

2 : program Proj2Layout (input, output);
3 : type
5 : include Proj2.typ;
105 : include Grid.typ;
121 : var
123 : include Proj2.var;
195 : include Proj2Settings.sub;
264 : include PipeComponents.sub;
426 : include Proj2Designs.sub;
439 : include Proj2InitsTowerVariables.sub;
499 : include Proj2BuildTower.sub;
615 : include BuildCivils.sub;
657 : include Proj2InitExchangerVariables.sub;
714 : include Proj2InitProjVariables.sub;
802 : include BuildExchanger.sub;
919 : include InitAndBuildRefluxDrum.sub;
979 : include GridStruct.sub;
1159 : include BuildSteelStrucs.sub;
1222 : include BuildAirCooler.sub;
1283 : include BuildPipework.sub;
1723 : begin
1724 : start i:= 1 model comp[i] do begin
1725 :     init_exch_variables;
1726 :     init_proj_vars_and_control_points;
1727 :     build_exchanger_group;
1728 :     attach tow_pts[proc2][grade];
1729 :     build_pipe_racks;
1730 :     init_tower_variables;
1731 :     build_tower;
1732 :     build_exchanger_group;
1733 :     build_reflux_drum;
1734 :     build_air_cooler;
1735 :     build_civil_works;
1736 :     build_proc2_pipework;
1737 : end;
1738 : end.

```

Fragment 10. The run-time PSD for the process engineering application

This subroutine **init_tower_variables** in line 1730 initialises tower variables for sizing and creating control points, related to the tower depicted in Figure 12. The graphics subroutine **build_tower** in line 1731 uses design rules which govern the placement of fixed trays in the tower, in order to arrive at its overall length and locations of the various nozzles, see Figure 12.

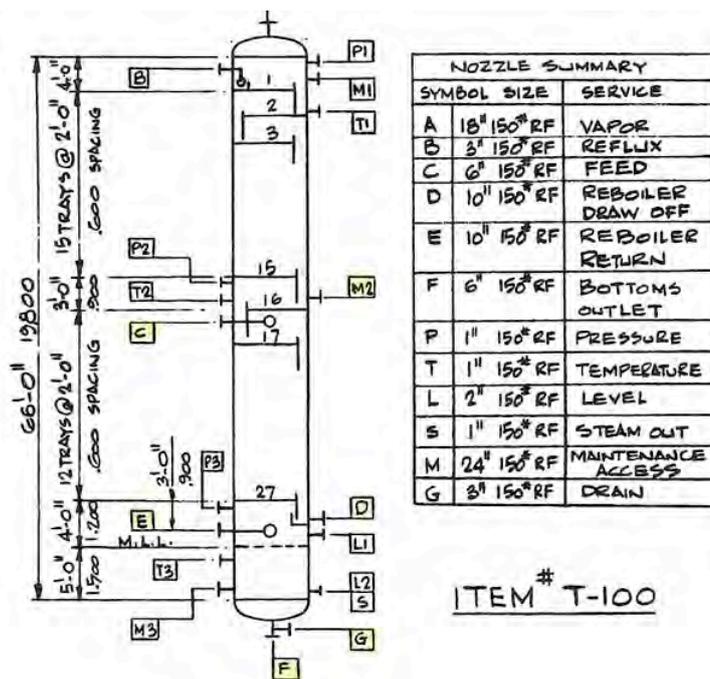


Figure 12. Process vessel sketch for the stripper tower

Methods of pipe routing and layout

All pipe lines are formulated using one of three methods, simple examples of which are shown in Fragment 11. The first method uses, specifically, conic textual primitives as shown in lines 42 to 46 and is depicted in Figure 13(A). The second method, lines 48 to 50, yields the model in Figure 13(B). The function, **proute**, has been developed to streamline the routing process. The user is only required to specify the route, as a sequence of vector phrases.

The third method, see lines 52 and 53, yields the graphics model in Figure 13(C). Here, the **torus** fits a bend, to the desired radius, at each change of direction.

```

42 : cylinder east 20;
43 : torus east bend, north bend;
44 : cylinder north 20;
45 : torus north bend, up bend;
46 : cylinder up 20;
47 : attach origin & east 40 & north 40;
48 : proute
49 :     east len; north 20+ 2*bend; up len;
50 : end;
51 : attach origin & east 80 & north 80;
52 : torus east len, north len;
53 : torus north bend, up len;

```

Fragment 11. PSD methods for generating pipework

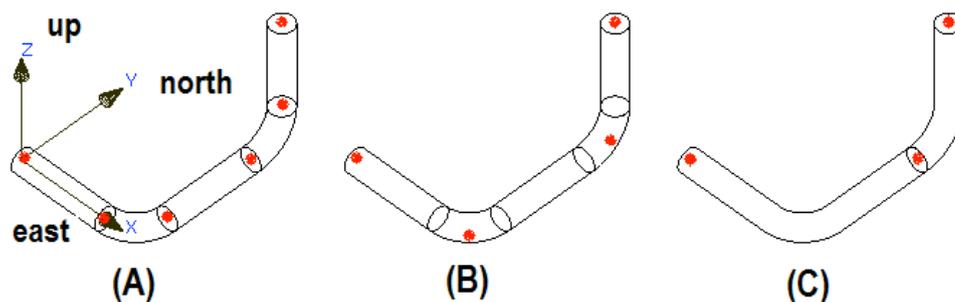


Figure 13. Different ways of depicting pipework

Fragment 12 is an extract from the trim coolers to overhead condenser pipeline, starting at the tee junction. It uses the first method, described above, to do the routing. Figure 14 depicts the model of the pipeline route under consideration.

```

1350 :// coolers common tee junction to overhead condenser
1351 :   tee north d1, north to reflux_drum_location, west 2;
1352 :   diam1:= d2;
1353 :   cylinder west to reflux_struct_location &
1354 :     east 6: curr_ctrl;
1355 :   attach east d1;
1356 :   valve1(pipes[i],handle_left);
1357 :   rad:= 1.5*d2; bend_rad:= 1.49999*d2;
1358 :   diam1:= d2;
1359 :   cylinder west to air_cooler_outlet_location & east rad;
1360 :   torus west rad, south rad;
1361 :   cylinder south to air_cooler_outlet_location &
1362 :     north rad;
1363 :   torus south rad, up rad;
1364 :// air_cooler_outlet_location
1365 :   cylinder up to air_cooler_outlet_location;
1366 :   attach up d1;
1367 :   flange2(1,pipes[i]);

```

Fragment 12. PSD extract of trim coolers to overhead condenser pipeline

The pipe route depicted in Figure 14 is used to produce the listing in Fragment 13. Such listings, in conjunction with temperature and related material specifications, could be used for calculating piping flexibility and stresses on nozzles.

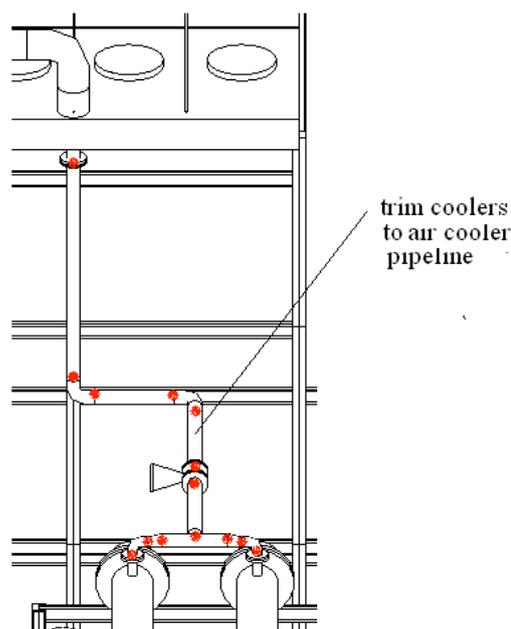


Figure 14. View of trim coolers to overhead condenser pipeline

Trim coolers to air_cooler pipework outlet.

source line	vector line	shape	diam	east west	north south	up down
1331	2341	flange	1.50	0.00	0.00	1.00
1334	2346	bend	1.50	0.00	2.25	2.25
1337	2349	reducer	1.50	0.00	2.00	0.25
1340	2351	flange	1.50	0.00	0.00	1.00
1344	2356	bend	1.50	0.00	2.25	2.25
1347	2359	reducer	1.50	0.00	2.00	0.25
1348	2360	pipe	2.00	0.00	9.50	0.00
1351	2361	tee	2.00	2.00	4.75	0.00
1353	2362	pipe	2.00	16.80	0.00	0.00
1355	2363	valve	2.00	1.00	0.00	0.00
1359	2378	pipe	2.00	26.50	0.00	0.00
1360	2379	bend	2.00	3.00	3.00	0.00
1361	2380	pipe	2.00	0.00	11.50	0.00
1363	2381	bend	2.00	0.00	3.00	3.00
1365	2382	pipe	2.00	0.00	0.00	35.15
1366	2383	flange	2.00	0.00	0.00	1.00

Fragment 13. A basic pipework schedule

PSD editor and graphics debugger

The PSD contains a mixture of EDL and conventional programming text which will be continually studied in depth by students and tutors. To improve readability a keyword colour code has been introduced as shown in the various Fragments of PSD. The need was also identified for a run-time text and graphics debugging facility.

Figure 15 shows a dialog box which provides the options for parsing and executing the whole PSD, or debugging the PSD text and observing progressively the creation of the graphics model by stepping through the numbered lines of statements.

The PSD, as mentioned before, contains a mixture of EDL and conventional programming text. For this reason strong colour coding of the keywords in each category as shown in the various Fragments has been used.

Figure 15 shows a dialog box which provides the options for parsing and executing the whole PSD, or debugging the PSD text and observing progressively the creation of the graphics model by stepping through numbered lines of statements. Models are initially shown in wire frame mode.

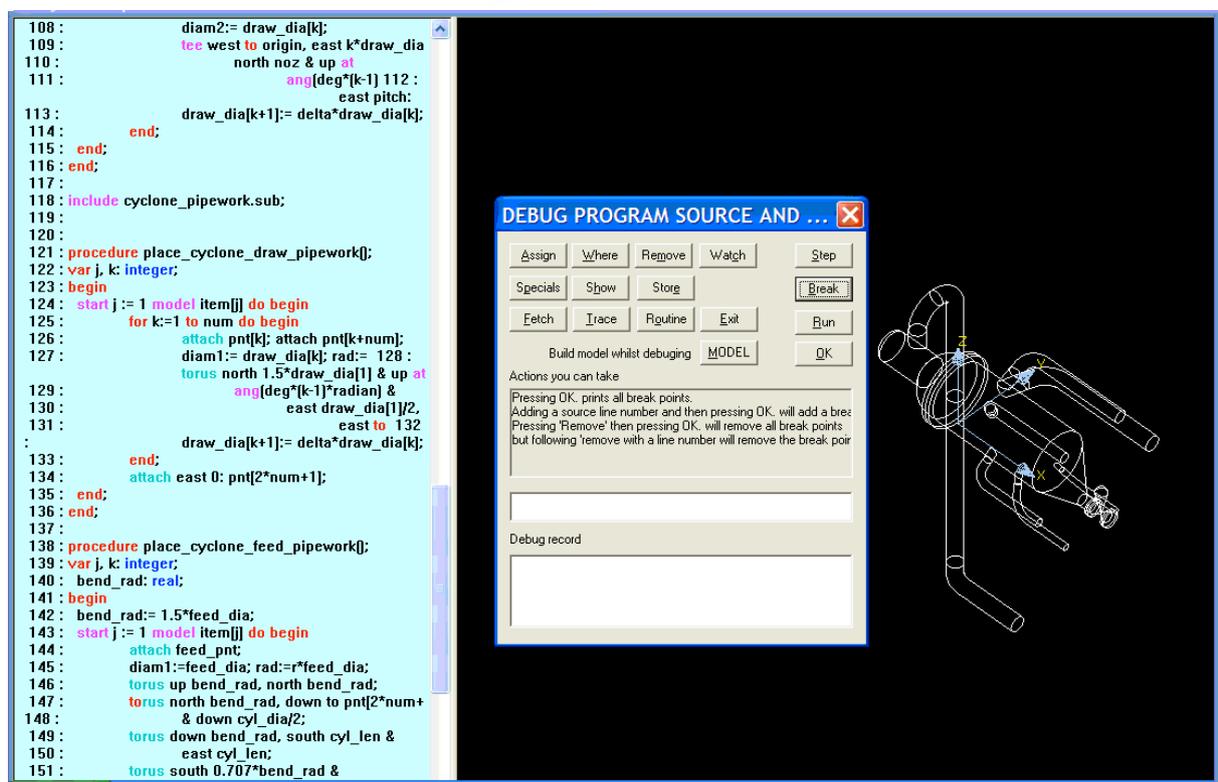


Figure 15 An example of the PSD editing and debugging facility

Discussion and conclusion

We would like to invite the reader to reflect on “DSL (Domain Specific Languages) development..... is hard, requiring both domain knowledge and language development expertise. Few people have both. There is very limited literature on DSL development methodologies and many questions remain on when and how to develop a DSL.” (Mernik et al. 2005, pp 316). The previous examples demonstrated, illustrate the generic nature of PDGM for creating integrated multi-domain systems.

Whilst every effort has been made to correctly represent each discipline, it is most likely that inaccuracies may be obvious to a reader fully skilled in a particular design discipline. It is argued that such errors do not affect the methodology on which PDGM is based.

PDGM provides the means for tutors to structure design courses so that students experimenting with PDGM can learn and demonstrate how to:

- 1) In general, create continuity of data between graphics modelling and design analysis,
- 2) Create their own integrated modelling and design system,
- 3) Create their own graphics modules,
- 4) Apply model analysis methods to influence the structure and geometry of the model,
- 5) Develop design rules to check the validity of a model,
- 6) Be able see how changes in the project data affect the model and the affect on boundary conditions,
- 7) Integrate into their own applications, parts of applications written by others,
- 8) Understand how a graphics modeller creates graphics images,
- 9) Extract data from their system to produce schedules of resources,

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**ISSUES RELATING ACTIVITIES OF PLANNING AND ORGANIZATION OF
COLLABORATIVE GROUPS IN THE PORTUGUESE LANGUAGE TEACHING**

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ISSUES RELATING ACTIVITIES OF PLANNING AND ORGANIZATION OF COLLABORATIVE GROUPS IN THE PORTUGUESE LANGUAGE TEACHING

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ABSTRACT

Currently, the method of teaching and learning Portuguese in public schools of basic education in Brazil is based on the speech of the teacher in the classroom, the reading of texts and, finally, in solving exercises. One of the major problems encountered in this form of learning is the difficulty of the student in constructing knowledge about the desired language. Within this context, this work has as its main objective to present the results obtained by introducing the concept of collaborative learning that was presented as an alternative method of teaching and learning of the Portuguese language in a Brazilian public school. Using this technique we discussed the possibility of helping students to overcome the difficulty in building the desired knowledge about language, surpassing the phenomenon known as functional illiteracy. Then, this study describes the approaches used for the construction of knowledge through discussions and exchange of ideas with colleagues over the texts and exercises. From the observation that the random formation of groups tends to pool between elements of the same level, a fact that impairs the diffusion of knowledge, we addressed issues related to the formation of collaborative groups efficiently. An experiment applied in a public school showed that with the use of collaborative learning, it is possible to improve skills of understanding and interpretation of texts.

Keywords: Collaborative learning, intelligent authoring tool, ontology, Portuguese language.

INTRODUCTION

The daily teaching of Portuguese in the public schools of basic education in Brazil is illustrated by the discourse of the teacher in the classroom, the reading of texts and, finally, in solving exercises. Such method is called of "the banking concept of education" (Freire, 1987). In this procedure of teaching-learning we have noticed great difficulties on the part of the students in the construction of desired knowledge of the language, which contributes to the phenomenon that has been called functional illiteracy. That is, the student is able to read and understand simple texts, but has difficulty following more complex texts (Espósito et al., 2000).

The collaborative teaching has been suggested as one method that can help students improve their reading skills and comprehension (Mello et al., 2004). This is because through the student-student and student teacher interactions (Barkley et al., 2005), students learn by exchanging ideas, sharing information, appropriating the explanation of a particular topic to other students and other forms of participation (Webb et al., 2006).

Within this context, we developed a study to introduce the concept of collaborative learning for elementary school students in Brazil through activity-solving exercises (Isotani, 2008a; Isotani, 2009). This choice was based on analysis of data related to the state of development of the student and the content being taught to identify the best way to form groups (Bittencourt et al., 2007) and an authoring program called MARI (Main Representation Adaptive Interface) to introduce group activities (Isotani et al., 2008b). Moreover, we observed that the application of collaborative learning was an activity that being out of the everyday life has generated intense interaction and collaboration between student-student and student-teacher, facilitating the learning of the proposed content. As an extra gain, we found that students who led their groups had been stimulated and had consolidated the acquired knowledge. Further, we found that students had felt themselves more comfortable for the accomplishment of the tests in group, because they did not feel the pressure of an individual evaluation.

Thus, continuing our study to develop a methodology to assist the teacher of Portuguese to use techniques of collaborative learning, we describe the approaches employed to the construction of knowledge through discussions and exchange ideas with colleagues on texts and exercises.

METHODOLOGY OF CONSTRUCTION OF GROUPS OF LEARNING

The existence of different learning theories that facilitate the planning and integration of groups of learning in the classroom (Collins, 1991; Endlsey, 1980) allows us to create group activities with pedagogical bases by selecting one of these theories. In view of this it is possible to adapt the formation of learning groups considering variables such as: (a) the readiness of students, (b) the objectives to be achieved, (c) the domain of content to be worked, (d) the context where group activities will be performed, and other miscellaneous information.

In view of the great amount of variables and the difficulty to understanding and using the learning theories in practical form, the research has as its objective development of systems that "reason" upon the facts of the environment (variables) to choose in "intelligent" form the best learning theory, and using the information contained in these theories in the real scenarios of education (Isotani and Mizoguchi, 2007)

Thus, one of the main practical problems is the formation of groups due to multiple factors that influence the arrangement of group (Isotani and Mizoguchi, 2008). The complexity of the formation process have been addressed through various studies and substantiated in several models of collaborative learning: "Cognitive Apprenticeship," "Situating Learning (LPP)," "Peer Tutoring," "Anchored Instruction," "Cognitive Flexibility," and "Distributed Cognition."

Among the mentioned models, those suitable for activities of solving exercises are the models "LPP," "Anchored Instruction," and "Cognitive Apprenticeship".

The model "Situating Learning" or "LPP," suggests formation of groups to improve skills in a particular topic, that is, learning using case studies (Lave and Wenger, 1991). In this model the student may be a central participant (PC) or a peripheral participant (PP). Central participants share doubts and opinions on how to solve exercises and help peripheral participants to solve the exercises. The peripheral participants solve their doubts with the

central participants. The goal is to improve the skills of the central participant in solving exercises and make the peripheral participant learn how to solve the exercise properly and become central.

The model "Anchored Instruction," proposes the formation of groups to distribute or share the knowledge among students (Cognition and Technology Group at Vanderbilt, 1992). As the LPP model, the anchor for this is contextualized exercises which must be solved using case studies. In this model the student can be instructor or a student with difficulty. The instructor assists the student with difficulties using case studies in groups of a maximum of 5 students, choosing those cases where students have more difficulty. The student tries to identify and solve their problems by checking through the case studies which are the main problems in their knowledge. The objective is that the instructor develops their ability to pass the knowledge through real cases and the student to remove his difficulties.

The model "Cognitive Apprenticeship" proposes the formation of groups with the objective to improve skills in a particular topic (Collins, 1991). For example, the skill to solve exercises of syntactic analysis more quickly. In this model the student can be master or apprentice. A master can have up to three apprentices, but not vice versa. The teacher demonstrates how to solve the exercise and makes the learner imitate his actions, checking how the learner solves a similar exercise. The learner in turn observes how the master solves the exercise and tries to imitate the reasoning.

Other models have as objective to improve knowledge and from there to solve problems. This is the case of the model "Distributed Cognition," which proposes the formation of groups to create new solutions and share knowledge (Salomon, 1993). All students are central players. The learning strategy in this case is the presentation of solutions, constructive criticism of the solutions and the exchange of ideas.

In the model "Peer Tutoring," the groups are formed to distribute or share the basic knowledge among students (Endlsey, 1980). In this model the student can be tutor or tutored. A tutor can have one or more wards. The greater the skill or knowledge of the tutor, the more tutored he is able to have. The practice shows that the most efficient format is one to one. The tutor plays the teacher's role and explains the concepts that the tutored person does not possess or could not get before. The tutored tries to relieve their doubts with the tutor.

In the model "Cognitive Flexibility," the groups are formed to share knowledge in unstructured environments (Spiro et al., 1988). In this model the student may be the presenter or the audience. The audience gets the passed information, builds their ideas and receives constructive criticism from the presenter. Individually, the objective is that the presenter improves their knowledge and skills to solve problems and present ideas.

As our main objective is not development or evaluation of these models, but to improve the teaching practice we adopted the pragmatic view of adapting the various approaches suggested in the existing models. We based our analysis on the demonstration by Isotani and Mizoguchi (2008) that more efficient results can be obtained using different approaches from various models. Thus, our primary concern became how to introduce the collaborative study to make learning more interesting for a later stage to worry about increasing efficiency.

In this context, this work made use of an intelligent computer system called CHOCOLATO (Concrete and Helpful Collaborative Learning Ontology-Aware Authoring Tool) that through

ontologies and the Semantic Web helps the teacher to use techniques of collaborative learning in actual classrooms (Isotani and Mizoguchi, 2007; Isotani et al., 2008c).

METODOLOGY TO HELP GROUP ACTIVITIES

Although computer-supported collaborative learning has shown good results (Fuks et al., 2006) there is little offer of intelligent authoring systems to help teachers plan group activities that can be effectively introduced in the classroom. The authoring program called MARI (Main Representation Adaptive Interface) was designed with the mission to help teachers introduce group activities in classrooms (Isotani and Mizoguchi, 2007; Isotani et al, 2008b). The MARI makes use of ontologies that represent different learning theories for collaborative groups. Group activities suggested by the program guidelines are based on preserving the consistency of the learning process and provide pedagogical guidance to achieve educational benefits. One of the most important features of the program is the ability to suggest patterns of interaction between two or more students so that everyone benefits from the learning process. Since the program uses the ontology to represent theories of learning, these patterns of interaction creates sequences of activities according to the model of learning with which the teacher wants to plan collaborative activities.

The ontologies were developed and evaluated by Isotani e Mizoguchi (2007). In this way, the program can do inferences using the several concepts and characteristics that represent the learning theories and, so, suggesting group activities that are adequate and consistent. The suggestions offered by the program are guidelines in which the teacher can base and propose collaborative activities that: (a) preserve the consistence of the process of learning, and (b) offer adequate ways to obtain educational benefits.

An interesting functionality of the program is the recommendation of patterns of interaction. A pattern of interaction represents a possible form to create/conduct the interaction between two or more students in such a way that all evolved actors (students) can acquire educational benefits. Through the representation of learning theories using ontologies, MARI can suggest patterns of interaction that help the teacher create effective collaborative activities

STUDIES OF THE BEHAVIOR IN THE ORGANIZATION OF THE GROUPS

The present study was carried in four classes of 8th grade of elementary school to verify the feasibility of introducing the collaborative study as a form to surpass the discourse of the teacher in the classroom, the reading of texts and, finally, the resolution of exercises and help students to construct knowledge desired in the language. This study was divided into two phases.

In the first phase we study the trends of relationship between students during the first half of 2008. We found that these students had no preparation for collaborative works, propitiating the analysis of the impact process of collaborative groups formation introduction.

We analyze the performance of four classes of the 8th grade in the first half of 2008, calculating the average of all evaluations. The evaluations were made in two quarters. In the first quarter the evaluated content were activities of the rehabilitation program of the State of Sao Paulo, the visual development of a text, an objective test of grammar, and an essay. In the second quarter we evaluated the production of an article (journalistic language), seminar, test, and a grammar review.

We found that the participation rate in the evaluations was approximately 20%. This result shows a low interest in the school performance by these students. Such lack of interest in the evaluations and low attendance at classes, the large number of students in classes and the background noise generated by conversations and parallel activities of the students made the transfer of knowledge difficult and the accomplishment practical exercises throughout the two quarters.

A study on the performance of 5th grade students of mathematics showed a correlation between the scores and participation (Isotani et al., 2008d). Then to gain the attention of students, before, and then to get them interested in the subject, and finally obtain their participation, in this order, were the main objectives of this study.

In the first phase we analyzed the process of formation of groups in three randomly chosen classrooms for this study and a classroom to serve as reference of the study. The classroom chosen as reference was 8^a D, where the students have developed the studies individually, being admitted parallel discussions and the intervention of teacher when requested.

Although the formation of groups structured according to the student academic performance is actually the most promising form of collaborative study (Isotani and Mizoguchi, 2008), we were unable to follow this path. In the discussion that followed the proposal of formation of collaborative groups, we see that because they are long-living classes, there already exists a predisposition for the interaction between students. One feature that was well defined is that although the individual leadership is of enormous importance, academic performance was not the determining factor for this. Thus, it was not possible at this stage to adopt models where the role of leader is precisely linked to academic performance. Moreover, the formation of organized collaborative groups also was difficult because the social factor in the formation of groups has bigger weight than the academic performance.

Then, to facilitate the introduction of the concept of collaborative study, overcoming the resistance to the unknown, we propose the formation of pairs or trios following the model "Distributed Cognition," with the support of the CHOCOLATO that offers a structured aid taking into account the different learning theories and objectives of the users (Isotani and Mizoguchi, 2007; Isotani et al., 2008c). The confrontation with personal relationships was prevented and we began the work of introducing the concept of collaborative work. Considering the groups formed, we found that, in addition to personal affinities, there is also proximity in the scores between the elements of each group. This is shown in figure 1 by the almost linear correlation between the inner group minor and major scores (data from Isotani, 2008a). The scores are distributed diffusely, but, clearly around an average straight line, showing that the students had chosen colleagues with similar scores.

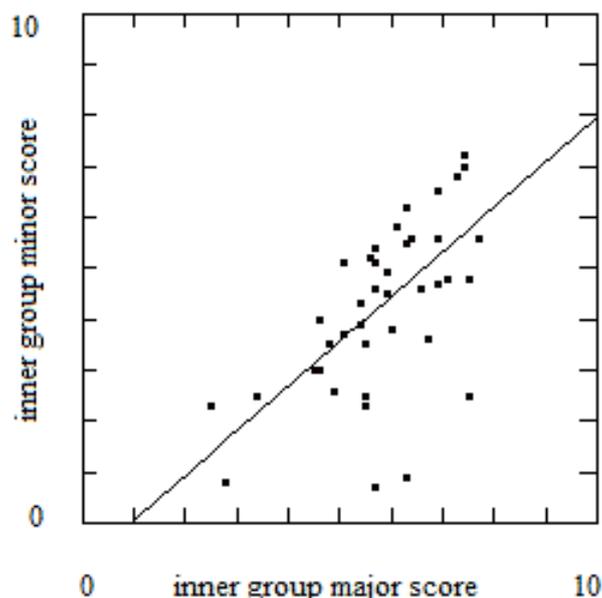


Figure 1. Correlation of inner groups major and minor scores (data from Isotani, 2008).

Table 1 shows the data collected by Isotani (2008a), with the number of students, the number of participants in the proposed activities, the rate of participation, the medium score including all students, and the medium score of the students before and after the activities. We see that the media for all students are always lower than the medium score of participants. This shows that the scores of non-participants was lower than the scores of participants, an observation consistent with the fact that students with lower participation have lower scores reported by Isotani et al. (2008d). Also in table 1 we see that the average score of the reference class (class D) had a significant increase while classes where the collaborative activities were applied decreased the performance in the evaluations, as expected from studies of Isotani and Mizoguchi (2008).

Table 1. Number of students, participants, rate, score of the classes before the activities, score of the participants before and after the activities (data from Isotani, 2008a).

Class-room	Number of students	Rate of participation	All students score before activities	Score of participants before activities	Score of participants after activities
B	45	76 %	4.6	5.3	5.3
C	44	64 %	4.4	4.6	4.2
D	42	57 %	4.6	5.5	6.5
E	45	67 %	4.6	5.2	4.1

We verify that many students with inferior academic performance participated in group activities. As the main cause of low yield was the lack of participation and parallel activities in the classroom, the strategy to recoup participation and then get them interested in the subject using the methodology of group work was effective because it increased the participation rate.

READING AND INTERPRETATION OF TEXT IN COLLABORATIVE GROUPS

In the second phase of the study, in 2009, we chose a classroom of the 8th grade for the development of collaborative studies of reading and interpretation of texts and two other classrooms for the traditional individual studies. We remember here that the objective follows the definitions of Vincent Jouve regarding the reading of texts, that is, "an operation of perception, identification and memorization of signs before any content analysis" (Jouve, 2002). Thus, the final intention is that the collaborative study enables students to recognize the text as form, genre, and meaning.

The challenge for teachers of Portuguese Language and Human Sciences, as demonstrated by the recent results of SARESP System (School Performance Assessment of the State of São Paulo) is to make the student-reader learn to build the context for understanding and simple analysis of a text. However, the teacher is faced with several factors for which he is not prepared, such as social problems, lack of resources, and especially the difficulty to obtain the interest of students in reading, understanding, and reflection of various issues that often are not part of their daily routine. Thus, in an attempt to find a method that met these shortcomings, we sought to adapt the theories of collaborative learning in contrast to the old methodology of lectures and group work without any supervision or orientation.

As seen in the above described study, the groups had to be formed according to the theory "Distributed Cognition." Then, we adopt as starting point for the development of studies of reading and interpretation of texts the model "Distributed Cognition" for the formation of the groups. The groups had been formed spontaneously without defined leaderships. The evaluation of the students was made in function of the results of the works, collectively, without individual evaluations.

In this context, making use of the program MARI, we gather suggestions to propose activities of collaborative learning of reading and interpretation of texts, taking into account the characteristics of the formed groups.

We verified in the classroom of the year of 2009, that about 60% of the students never had contact with books in general. Through a test on the book "Some Histories" of Machado de Assis, supplied by the school, we find that the used language had a structure more complex than the actual level of the students, making difficult the learning of analysis and interpretation of texts.

The experiment using the collaborative method was to use the reading as a basis for production of texts, with the development of the journalistic genre and the assembly of an editorial about their everyday living problems.

For this activity subjects had been chosen that approached the students to the read text, including such problems lived in the school: bullying (acts of physical and psychological

violence), a dialogue between professor and student, illiteracy, lack of cultural activities and too little participation of the parents in the school life of the children

The activities had been developed during the lessons through the following steps:

First step: Individual reading of articles related to the chosen themes and understanding of the genre to be worked;

Second step: Grouping according to personal interest in the subject;

Third Step: Search using the tools available to the student. (Google, Orkut);

Step Four: Write by hand the previous texts, motivating the discussion and sharing of experiences of everyday life;

Last step: Type the text corrected in advance and write the article.

In the course of the activities we observed that those who had easiness in the reading had helped the colleagues who had more difficulty. The ample research has brought knowledge to the whole class, starting from the collective to the individual. The presentation has forced students to think about the chosen text and appeal to the textbooks to pass information properly. Finally, the groups that were separated initially to work without interaction with others, in the end could share with the construction of ideas and the exchange of knowledge.

The method “Distributed Cognition,” in which the students are encouraged to exchange information, proved to be efficient in encouraging them to research the subject. Among that, the opportunity of using self life experiences intensified the exchange of information and the self correction.

INDIVIDUAL READING AND INTERPRETATION OF TEXTS

We chose two classes to apply the traditional method to compare to the classes where we applied the collaborative method. The planning and the steps were the same, however, the procedure had to be adapted to make suitable for 44 and 45 students. For that reason, it was decided that the student could research at home or at school and the written texts should be delivered for correction.

The activity steps were explained by the teacher and the students were free to discuss with both colleagues and the professor. The main objective was writing an editorial about their everyday living problems.

For this activity the students didn't show commitment or interest on researching new information. As a consequence the collaboration of colleague-colleague and student-teacher became impossible.

The results proved to be inferior compared to group studies. A great number of the texts were copies from social networks communities, as Orkut and facebook. Besides that, as they were written during conversations on MSN, 30% were full of orthographic mistakes. The individual deficiency, the lack of interaction, and the difficulty of guiding the project compromised the acquisition and the construction of new knowledge by the students.

CONCLUSIONS

The actual social life demands the individual to exchange information, reflect about several subjects, and discuss and share actions to make decisions. This makes possible the construction of new knowledge and individual and intellectual development.

The school and the educator have as its function to help the student to understand these steps. It is fact that the students' profile has changed and the teachers also must rethink and look for new methods to help the acquisition of new information by their students.

As mentioned before, collaborative study has stimulated students to discuss different subjects and to exchange ideas. Consequently the texts were written with little orthographic mistakes, and consistent and clear information. Besides this, the activity made real the interaction-collaboration between professor-student.

It is important to mention that collaborative studies helps the educator to get through social obstacles, makes the integration easier, and makes the student become part of its own knowledge construction. Therefore, with organization, planning, and proper orientation this method works to stimulate student commitment and to increase their self-confidence.

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Media education in context: A Chinese perspective



Media education in context: A Chinese perspective

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Abstract

It has a short history for media education in mainland China. Chinese scholars and organizations have been struggling to advocate media education inside and outside schools. Initially, media education borrows the key concepts and experience from western countries (mainly Britain and North America), which catalyzes its development in China. But media education is always culturally based in its local context. After years of effort, media education has found its way in China. The diversified models of media education in practice are shaping while the theory for media education is still under investigation to fit into the local context. In this study, it will analyze the existing concepts of media literacy in China and how media education develops based on its local situation. The study will not only review the development of media education inside the educational system from the primary school to tertiary education, but it will take some examples of media education practices beyond the classroom as well. The purpose is to explore how media education is initiated and develops from the perspectives of the theory and practice in its local context, which can enrich the experience for media education worldwide.

Keywords: media education; media literacy; China

Introduction

Media play an important role in young people's lives with the quick change of new technologies. The global distribution of media content such as film, news and entertainment programs accelerates the course of information proliferation in a broader context. Family, community and school are the main channels for the social interaction of young people. Nevertheless, when there are more attractive things in audio-visual format unfolded in front of young people, media become competitive with family upbringing and school learning. In such a media-saturated environment, students understand the world with printed-text in a traditional way is confronting with the impact of electronic media through which students construct their perceptions about the world around them. Moreover, students encounter the two contradictory pedagogical stances in media culture and school education in their everyday lives. Media make young people get effortless gratification and pleasure while education fosters them to make greatest effort to discipline and develop themselves (Frau-Meigs, 2003). The change of leaning environment makes educators

think over what students should learn and how they learn in a media age. The knowledge students learn from school curriculum seems irrelevant for students in their private and public lives. Educators are exploring a new pedagogy for students' learning in schools, which can closely relate to students' experience outside schools. The traditional definition of literacy mostly refers to the ability to read and write with printed text. With the development of electronic media, the definition of literacy is expanding to include various forms of text. Silverblatt (1995) pointed out a literate individual in a media era should be well informed in matters of media coverage; be aware of the impact of media on personal lifestyle, attitudes and values; interpret media messages in a insightful way; be sensitive to the culture media shape; and understand the relationship between ownership, government and media industry.

To be media literate, media education is indispensable. It is a process of teaching and learning about media. In 1982, it was justified via Grunwald Declaration at UNESCO's International Symposium on Media Education, and then it expands quickly worldwide. The definitions of media education and its outcome media literacy are defined as (Gundacker & Waltenstorfer, 1999, pp. 273-274):

Media Education

- *deals with all communication media and includes the printed word and graphics, the sound, the still as well as the moving image, delivered on any kind of technology;*
- *enables people to gain understanding of the communication media used in their society and the way they operate and to acquire skills in using these media to communicate with others;*
- *ensures that people learn how to*
 - *analyze, critically reflect upon and create media texts;*
 - *identify the sources of media texts, their political, social, commercial and/or cultural interests, and their contexts;*
 - *interpret the messages and values offered by the media;*
 - *select appropriate media for communicating their own messages or stories and for reaching their intended audience;*
 - *gain, or demand access to media for both reception and production.*

Media education is often accompanied by the development of technology and media. It has a short history for the research and practice of media education in mainland China. Media education was first introduced to China no more than twenty years. Academic communities and social organizations have been struggling to develop media education inside and outside schools. Initially, media education borrowed the key concepts and experience from the western countries (mainly Britain, Canada and US.), which catalyzes its fast growth in China. However, media education is always based on its local context. It has already found its way within the context of Chinese educational system and media culture after years of effort. The diversified model of media education in practice takes shape while the theory is still under investigation to fit into Chinese context.

Students' media consumption vs. schooling

Media consumption

Young people willingly involve in various activities with media nowadays. In a survey, it shows that TV and music are the primary media in young people's lives in America. They spend an average of three hours a day watching TV and near two hours listening to the music (Rideout, Roberts, & Foehr, 2005). Meanwhile the size of netizen had reached 298 million by the end of 2008 in China, and students of the primary and secondary schools occupied 26.7%. The application of the internet for the primary and secondary students mainly concentrated on entertainment and social intercourse such as instant messaging, blog, network music and video. The average hours they spent on the internet per week were 9.5 hours (CNNIC, 2009). They could not surf on the internet for a longer time, partially because of their parents' supervision. Commonly parents and teachers worry about the negative impact of media, even though parents would like to supply their children with computers at home and teachers utilize various media to facilitate students' learning in the classroom. The relationship between young people and various media cannot simply be thought as active transmitter and passive receiver. Henry Jenkins (2006) regards the interaction between young people and media as a participatory culture, which can be seen as a hidden curriculum in a digital era. The participants can develop a new set of social skills through collaboration and networking. In addition, young people express themselves with a variety of media formats such as blogging, fan video making, and mash-ups etc. Among these media applications, young people develop a kind of peer-to-peer learning, diversification of cultural expression, the skills valued in the modern workplace and a more empowered conception of citizenship. Students communicate with the rest of the world and enjoy pleasure through these new technologies. They become creative producers and express their concerns through media. However, the positive interaction mostly depends on the motivation of the participants. When the media usage, particularly internet application, abruptly increases among Chinese young people, the state first constructs a positive media culture for young people (SARFT, 2004). Due to the fact that children, particularly when reaching adolescence, enjoy viewing adult programming, they do not choose the programs they watch very carefully and are passively exposed to the media (Calvert & Jordan, 2002). The State Administration of Radio, Film and Television (SARFT), as one of the main administrative units for media industry, advocates more diversified and channels of programs for children and adolescents specifically. As for the internet usage, the state proposes software Green Dam-Youth Escort to filter the pornography and improper content online in 2009.

Schooling

The usage of technologies after school makes students' learning more complicated than before. It causes the reflection on the role of schooling nowadays because of the

impact of media and technology on teaching and learning. In the past fifty years, educators have attempted to connect the school with the society by introducing a variety of media into the classroom (Ely, 1984). The fastest progress in school may be the technology-supported learning. The new technology not only greatly affects the schooling either in instructional methods or learning modes, but also stimulates the talents to compete in a broader setting instead of simply in the local place (Guan & Meng, 2007). The revolution of new technology requires educators to think over the existing curriculum and the role of media and technology in schooling. The reform of curriculum must keep up with the development of technology. In China, the curriculum reform of basic education set out in 1999. Two years later, the Ministry of Education (MOE) issued Basic Education Curriculum Reform (Trial) and Curriculum Standards of Eighteen Subjects. There are many changes compared with previous curriculum guidelines. For instance, integrated curriculum is advocated in the primary school. Students are more likely to learn if the subject was “*organized into generalized concepts that cut across the fragmentating boundaries of separate subjects*” (Beane, 1997). The evaluation of the new curriculum pays close attention to students’ academic performance and promotes their diversified potentials. In addition, schools are encouraged to develop their school-based curriculum, which should base on the local social-economic status quo, the local tradition or advantages, and students’ need and interest. The new curriculum guideline is more flexible, particularly at the school level.

In the new National Curriculum Standards of Eighteen Subjects in China, the expansion of literacy is also visible to include media either as a tool or as the learning object. Take the Chinese Curriculum Standard (MOE, 2001b) for fifth graders as an example, it requires:

- To make use of library, internet and other information channels to do inquiry-based reading; the number of total extra-curricular reading is no less than 100 million words.
- To make use of library, internet and other information channels to acquire information and solve problems in study and life; and try to write simple research reports.
- To organize some discussions and lectures on common topics students concern such as stories and images from TV and film; to learn how to recognize the right and wrong from these stories.

There is a wide range of complicated factors about the value of expanded literacy to include mass media into the school system (Semali, 2000). Considering the changing learning environment, the curriculum standard combines with the usage of technology and study about mass media. Stories and images from TV and film are close to students’ lives, but more concentrate on the critical thinking of morality in the standard.

The foundation of theory for media education in China

Both media culture and schooling drive the appearance of media education in China. The development of media education worldwide also influences its fast growth in Chinese context. The general definition of media education, mentioned in the first part of the article, provides an identical understanding around the world, though it subtly changes in different contexts. It is still an umbrella concept with a wide perspective from diversified philosophies, theories, frameworks, practices, settings, methods, goals and outcomes (Hobbs, 1998). Media education was first introduced by reviewing its meaning, content and approaches from the western discourse in 1997 (Bu, 1997). Chinese scholars would like borrowing definitions, key concepts and principles of media education from western countries such as Britain, Canada and America at the initial stage. Media education as a new topic arouses great interests in the academic community, particularly in the disciplines of Communication and Journalism. Research on mass media makes scholars realize the media effect on children and adolescents, which calls attention to media education. After 2004, many media education research appeared, but there lacks of practice in reality. The western concepts and framework cannot be verified and revised fully in Chinese context. The dominant definition and clear framework for this new field is still under construction.

Media literacy can be seen as the extension of traditional literacy (listening, speaking, reading and writing), including the skill to understand various media information, to critically view and listen media information from movies, TVs, broadcasting, internets, newspapers, ads and other forms of media; and it also includes the skill to produce media information by taking advantage of broad information technology (K. Zhang, 2003, p. 117). It is also defined as the ability to understand and analyze media information critically; it includes the skill of taking advantage of media information to develop personal life and society (Zhang & Shen, 2004, pp. 11-13). The different interpretations on media literacy, together with other definitions among Chinese literatures, mostly focus on: a) Critically understanding the media information; b) Taking advantage of media information to develop individuals and society; and c) Media production is a necessary skill for media literacy (Xu, 2009). It indicates that media education not only teaches a system of knowledge but also develops students' skill. The ultimate aim is to improve student themselves and promote social development. Hobbs (2008) concluded the western conceptions of media literacy from the following aspects:

- (1) a personal focus on accessing and using media and technology;*
- (2) the process of critically analyzing and evaluating the content, form and contexts of media messages and media systems and institutions; and*
- (3) the ability to compose or create messages using digital, visual and electronic tools for purposes of self-expression, communication and advocacy.*

The conception of media literacy in China is corresponding to that of the West. The purpose of self-expression and advocacy via media education in western countries is not evident in Chinese context, which alternatively refers to individual development and social promotion. The motivation for media education is not the same from countries to countries; therefore, the media education practice is different. Media literacy cannot be isolated from the institutional discourse and practices, in which media is constructed through the educational and cultural activity. The evolvement and shift of literacy accord with the social and cultural changes, furthermore, the interest of elites who control the hegemonic institutions (Kellner & Share, 2005). Leavis and Thompson (1933) suggested media education to train students' critical awareness on popular media in school in the early 1930s in Britain. They charged "*the competing exploitation of the cheapest emotional responses*" and "*satisfaction offered at the lowest level*" caused by mass media. The purpose of education should protect the culture and preserve the literary heritage, language and true values. With this consideration, studying about media and popular culture was to resist and discriminate the false and corrupting influence of mass media (Buckingham, 1998). It is understandable that different orientations of media education in various educational and social-economic systems. Chinese media education develops fast in the beginning of the new century, but it keeps the stance of "discrimination or protectionism" from the stance of the state. This standpoint gets more support from Chinese parents and teachers when young people spend much more time on television and internet. In Moral Education, element of media education is to help students to realize the impact of media, but it does not mean to positively study the media. The underpinning point on the relationship between passive receivers (students) and active senders (media) ignored the students' complex experience with media. However, it becomes more complicated in practice when media education goes to students, which present more diversified implication for media education. The regular academic conferences on media education are held to call together media educators from various disciplines. An academic community for media education is taking shape. More and more scholars and teachers involve in media education, which can be recognized from the increasing number of studies and practices. Chinese media education is different from that of western, since the context of media and educational system is different, though there are similarities in its development. Defining the rationale and the theoretical framework of media education is a sticky task for the Chinese scholars in the early stage. Many scholars prefer to carry on practices while fumbling with the theory in the local context.

The diversified practices in the local context

Media education refers to the process of teaching and learning about media. It has been taken as an independent subject or as an integrated part in existing subjects in the formal schooling in some countries. In Britain, media educators had been making great effort to take media education into their national curriculum framework. The position of media education in the third version of national curriculum for English

was clearer in the past ten years than ever (Hart & Hicks, 2002). In Canada, every province has media literacy embedded in provincial policy guidelines for English/language arts programs (Duncan, 2006). Media education is also rising in Asia countries with gradual changes in the students' classroom to respond their real needs in the society (Cheung, 2009). In Hong Kong, Liberal Studies is a core subject in the New Senior Secondary School Curriculum and aims to help students broaden their knowledge and enhance social awareness by adopting an issue-enquiry approach (EDB, 2007). Media education is integrated into Liberal Studies to make students aware of their media consumption on adverts, the relationship between mass media and the society, and the changing lifestyle caused by information technology. By adopting the independent enquiry study, students construct their personal understanding about the world around them and become self-directed learners in their learning. As mentioned above, the dominant theory of media education in China is under-researched. However, media education practice is diversified within various contexts.

School-based curriculum

Media literacy can be achieved via various channels, but school is definitely the best place to develop students' critical reflections on media systematically. Media education does not exist in the present primary and secondary curriculum officially, although there are elements of media literacy in the national curriculum standard. As mentioned above, school-based curriculum is advocated in the curriculum reform (MOE, 2001a). It offers an opportunity for the development of media education, and media education is first practiced as a school-based curriculum in China. In a Beijing primary school, school-based media education program started in 2008. It is as an independent curriculum delivered to fifth graders. In this program, the objectives of the media education include: to help students understand media, and make them realize the relationship between media and economy, politics and social culture; to help students get information from various channels and analyze media messages from different perspectives, foster better learning attitude toward media and popular culture; to express themselves freely when needed through media and get familiar with the skills on using media (Zhang, 2008). It is a general aim for the school-based media education curriculum in this primary school. Students involved in this program are fifth graders and they begin to be critical and doubt about the world around them. The learning content includes video games, advertisement and TV drama etc. particularly video games get more time in the course, since video games influence young people much in China. The school-based media education curriculum not only accords with national curriculum reform, but it starts from students' real life and interest.

Integrated courses

In schools, there is confusion between instructional technology and media education.

Instructional technology mainly emphasizes on teaching through media while media education is teaching about media. But they are not absolutely departed from each other. Teaching through media can be a very useful way to facilitate media education. In some cases, they are mutually integrated. For example, a teacher who teaches Information Technology explored the similarities and differences between Information Technology and media literacy. She pointed out the overlaps in aims and content of these two subjects, and tried to combine them with each other as an integrated course. She found that the integrated course can stimulate students' motivation and collaboration. The teaching content is richer and students are more engaged in the classroom (Liu, 2010). Furthermore, Information Technology is integrated into Comprehensive Practice. Students are encouraged to take an inquiry study within a collaborative environment in Comprehensive Practice. Teachers combine media education with Comprehensive Practice, which emphasizes on the extended knowledge and practice of traditional knowledge. In this kind of integrated course, teachers have more power to enrich the traditional curriculum with their own creativity, but teachers lack the knowledge and skill to practice media education in Comprehensive Practice even if they are keen to do it. Media education can be integrated with various subjects in U.S. and usually integrated much in language study, social studies and health education etc. In China, the Chinese teacher tries to extend the traditional Chinese teaching and learning in the context of digital era. The new curriculum standard provides him the chance to integrate media literacy into his teaching (Shi, 2008).

Activities outside schools

Some organizations are very concerned about young people's physical and spiritual development in a digital age. They made different activities to help the young people to adapt the changing surroundings. Media education becomes one of channels to balance the relationship between young people and media. Activities beyond the classroom are more flexible compared with media education in schools. Formal teaching and learning is not necessary, but the activities have to be colorful and conform to the objective of media education. A theme for media education proposed by China Children's Press and Publication Group is media participation for all Chinese children (UNICEF & CCPPG, 2007). It creates opportunities to involve as much as children in various media activities. Children and adolescents are encouraged to do various media productions to express their voices. They can write letters to newspaper and make videos on the issues they concern. Another activity organized by this organization is called media superman. The participants are invited to visit the media industry like print factory and do simple media production themselves while they visit Beijing. These activities outside schools make young people realize their media environment, and also encourage them to participate in their media culture actively. The purpose of these activities is to make children and adolescents aware of the media influence and use media to self-express in the society. This project puts emphasis on how to help children understand media and participate in media culture

in a positive way. Another case is media fast program for young people. In this program, students reflect their media consumption by fast from various media for a period of time. Students reflect upon the pleasures and functions TV or internet serves in daily life through the absence of media.

Media education for adult: Selected courses and seminars

The most prominent development for media education is in the university. Most of media educators are from universities. Some of them teach media literacy as a selective course for undergraduates (Hu, 2004). Since courses in colleges are more flexible and they are not examined as carefully as in the primary and secondary schools. Media education can easily find its position in colleges if scholars are interested in it. For example, in Communication University of China, media literacy is taken as a course for undergraduate for several years. It becomes a regular course for undergraduate. Media education for undergraduates is different from journalism and communication education, which is to train professional workers in media industry, while media education mainly cultivates students' literacy on media. Although students do not realize the importance of media literacy, they can highly involve in issues related to their media consumption like media addiction and media worship (Wu, 2009). From this point of view, no matter for primary and secondary school students or undergraduates, media education should take students' concerned issue and their previous media experience into account, which can arouse great motivation to study media literacy. There are also other forms of media education like community seminar. For example, I have observed a seminar on media literacy for the neighborhood. Most of the participants are middle-aged and above from the same neighborhood. In the seminar, they complained much about the media program and reflect their media consumption. Although media education cannot teach them directly to solve their confusion on media consumption, they have learnt several methods to think over their media consumption again in a more critical way.

Conclusion

From the above, we know that Chinese scholars and organizations have been struggling to advocate media education inside and outside schools while the state tries to regulate media and creates a better media environment for young people. The state still takes conservative stance for media education, but the elements of media literacy have been integrated into the national curriculum standard. The diversified models of media education in practice are shaping while the theory for media education is still under construction to fit into the local context. As a whole, the development of media education largely depends on the interest of academic scholars and organizations. It develops unevenly in different places and is relatively feasible in media rich area such as Beijing and Shanghai. Although it is urgent to develop media education from the perspective of media educators and some stakeholders, it still lacks of common objective for media education. Chinese media education develops fast actually if

compared with those countries with long history of media education. Because of its rapid growth, some issues arising from the practice of media education such as teacher training and classroom learning of media literacy need to be investigated.

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The learning needs analysis

Prolegomena to the integration of the balance of competencies in learning design

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Abstract

The learning need analysis represents the essential condition to successfully design training paths. In fact, without a preliminary analysis about the actual target needs it wouldn't be possible to define the courses objectives and the expected results.

Companies, public administration, training institutes, university and school are all concerned. The structure of a learning path and its assessment system, the monitoring tools and the contents delivery strategies are fundamental variables depending on a detailed analysis about organization goals, development strategies and target competencies.

In this sense, the authors present:

- a research method articulated in five phases;
- one application of this method in order to define the guidelines for designing a University Master's Degree addressed to Instructional Designers.

1. Introduction

1.1. The common practice

This essay is based on the assumption learning design activities need a preliminary study in order to rigorously define what is going to be designed.

Many training managers and consultants often interpret such assumption as a mere formality, the fulfilment of a complicated – and not “complex” – design procedure. So the preliminary learning path analysis is frequently interpreted as a sequence of due actions and standard communications between the organization functional areas. This kind of practice clearly disregards serious researches about learning needs and the most important target features.

Furthermore organizations are often reluctant to allow the introduction of rigorous methods in order to identify the learning need. Adopting a new analysis model is hardly sustainable, even counterproductive in contexts where it's fundamental to preserve the balance of power of the different functional areas.

So, public and private organizations prefer not to adopt scientific methods to analyse the learning need: preliminary activities are run in an approximate way and it looks like there's no need to define a quantitative frame to evaluate the outcomes. Thence it becomes hard to provide functional answers to the actual target needs, attain the strategic objectives and optimize time and resources.

1.2. Objectives

The objective of the essay is to give an operational answer to a widespread need organisations often incur into: how to combine learning activities and strategic objectives by identifying an actual learning need analysis method. The aim is to recover some common – and basically qualitative – practices and integrate them in a procedural model based on a quantitative investigation model.

Such method should support the Learning Area team in the preliminary analysis in order to:

- (a) interpret the directions of the Industrial Plan or the organization strategy statement;
- (b) ponder the expected outcomes of the learning plan according to the target and the strategic objectives;
- (c) functionally represent the starting conditions of the target competencies;
- (d) effectively define the courses structure by taking into account organizational bonds, learning needs and methods;
- (e) support the identification of contents and actors involved in relation with the objective complexity levels and the need of assessing/certifying the outcomes;
- (f) plan time, activities, resources of the process (design, implementation and delivery);
- (g) translate the analysis outcomes in some guidelines to define Instructional Design activities.

Certainly it's fundamental to consider all the possible implementations and the complexity of the different application contexts. In fact, the method should concretely satisfy the effectiveness and efficiency needs of the actors involved in the process.

That's why the method will be:

- sustainable and suitable to deal with the available resources and get a coherent competencies management system;
- simple, that means its principles and implementation modalities must be understood also by non-experts;
- rigorous and based on consolidated methods of quantitative data analysis and description, in order to identify and represent all the variables involved in the context;
- replicable, according to a modular and parametric logic and in order to allow its application in different contexts;

- permeable to new analysis needs and open to include non-formal and informal learning validation tools;
- compliance-oriented and coherent with regulations and management needs in the learning offer planning;
- transparent and fully codified in order to get an extensive documentation and clearly describe tools and techniques;
- more focused on the target and not only centred on the abstract themes of the courses catalogues;
- bound to the balance of competencies, that implies a link to the process analysis and the definition of target knowledge and abilities;
- Risk Management oriented, as integrated in the practice of managing the operational risk in the framework of the organizational processes control.

1.3. Essay structure

In order to suitably describe the learning need analysis method, the research has been articulated in three essential moments:

1. Operational definition of the learning need concept;
2. Description of the analysis method and its implementation phases;
3. Application of the model to a concrete case study.

2. The “learning need” concept

What does “learning need” mean?

2.1. A general definition

Considering the organization as the reference frame, the learning need can be defined as *an integrated system of knowledge and abilities subjects must and can acquire through formal, informal and non-formal learning processes. The aim is operating in a competent way, coherently with their activities and in accordance with the strategic objectives and the organization values system.*

This definition shows an organic and advanced vision, a systemic perspective that requires overtaking the qualitative vision in favour of a rigorous analysis method: the goal is identifying and quantitatively describing the knowledge/abilities structures that make possible the competent behaviour.

2.2. An operational definition

The adoption of a quantitative analysis presumes some considerations about the learning need measurability and the analysis outcomes concreteness. Briefly this consideration can be articulated in two fundamental moments:

- the distinction between “virtual” (LN_v) and “real” (LN_r) learning need;
- the meaning of these two variables - LN_v e LN_r – in the *learning effectiveness* definition.

2.2.1. “Virtual” and “real” learning need

Considering the previous definition of learning need, there’s not a precise identification of the actual knowledge and abilities state in organizations. Until now the stake seems to be just about a system of competencies individuals and/or clusters of individuals are supposed to get in order to adequately carry out specific processes and functions: the critical learning needs and actual gaps to plug aren’t defined yet¹.

Then it can be useful to distinguish the concepts of “virtual” (LN_v) and “real” (LN_r) learning need:

- the first one, LN_v , coincides with the whole competencies system a subject should get to coherently operate with the organization objectives;
- the second one, LN_r , represents a subset of the “virtual” learning need and covers all knowledge and abilities still not acquired at the moment the analysis is carried out: the difference between LN_v and the actual Competencies System (CS_a) of the organization members allows calculating LN_r .

By discriminating between an abstract dimension and the system effective state, it’s possible to pass the mere subjective dimension of the learning need in favour of a more objective dimension. The first one mainly represents the result of a census to record how management and training target perceive the organization learning needs. The second one, based on objective observations, is a real diagnostic evaluation aiming to “photograph” the actual situation and taking into account all the affecting design factors. Furthermore it limits the intervention perimeter to the “real” learning need, obviates the risk of redundancy and helps to overcome the actual existing gaps.

2.2.2. What “learning need” means in the effectiveness calculation

To objectively identify the learning need we must refer to some specific criteria and evaluate the quality of a course addressed to a specific organization segment. Such principle is mainly valid when the formative plan effectiveness coincides with its methodological and operational suitability – in terms of target competencies increasing and strategic organizational objectives as well. In these cases, determining in detail the real learning need represents a necessary condition to design effective learning paths.

In fact, the learning effectiveness of a course equals the ratio between the “added value” of the course –the difference between the final (CS_f) and initial (CS_a) Competencies System – and the real learning need (LN_r) – the difference between LN_v and CS_a :

$$\text{Learning Effectiveness} = \frac{(CS_f - CS_a)}{(LN_v - CS_a)} = \frac{(CS_f - CS_a)}{LN_r}^2$$

First of all, this integration defines the connection between “effectiveness” and “learning need”. Secondly, it highlights the coherence and circularity of the preliminary analysis phase, the design process and the expected learning outcomes assessment.

2.2.3. The “learning need” operational definition

Now the real learning need can be defined as the difference between two systems:

¹ If a formative path were only based on these series of information, the result would be a professional profiles map or an articulated catalogue of courses and development plans to formally cover all knowledge and abilities. In other terms a sort of all-embracing proposal leading to unavoidable overlaps, redundancies and antinomies.

² Ronsivalle, G.B. & Orlando, M. 2009; Loi, M. & Ronsivalle, 2009.

(a) the knowledge/abilities integrated system subjects must acquire through formal, informal and non-formal learning processes. In order to get competent behaviours within the organization subjects must perform specific activities related to precise functions and in accordance with the organization strategic objectives and value system;

(b) the actual knowledge system previously acquired and assessed.

Such difference represents the starting point to create and implement effective training paths. As a matter of fact it also represents the necessary information system to elaborate a quantitative description of the expected results for the final course assessment. In fact, a training course evaluation can't be based on impressions or suggestions but needs clear empirical evidence.

3. The five phases of the learning need analysis

Consistently with the essay goal and the principles abovementioned, the analysis method foresees a sequence of activities aimed at identifying the real learning need and defining some fundamental guidelines. Such sequence is articulated in five phases:

1. declination of the organization strategic objectives in expected outcomes;
2. declination of the general expected outcomes in individual professional objectives;
3. definition and selection of the target competencies development plan;
4. representation of the virtual learning need;
5. definition of the real learning need.

3.1. Declination of the organization strategic objectives in expected outcomes

The first phase objective consists of identifying a series of expected outcomes by defining the general goals and the organization strategic objectives.

The definition of a grid containing the expected outcomes and their indicators represents the starting point of the learning need analysis. That's a necessary phase in order to define all the activities and delimitate the intervention perimeter. The organizational needs and their integration within the implementation process are certainly binding.

The instructional designer plays a fundamental role as well: getting all the information about the organization structure, its mission and values through an attentive analysis of the most important institutional sources (Industrial Plan, Strategic Plan, Statute and Budget Plan) of the organization³.

Then, the first analysis document will include:

1. the organization synthetic description, with its history and main features;
2. the organization general objectives definition through the identification of its values and mission;

³ In these documents it's possible to find information about: the activities temporal evolution, the processes general structure, the obtained financial results, the possible reorganizations and/or acquisitions, the future predictions about the market strategic placement, the perceptivity about social responsibility, the human resources development plans, the learning and assessment orientation.

3. the identification and presentation of micro objectives fully describing the organization strategy in order to get the general objectives;
4. a targeted analysis of the organization strategies in order to identify the success factors, the possible issues and the related objectives;
5. the definition of the expected outcomes through appropriate observable indicators and the formulation of hypothesis about outcomes measurement and verification.

3.2. Declination of the general expected outcomes in individual professional objectives

The general expected outcomes based on the strategic plan represent how organization members attain some specific objectives. These kinds of arrangement depend on how many professional profiles are involved and how activities are managed according to the temporal interdependence logic. In order to identify the connection between general and individual dimensions, it's prior to (a) study with attention the internal process map and (b) determine how and how much the development and reorganization strategies affect productive processes and actors involved.

The second phase aims to define on a general level the expected outcomes and decline them in a series of objectives related to the organization single individuals. This includes registering the activities flow, the different roles, the intermediate and final outputs, the possible procedure and the tools supporting all production dynamics. Such phase also intends to represent the initial conditions system, integrate the quantitative data and attribute some reference values to the expected outcomes indicators.

In particular, the instructional designer must elaborate a synthesis document to determine the learning need analysis field:

1. a description of the organization current state, by defining the appropriate system indicators and quantitatively representing starting points and outcomes;
2. the identification of the organization processes, with a particular focus on the process logic structure in relation with the organization strategies;
3. the declination of the selected processes in sub-processes, activities, inputs, outputs and implementation temporal intervals;
4. the identification of the process possible issues in relation with the strategic objectives;
5. the representation of the human resources map, by selecting specific roles and profiles defined in the process;
6. the definition of the different individuals objectives related to the selected professional profiles.

3.3. Definition and selection of the target competencies development plan

The third phase foresees the definition of the intervention potential target by cross-reading the competencies map, the individual objectives and the organizational processes.

First of all, this kind of analysis requires a direct connection with the HR department and implies a high awareness about the competencies model determining the assessment strategies of the organization members performances. In particular, it focuses on the reference measures, the assessment tools, the internal and external standards (like EQF), the representation of the

expected levels, the practices to plan the balance of competencies and, above all, the state of the art of the different social parts agreements⁴.

At the end of their analysis, instructional designers must be able to define a document including:

1. the definition of the actors and the competencies development plan, according to the organization strategic objectives;
2. the target segmentation, by distinguishing and prioritising the different profiles in the process;
3. the description of all profiles involved on the strength of their expected cognitive and behavioural assets: technical, professional and transversal skills will be break down in specific knowledge and abilities in order to carry out the process activities.

3.4. Representation of the “virtual” learning need (LN_v)

What does exactly “breaking down some competencies” in “knowledge and abilities” mean?

As previously explained, the virtual learning need is “the knowledge/abilities integrated system subjects must acquire through formal, informal and non-formal learning processes in order to get competent behaviours within an organization – consistently with activities related to specific functions and in accordance with the organization strategic objectives and value system”.

How can we identify and represent such “integrated system”?

After breaking down the competencies in knowledge and abilities, the instructional designer must translate such assets in observable behaviours. Then he/she can elaborate a map to define all the correspondences among the process steps, the expected outcomes and the organization activities.

It’s about defining a formal structure of interrelated learning objectives (according to Mager learning objective definition) that includes information about: (a) the observable behaviour hierarchy, (b) the dependence and subordination relation, (c) the nature of the knowledge required to carry out the expected activities, (d) the complexity level of the abilities to functionally elaborate the information, (e) the logical sequence of the behaviours.

The transposition of the competencies in terms of learning objectives implies a systemic representation of the virtual learning need (LN_v), that is the knowledge and abilities integrated system subjects must acquire in order to competently behave within the organization.

3.5. Definition of the “real” learning need (LN_r)

Now it’s about making sure the tree of the learning objectives representing the virtual learning need actually corresponds to what subjects must acquire in terms of knowledge/abilities.

The objective of this phase is determining in a rigorous way the real learning need related to some members of the organization. On the strength of the results it will be possible to define the guidelines to design specific training interventions.

For this purpose the analysis foresees some activities to verify the system initial conditions, that is the knowledge/abilities background of the target, and empirically redefine learning objectives and goals.

⁴ In a systemic vision of the process, sometimes it can be useful to make reference to the contents of collective agreements and, in general, to the Key Performance Indicators (KPI) and the organization salary and incentive systems.

In particular, to define the final report contents an instructional designer must:

1. perform a qualitative check of the initial conditions by looking through the human resources records or similar and analysing the training experiences of the potential target;
2. define the macro structure of the assessment system and take in consideration the objectives complexity levels, the objectives tree structure and the possible organizational and legal bonds;
3. define the (structured/semi-structured) test micro design activities to measure the knowledge/abilities system corresponding to the virtual learning need;
4. choose the subjects to be examined by segmenting the target and/or defining some possible sampling techniques;
5. administer the check test and record the results in a database according to a specific data representation system coherent with the organizations standards and needs;
6. verify the soundness and reliability of the tests of the entire assessment system;
7. analyse and interpret the data in order to identify the real learning need (LN_r), that is the gap between what the subjects should have acquired in terms of competencies and their knowledge/abilities background;
8. share and verify the analysis outcomes with the organizational functions who manage and monitor the human resources;
9. describe the real learning need through the representation method of the learning objective tree.

Once the intervention area defined, the following step is integrating the information and the analysis outcomes in a series of guidelines to design learning paths. Some indications about (a) the general learning objectives, (b) their complexity levels, (c) the target functional segmentation must be defined as well.

4. Application of the model to a concrete case study

The analysis model previously defined implies that all the activities are related to the organizational context of the potential target.

What happens if there's not a specific reference organization?

Let's suppose the objective of the learning need analysis is to define the guidelines to design a Master's Degree addressed to Instructional Designers. In such case we won't have any reference company: how can we structure our analysis activities then? And how can we identify the real learning need?

4.1. The choice of the case study: a premise

The objective we tried to attain is leading the learning need analysis and defining the guidelines to design a post-graduate course: a I level Master's Degree to train professional profiles for Learning Departments.

Many reasons steered our choices. In general, we can state that:

1. the complex reality of the academic world represents an ideal “field” to test the model and show its reliability, strength and flexibility;
2. the academic training supply is currently inadequate on this subject. Students hope to get concrete competencies and soon capitalize them in the job market: in this sense Masters and post-graduate courses can be often disappointing;
3. also this academic deficiency affects the private and public organizations for two reasons: first, the new intake needs a supplementary and long internal training; secondly this “lack of competencies” slows down any process of knowledge development and/or renewal within the organization.

All these issues lead to the lack of a rigorous analysis of the “real” learning need. The training path design should define some guidelines in order to:

1. answer the “real” organizational needs;
2. satisfy the students expectations about their academic training path;
3. contribute to the complex evolution of the learning design process on a systemic level.

We are persuaded the first duty of Universities must be accomplishing such tasks and supply an adequate answer to the professional demand.

4.2 The case study: guidelines to design a Master’s Degree addressed to Instructional Designers

The main difference between leading the learning need analysis for a company– in reference to the Learning Plan guidelines – and developing it for the University – in reference to the Master’s guidelines – is that in the second case there’s not a reference organization.

If the target of a Learning Plan works in a well-defined organizational context, the Master target doesn’t act in a specific framework.

Nonetheless it’s fundamental to allow students getting the competencies actually expected in the job market. The most important goal of a Master’s Degree must be supplying students some new competencies to offer to organizations.

To identify such competencies we broadened our analysis to an extended and significant area in order to abstract the identikit of an organization type.

4.3 The reference field

To define how our reference field was composed, we assumed the organization type implied a scenario with all the complex elements of a big organization.

Furthermore, in order to avoid circumscribing just a single sector with our observations, we identified some heterogeneous scenarios.

In the strength of these considerations, we analysed the following organizations:

1. a big transport company;
2. a professional association in the Credit field;

3. an important Italian bank;
4. a famous hotel chain;
5. a big organization in the Security Area;
6. an agricultural professional association;
7. a big communication and shipping organization.

4.4 The application of the learning need analysis model

In the following paragraphs we'll show the application of the model to our case. In particular, for each of the five phases we'll describe the activities we carried out and the following outputs.

4.4.1. Phase 1: Declination of the organization strategic objectives in expected outcomes

The goal of this first phase was defining the general purposes of the organization type in order to find the strategic objectives and decline them in expected outcomes.

The research activities were split in two different parts.

1) First we defined the general objectives of the organization type by identifying four steps.

Step 1) Identification of the missions of the reference field organizations through the consultation of their websites.

Organization	Mission
Hotel field organization	Supplying value to all our stakeholders through our brand and structures, which is a reference within the different market segments. In this way we satisfy the customers needs and develop our human resources.

Table 1 – Example describing the *Mission* of one of the reference field organizations

Step 2) Analysis of each single mission and identification of a set of general objectives.



Figure 1- Example of the *mission* analysis and identification of the general objectives

Clearly, the human resources objective highlighted in Figure 1 is directly related to the subject of our research, the Learning Function.

Step 3) Map of the identified objectives and explanation of:

- the existing relations between objectives;
- the objectives hierarchical structure.

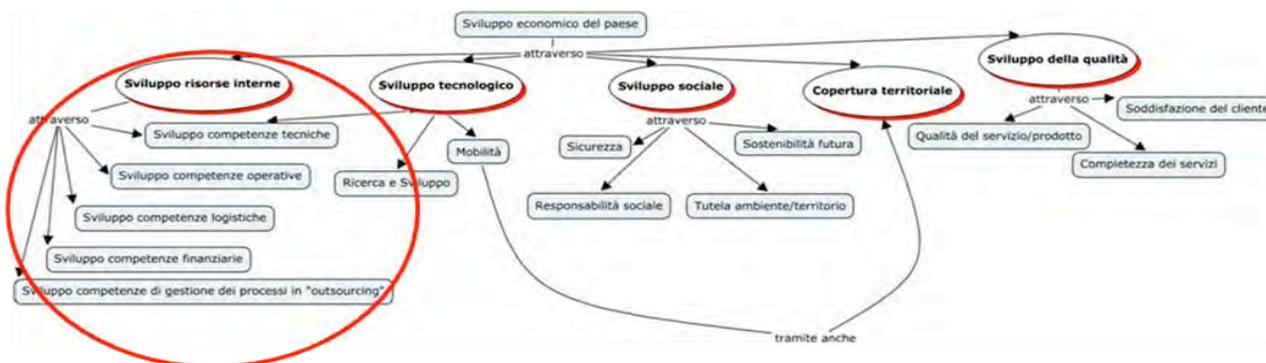


Figure 2 – Map of the general objectives

The map in Figure 2 shows all the identified objectives focusing on the specific Learning objectives.

Step 4) Classification of the objectives in “macro categories” and identification of the general objectives of the organization type:

- internal resources development (the direct goal of the Learning function)
- technological development;
- social development;
- territorial covering;
- quality development.

2) Secondly, we identified the expected outcomes related to each objective.

This activity, led through the consultation of the most important institutional sources (Industrial Plan, Strategic Plan, Statute and Budget Plan) was defined in three steps:

Step 1) Definition of the organization type mission through the elaboration and the synthesis of the general objectives previously defined:

Organization	Mission
Organization type	Supplying a high quality service/product by developing the internal resources competencies and the technological innovations in order to improve the company life conditions and strengthen our presence on the field.

Table 2 –Mission of the organization type

Step 2) Definition of the structure of the organisation type and integration of the different organizations structures.

This activity was particularly useful to identify the various operational branches of a big organization.



Figure 3 – The structure of the organization type

The structure, as reported in Figure 3, shows the different operational directions highlighting the Human Resources direction, that is the branch directly related to the Learning Departments.

Step 3) Definition of the strategic plan of the organization type, consistently with the general objectives and the identified mission.

To carry out this activity we analysed the information and the institutional documents of the different organizations, lingering over the strategies of every single company.

In this way, for each objective we could define:

- the **strategies**, that is the activities to perform in order to attain the general objectives;
- the **expected outcomes**, that is the effects following the strategies attainment;
- the **organization performance indicators**, that is the criteria observed in order to establish if and how the objectives have been attained.

Macro categories	General objectives	Strategies	Expected outcomes	Organization performance indicators
Internal resources development	Developing and updating the core technical-professional competencies	Elaborating and implementing a Training Plan in order to develop the core technical-professional competencies	Increasing of the global effectiveness level by strengthening the core knowledge	Lower number of calls to the help-desk about the basic matters; lower number of operational errors; managers demanding less basic courses; managers showing a satisfaction increasing in the interfunctional relationships.
	Developing and updating the specialist competencies	Elaborating and implementing a Training Plan in order to develop the specialist competencies	Consolidation of the specialist competencies	Less complains; budget attainment; market share consolidation; cross selling increasing and services/products selling with a higher added value.
	Developing and updating the competencies related to the management analysis techniques applied to the costs rationalisation	Elaborating and implementing a Training Plan in order to develop the competencies related to the management analysis techniques that are applied	Rationalization of the costs and effective processes management	Costs reduction; decrease of legal arguments concerning the suppliers; increasing of the frame agreements and maximization of the supply quality/price ratio;

		to the costs rationalisation		
	Developing and updating the communication/relation competencies	Elaborating and implementing a Training Plan in order to develop the communication/relation competencies	Customer consulting improvement, especially about the communication/relation features	customer satisfaction increasing in the periodical survey

Table 3 –Example of a grid “objectives – strategies – expected outcomes – performance indicators”

Table 3 shows objectives, strategies, expected outcomes and performance indicators related to the Learning functions (Macro objective: internal resources development).

4.4.2 Phase 2: declination of the general expected outcomes in individual professional objectives

The goal of the second phase was declining the expected outcomes in individual professional objectives.

In particular, we tried to describe the relation between the general dimension of the organization type objectives and the significance of the single individuals contributions.

In other terms, given a specific process, which is the contribution a single professional profile can offer in order to attain the organization general objectives?

As we verified in the previous phase, one of the fundamental organization goal is the human resources development. The expected outcomes related to such objective are strongly related to the Learning department processes. That’s why we tried to understand which process components and professional profiles were more relevant.

The research activities were split in four parts.

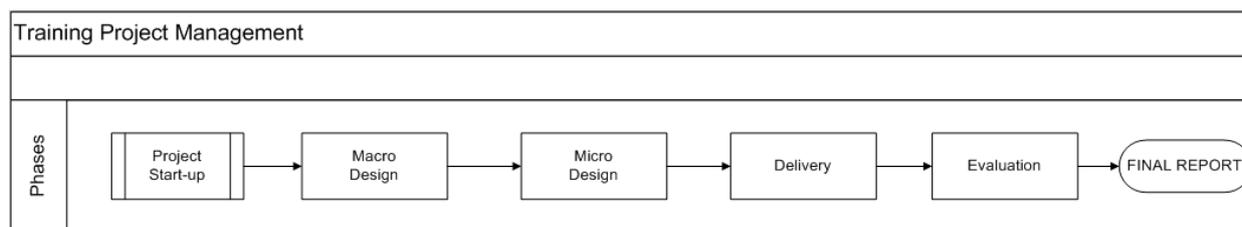
1) At first we analysed the existing processes of the reference organizations Learning Departments in two steps.

Step 1) Consultation of the documents mapping the organizations processes (the Quality documents and the Internal Audit reports).

Step 2) Census conducted through a test addressed to the organizations Learning managers in order to check the information the organization provides.

Thanks to the information collected for each organization we reconstructed the Learning departments processes.

2) In the second part we defined the Learning Function process type (Figure 4). This goal was attained through a synthesis of the different processes by applying our team Instructional Design model⁵.



⁵ Ronsivalle, G.B. & Carta, S. & Metus, V. 2009.

Figure 4 – The central phases of the learning management process

3) In the third part the process was further detailed by itemizing each phase. This activity was split in four steps⁶.

Step 1) For each phase we defined the sub-processes.

Step 2) For each sub-process we identified the activities that involve the professional profiles corresponding to the training target.

Step 3) For each activity we described the related inputs and outputs.

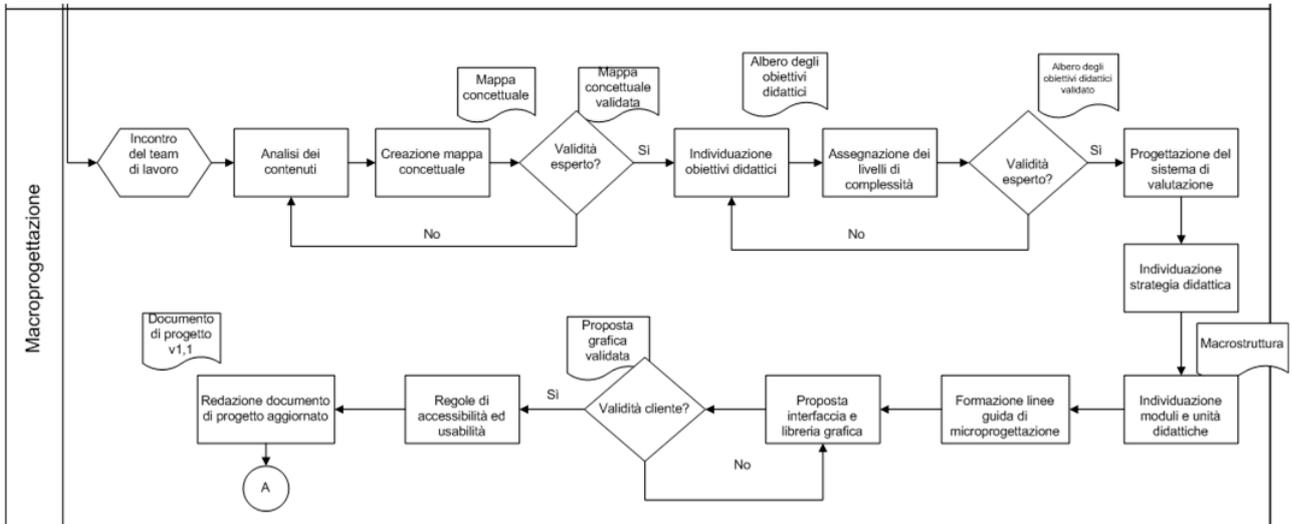


Figure 5 – the “itemized” process: a Macro Design detail

Step 4) For each activity we identified the related professional profiles gravitating around the Learning Department and, for each of them, we defined the process objectives.

4) In the fourth part of this phase, we identified the individual objectives related to the professional qualifications at the core of our researches.

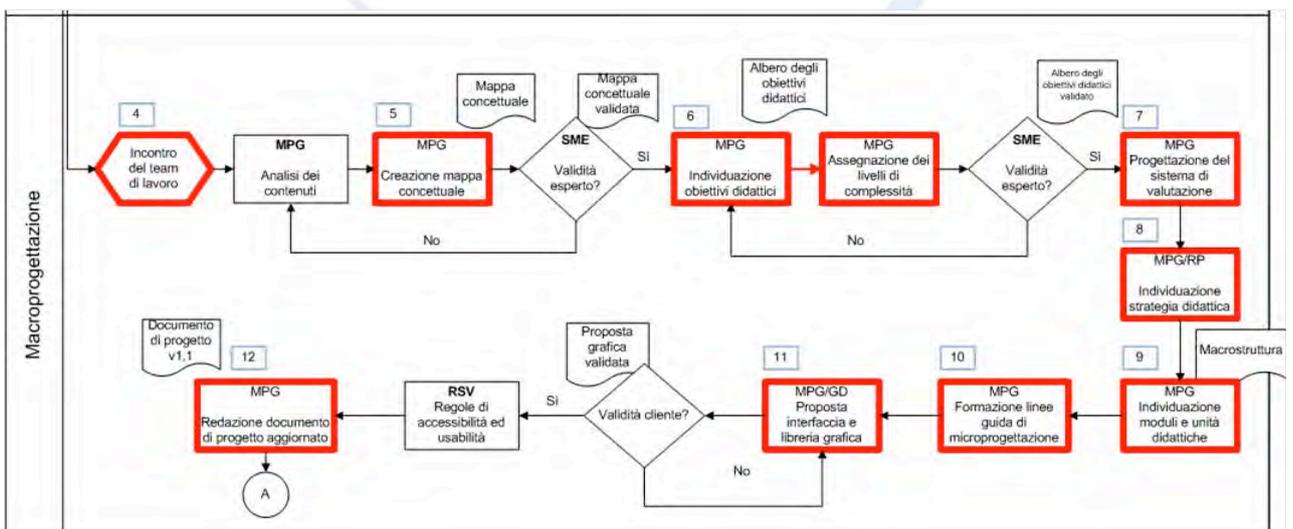


Figure 6 – Identification of the professional profiles and the individuals objectives in the Macro design phase

⁶ Ronsivalle, G.B. & others 2008.

Then we tried to answer the following question: which is the more relevant phase in the organization general objectives attainment?

On the basis of the collected information and the organization general objectives, it was clear that the most important contribution in order to attain the organization expected results was the Macro Design phase. That’s the phase where the activities assuring the learning path effectiveness are defined.

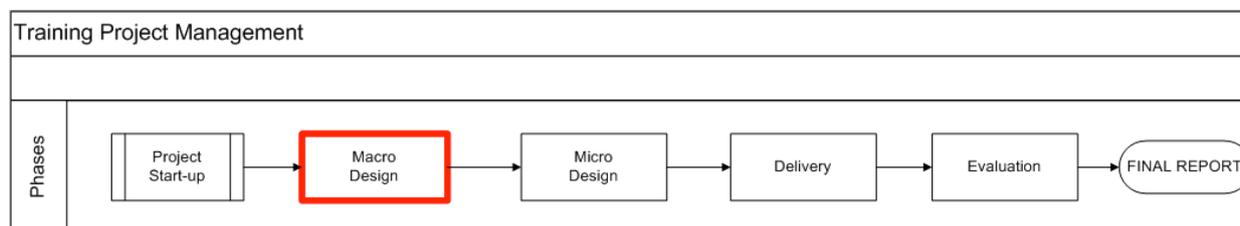


Figure 7 – Identification of the most relevant phase in order to attain the general objective “Internal resources development”

4.4.3. Phase 3: declination and selection of the target competencies development plan

After identifying the phase we needed to focus on – the Macro Design phase – we defined the more relevant professional profile in the process.

The output of this phase was a declaratory about the knowledge and abilities concerning the Macro Designer, that is the professional profile our Master is addressed to.

ACTIVITIES	KNOWLEDGE	ABILITIES
4. Team meeting	<ul style="list-style-type: none"> Internal organizational system process Customers demands and bonds Macro design work phases Team competencies and relational features Report drafting 	<ul style="list-style-type: none"> Communicative/relational Coordination Meeting management Decision-making
5. Definition of the conceptual map	<ul style="list-style-type: none"> Novak’s theory Conceptual maps models Research tools Internal organizational system process Copyright information Mental models theory Guidelines of the design process 	<ul style="list-style-type: none"> Synthesis Schematizing Graphic representation of the concepts
6. Objectives identification and complexity levels attribution	<ul style="list-style-type: none"> Mager’s theory Bloom’s taxonomy of the cognitive domain Trees of the learning objectives Guidelines of the design process Correspondence rules between observable behaviours and mental models Internal organizational system process 	<ul style="list-style-type: none"> Writing Synthesis Analysis Schematizing
7. Assessment system design	<ul style="list-style-type: none"> Bloom taxonomy Docimology elements Learning design model Tests typologies and items Correspondence rules between test typology and taxonomic levels 	<ul style="list-style-type: none"> Analysis Synthesis Assessment

Table 4 – Example of declaratory of the knowledge/abilities a macro designer is supposed to master in the macro design phase

4.4.4. Phase 4: representation of the “virtual” learning need

In the declaratory above described we broke down the Macro Designer competencies in knowledge and abilities.

Then we defined the tree of the observable behaviours and elaborated the correspondence map among the steps of the process, the expected outputs and the macro designer activities.

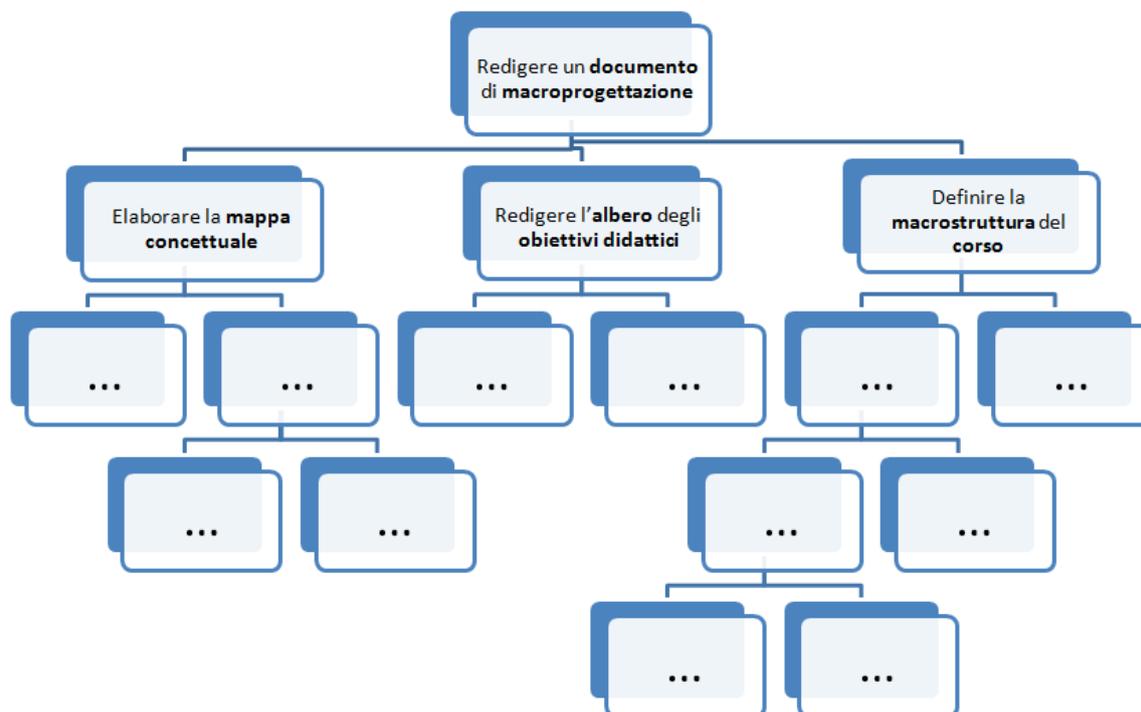


Figure 8 – Example of the learning objectives tree concerning the “virtual” learning need.

This tree represents the “virtual” learning need, that is the set of the learning objectives to include in a Training Plan oriented to train the Macro Designers within the Learning Department.

4.4.5. Phase 5: definition of the “real” learning need

Let’s consider the learning objectives tree representing the “virtual” learning need: is it actually corresponding to what the target Master has to get in terms of knowledge and abilities?

To answer this question we carried out two fundamental activities.

1) In the first one, we determined the “real” learning need by making use of different analysis tools, as:

- the “educational qualifications” reading, to identify some possible prerequisites;
- some sample interviews;
- different assessment tools (for instance structured tests).

2) In the second activity we compared the “virtual” learning objective tree with the results obtained with this analysis. This comparison allowed us defining by difference a new learning objective tree concerning the “real” objectives not “covered” by our students, that is what the target must get through the training path.

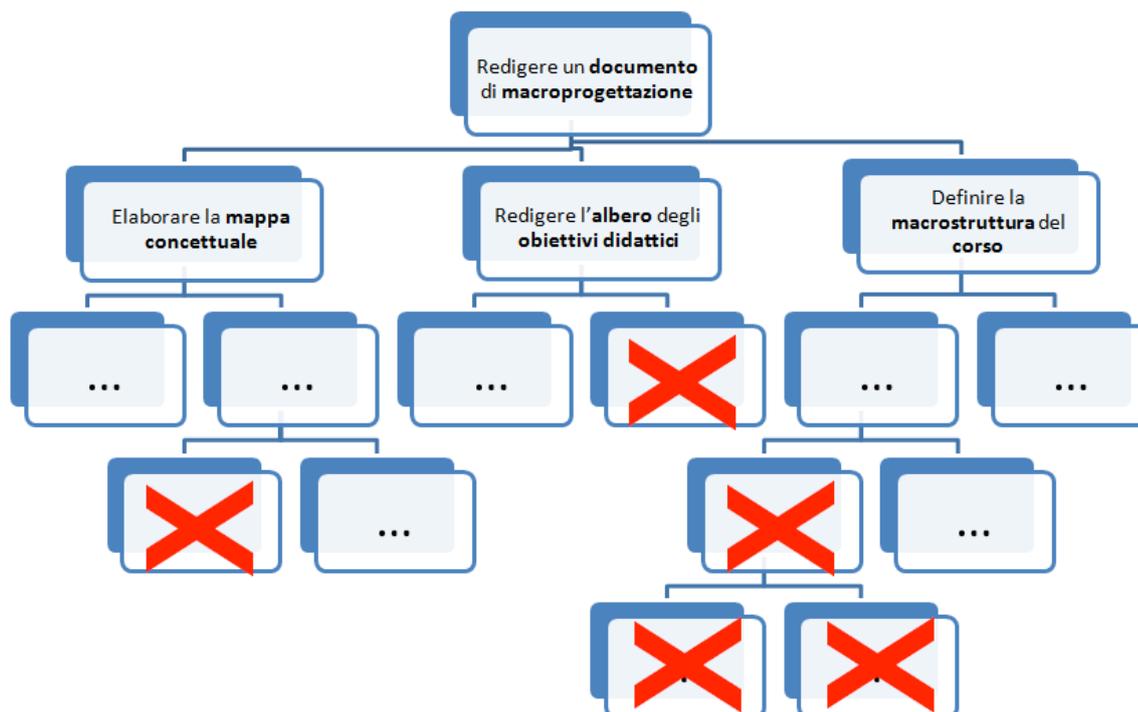


Figure 9 – Example of the learning objectives tree concerning the “real” learning need

At this point we can consider the learning need analysis completed.

The general objective of the professional profile with the “real” learning objectives ramifications will help us defining the guidelines for the Master Instructional Design.

In particular, the general learning objective will allow defining the essential test to assess the Master objective attainment; the different ramifications will allow identifying the course learning plan.

Conclusions

In this paper we introduced the theoretical principles and the research method of our Learning Need Analysis Model.

We moved from an “operational” definition of the learning need concept by distinguishing between “virtual” and “real” learning need.

This distinction allowed us enumerating the method fundamental features and describing the implementation five phases of the analysis.

At last, to facilitate the comprehension of the method, we showed a concrete application by defining the guidelines for a Master’s Degree addressed to Instructional Designers.

In this way, we highlighted the essential relation between learning plans and strategic objectives of a big organization.

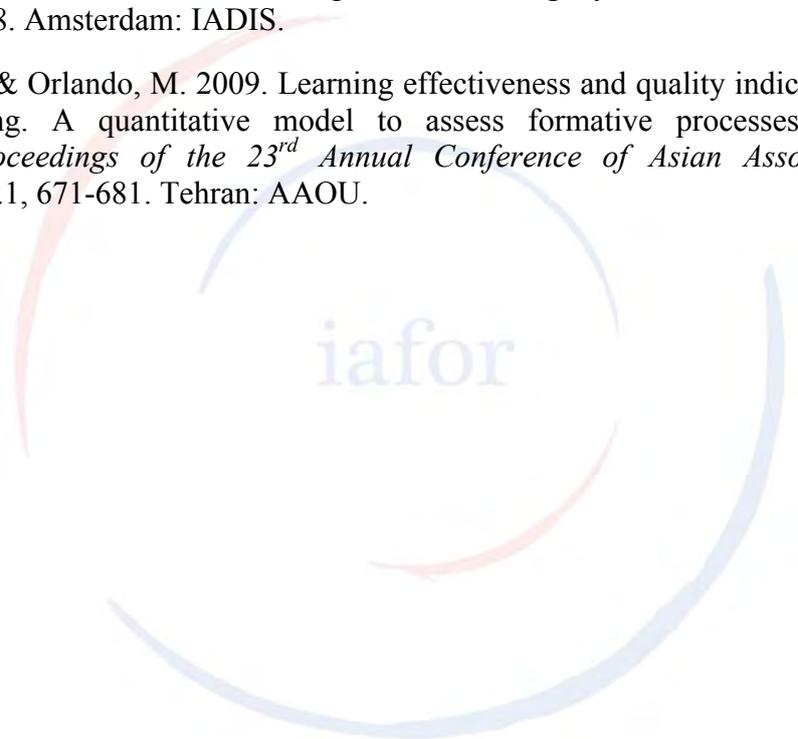
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The logo for the International Association of Open Universities (IAFOR) is centered on the page. It features the word "iafor" in a lowercase, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular graphic effect.

**Re-thinking Literary Pedagogy in an Age of Globalization: An E Pluribus
Unum Approach to the Teaching of Literature**

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Abstract (Topic):

No sensitive observer can avoid the dreary conclusion that literature has entered upon a period of decline and progressive death in many academic institutions around the world. This demise, as the present paper will attempt to demonstrate, is not due to a lack of genuine literary works but due either to difficulties in understanding the nature of literature or in employing inappropriate methods of teaching which are based on a limited perspective. The present paper is an attack on such sterile pedagogical approach whereby competing theories tend to lay the blame at the door of one another and advances a claim that literary pedagogy should find its way in a new interdisciplinary approach where intrinsic and extrinsic evidence is contrasted. The main argument presented here is that to reanimate students' interest in literature, to achieve a modus vivendi and arrive at a fine-grained analysis, what is needed is a method of teaching which is able to blend various analytic tools and critical modes and which is likely to lead students to the threshold of their own minds. Based on this approach, literary pedagogy ceases to be only a matter of championing the beauty and pleasure of the teacher's reading experience and becomes the learner's responsibility to explore the merits of all kinds of critical endeavors to the understanding and appreciation of literary texts.

Introduction

In the last few years and with "the looming demise" of literary studies (Hassall, 2001), as both Harold Bloom and Frank Kermode have indicated pessimistically, literary pedagogy seems to have lost some of its self-confidence. A conflict seems to have sharpened in which theorists, scholars and academics are opposed to a comfortable immobility. The source of the problem is that our modes of teaching tend to valorize and support a particular analytical approach as the most explanatory and reliable model and to refute any other teaching approaches which may weaken our position, pluralize possible meanings in a text or enhance the bogey of contradiction and critical indeterminacy.

The present paper primarily addresses scholars, who, in the face of diverse and unfamiliar findings, are confused, dissatisfied and yet refuse to change sides. Accordingly, the paper dismisses any literary pedagogy which does not allow freedom or flexibility and, in turn, argues for a pluralist, critical approach whereby a text is studied "with an open mind and without any necessary or apparent commitment to one single position or stance" (Cuddon, 1999). Most importantly, the paper expresses the willingness to hold more than one position, arguing that the meaning of a literary

text must be regarded as provisional, complex, open, contradictory and unfinished rather than as objective and fixed truth put there by a God-like author.

My overarching premise in this paper is that there is no center or origin, no independent 'validator' of our interpretations, and thus no hope of achieving a final interpretation since what counts as "true" and "right" is determined by the changing interests of texts, authors, readers and interpreters. Having abandoned the idea of a one dimensional mode of analysis and given up the possibility of grounding or fixing reference in any absolute sense, the paper recommends that a literary text be viewed from different perspectives by making use of both extrinsic and intrinsic evidence.

Hence, the products of literary analysis should be neither exclusively based on intrinsic or extrinsic evidence since both elements co-exist, although one or the other may occasionally predominate. Literary analysis, then, should be considered both as scientific and artistic in nature, aiming, on the one hand, at the description, interpretation and evaluation of literary texts, and, on the other, at the 'Worlding' of critical principles and the establishment of global and systematic procedures. The paper is motivated by a belief that modes of analysis should be globalized or 'Worlded' and that they should not be evaluated by comparison, each providing its own criteria of validation. In this sense, the variety of critical approaches is likely to enhance our ability to deal with literature and all factors related to it.

In brief, this paper seeks to go beyond the tedious and elucidate the importance of all kinds of endeavors to appreciate and understand literary texts. Based on these assumptions, the paper discusses the challenges and rewards of a new interdisciplinary and pluralistic approach to the analysis and teaching of literary texts. By this designation, the paper is not referring to a 'permissive' form of pluralism. Rather, it is referring to a kind of pluralism that is capable of discrimination and selection, of making "right" and "wrong" judgments.

In short, the 'Worlding' or E Pluribus Unum approach is one capable of objectivity and of applying systematic principles and standards of acceptability to disputed cases. Since the present paper is primarily concerned with the pedagogical insights of this research, its focus is restricted to sampling some notions borrowed from three analytical approaches in order to show how they might fruitfully enrich literary analysis. Thus, the paper will first explore the contributions of Conventional Criticism, in which concepts such as intuition, illocution and perlocution will be discussed. Then Literary Stylistics will be introduced, with a special focus on paradigmatic foregrounding and deviation. Finally, an attempt is made to explore the contributions of Literary Pragmatics, where concepts pertaining to implicature, speech acts, text acts and speaker's assumptions will be analyzed. Throughout this discussion, illustrative lines from Shakespeare's Sonnet 66 will be scrutinized.

1. Conventional Criticism

Conventional criticism highlights the importance of the author as a completely autonomous being in full control of his language. The reader simply undergoes the manipulations of the writer. The poem performs because it is anchored in an individual's intention since intentionality is a canonical requirement of speech acts.

To have access to the poet's illocutionary act, the reader needs to know something about the writer's life as an individual. There is no room for the plurality of perlocutionary effects since the author has only one illocutionary act. The "right" interpretation lies in obtaining a match between illocution and perlocution. The Conventional approach is a subjective mode of analysis where feeling, insight, inspiration and intuition constitute the core of literary analysis. Implicit to this idea is that texts contain fixed meanings and that reading is a matter of verifying one's knowledge of the world. Approaching a literary text biographically, conventional critics tend to reduce a literary work to an expression of the author's experiences, or at least to understand a given work by appealing to biographical information and adducing extrinsic evidence that might explain it. Based on such assumptions, conventional criticism appears to be an interpretive pre-supposition rather than an interpretive position.

Approaching Shakespeare's sonnets biographically, conventional critics argue that they are clearly "a record of the feelings and experiences of the man who wrote them" (Johnson, 1962). They also contend that there is direct personal emphasis on and emphatic allusion to the life of the author, which provide "the keys to unlock" (Johnson, 1962) the great secret of true authorship and identity of the various speakers or addressees. Hence, Conventional critics advance the claim that Sonnet 66 is simply a literary exercise which aims to record the poet's life experiences and that Shakespeare seems to speak in his own voice rather than in the ventriloquist mode of the plays where he is distancing himself from the state of affairs he is describing. In a similar vein, Landry Hilton (1963) affirms that Sonnet 66 reflects on the social, religious and moral injustices of the world that the author has grown weary of. He asserts that the sonnet reveals the poet's intimate confessions, anger and disappointment in his personal life and in the society in which he lives, a society where the undeserving win public esteem while the virtuous and needy are neglected and even disgraced. Hence he states:

The opening words signify more than emotional exhaustion, the weariness of frustration. In view of the Sonnet's feeling and tone, "Tired with all these" tells us that the poet is fed up, disgusted with all of the evils which follow, and thus longs for death to bring rest and oblivion. He sees "desert," men who are deserving by virtue of their natural equipment, their fine qualities born poor and humble, forced to beg favors, while those who are intellectually and spiritually less than nothing ("needy nothing") enjoy exceptional prosperity and have the euphoric insolence which often accompanies it. (p.2)

Similarly, Ian Johnston shares the same conventional belief, that Sonnet 66 contains important clues to Shakespeare's life because of "the emotional pressure contained in the sonnet and the fact that some of the poems are about a person, a young man named Will" (2009). He also argues that the dedication to the sonnets and the initials T.T. refer to a young, rich handsome and noble man, with some connection to William Shakespeare. Based on historical speculation, Conventional critics argue that the identity of the poet's dedicatee in Sonnet 66 shifts between two main candidates: William Herbert, third Earl of Pembroke; and Henry Wriothesley, third Earl of Southampton. According to the conventional view, both possibilities are tenable, as both were men of means and of literary interest enough to be patrons to Shakespeare.

It seems clear that Shakespeare, in fact, dedicated other works to each of them: his First Folio to Herbert and his 'Venus and Adonis' to Wriothesley. Following the same conventional line of argumentation, Roy Neil Graves (1995) contends that reiterating the poet's despair and longing for death, coupled with the comprising ten lines (3-12) that begin with "And", aim to parallel describe "the poet's extended double and estranged wife back in Stratford." In addition, Graves continues, Shakespeare's life and historical records show him living apart from his wife Anne during the period when the sonnets were produced.

2. Literary Stylistics:

Literary Stylistics is a critical approach which applies linguistics to literature in the hope of arriving at analyses which are broadly based, rigorous and objective. The pioneers were the Prague and Russian schools, but their approaches have been appropriated and extended by radical theory. The basic premises and criteria of Literary Stylistics are systemacity and comprehensiveness. Its main contribution lies in providing a technical way to decipher the codes of language and relate them to their ideological state. Any text, therefore, is a communicative interaction between its producer and its consumers, within a relevant social and institutional context. The basic concern of the stylistician is to link linguistic facts to meaning, i.e. linguistic description to interpretation. Literary Stylistics is not just a detailed linguistic description of a given text; its objective is to reach beyond the descriptive phase to the interpretative one.

From this we can deduce that literary competence is anchored in linguistic competence i.e. this latter is the only ingredient of the former. Stylisticians admit that there is a "wedding" (Widdowson, 1975) between literary and linguistic methods. Intrinsic reading and intuitive judgment of a text are central to the process of analysis. However, stylisticians argue that, in addition to the sensitivity to language, the technical analysis and the focus on linguistic details can add to our appreciation of a text. In this light, Jakobson (1960), the father of stylisticians, remarks that if "there are some critics who still doubt the competence of linguistics to embrace the field of poetics; [he] privately believe[s] that the poetic incompetence of some bigoted linguists has been mistaken for an inadequacy of the linguistic science itself." "All of us here", he continues, "definitely realize that a linguist deaf to the poetic function of language and a literary scholar indifferent to linguistic problems and unacquainted with linguistic methods are equally flagrant anachronisms" (p. 19).

So far, I have briefly introduced the idea of stylistic analysis, its aims and processes, after giving a general interpretation of the sonnet. I will now restrict myself to linguistic features which attract some degree of foregrounding. In my analysis, I will scrutinize paradigmatic foregrounding through three levels of deviation: semantic, lexical, and grammatical. In so doing, I will try to show how formal stylistic features are used as the basis for inferring the sonnet's meaning and effect.

2.1 Paradigmatic Foregrounding:

Foregrounding is a fundamental concept in stylistic analysis. Referring to the theory of aesthetics and language from the Czech School (Garvin, 1964), Leech interprets foregrounding as "a motivated deviation from linguistic or other socially accepted

norms". Elsewhere, Fowler defines foregrounding as "the violation of rules and conventions, by which a poet transcends the normal communicative resources of the language, and awakens the reader, by freeing him from the grooves of cliché expression to a new perceptivity" (1973, p.75). And according to M. Short, "Foregrounded features are parts of the text which the author consciously or unconsciously is signaling as crucial to our understanding of what he has written." (1989, p.36). Foregrounding is achieved with a variety of means, which are largely grouped under two main types: Deviation and Repetition; or "paradigmatic" and "syntagmatic foregrounding".

a. Semantic Deviation:

Semantics is the study of linguistic meaning. We can study meaning on a number of different levels: Lexical semantics is the study of the meaning of individual words (lexical items) in isolation; sentence semantics is the study of the meaning of a sentence, of the semantic relationships holding among the parts of a sentence; and text (discourse) semantics is the study of the meaning of extended discourse (spoken or written), of the semantic relationship between utterances. Thus, semantic deviation is the unusual, inconsistent or paradoxical meaning relations between words.

The paper deals here with metaphors and the like, areas of language that are in some ways on the borderline between grammar and meaning. Metaphor refers to expressions which transfer a word from one conceptual domain to another to make the phrase non-literal. Non-literariness is a sufficient condition for metaphor only if it "makes a connection between two systems of concepts" (Black, 1962, p. 42). The terms tenor and vehicle that Richards (1936) coined to denote "the two thoughts" or "the systems of concepts" operate in every metaphor. The tenor is something which is present in the given metaphor phrases, while the vehicle is something (word, referent, meaning) which is not present, but which we construct when we interpret the metaphor. This is one mechanism the stylistician uses. He dissects the language, reads between the lines, and then, eventually, comes up with the interpretation. Perhaps the first thing that one notices when looking at the language of Sonnet 66, without troubling about what it is attempting to convey, is the preponderance of abstract phrases in Subject-Actor position which refers either to the poet's message or deeds.

For example, one notices in the third line, 'And needy nothing trimmed in jollity', that Shakespeare has foregrounded the line by blending two different expressions together. "Nothing trimmed" is an odd expression. Nothing cannot literally have trimmed in jollity as it is an abstract noun. In addition, "nothing" is here modified by needy, which creates another paradox. Someone who is needy means someone who is without what is needed for life. The expression is a pun that allows two possible interpretations. Either the expression means that it is a nonentity, who makes his way in jollity at the expense of those who are deserving, or the paradox is in the person himself (i.e., the person at the same time needs everything and nothing), and second, he is trimmed in jollity undeservingly. Furthermore, it appears that the phrase suggests the opposite of what is intended, for when in a list of socially responsible types whom society has downtrodden, one automatically accepts it as being of the correct type to fit the general flow of the poem (i.e. one of the better and praiseworthy

examples). Accordingly, one can deduce that semantic deviation occurs at three levels: between items, between parts of a sentence and between utterances.

In the fifth line, 'And gilded honour shamefully misplaced,' another example of semantic deviation can be identified since "gilded honour" is abstract and cannot literally be misplaced. "To misplace" is a verb especially used in the passive voice and means to put something concrete in the wrong place. Its "Logical Subject," the doer of the action, is left out and "gilded honor" is the "Psychological Subject", the concern of the message. Presumably, gilded honor refers to concrete equipment, and as it appears both as subject and theme to misplace, it appears that the paraphernalia of office and authority, the gold regalia of office, is consciously and shamefully misplaced. In addition, honor is here modified by "gilded," which creates another metaphor. Honor cannot literally be covered by gold, as it is an abstract noun: to have honour means to have high public regard for some body or something. The easiest way to normalize the phrase would be to interpret it as elliptical for a phrase like "the pomp and the gold regalia of office are shamefully misplaced". The ellipsis allows a number of possible interpretations. The phrase could refer to valuable articles of wealthy people or awards and titles of the upper classes. The first possibility, which seems to me to be the most likely and which fits best with the true meaning of the word "honor" is that it suggests the notion of office and helps us to view ill-treated and unworthiness well rewarded.

Again in line seven "And right perfection wrongfully disgraced," a similar process is found to heighten the effect of conversion in the sonnet. "Perfection" cannot literally have disgraced as it is an abstract noun and "disgraced" requires a human Subject. The easiest way to resolve the paradox would appear to be to interpret the line as personified for a phrase like "right perfectionist wrongfully disgraced". The honest perfect person sinfully falls from favor and unjustly loses his position of power and honor.

Nevertheless, even though the tentative analysis of semantic deviations seems to be thorough, it needs to be supported by other levels of stylistic analysis that offer contributions to the above analysis. Lexical deviation is one of them.

b. Lexical Deviation:

Lexical deviation refers to the deviation from norms outside language at the lexical level whereby foregrounding is produced. The most obvious way to achieve foregrounding at the lexical level is called "functional conversion" or the process of converting and subverting a word from one grammatical class to another. In the sonnet, Shakespeare takes the noun "strumpet" and uses it as a verb, in spite of the fact that the English language already has a verb synonymous with the word "Strumpet" which is "to prostitute". Obviously, "strumpeted" here is a verb, because it has its subject "maiden virtue" which is personified as a maiden and innocent lady, and it is modified by an adverb "rudely" that adds information about the action of the verb and it is coordinated with a parallel construction of elliptical coordinate clauses in the passive voice. So, why does Shakespeare bother to coin new verbs when the language has already provided him with one? The prototypical view of poetry tends to allow the poet to take some freedom from the rules; i.e. poetic license. Here, Shakespeare condemns sexual abuse and delineates it as rudely done. The notion of sexual violence is worsened by hinting at the notion of publicity. The resemblance of

the word "strumpet" to "trumpet" hints at the possibility of bringing public shame upon the innocent.

Shakespeare also foregrounds through lexical deviation by making a word mean what its denotative and connotative details do not. According to the dictionary definition, the meaning of the word "desert" in line two is a lifeless land with little water and plants. If we consider the connotative details of the item, "desert" holds the notion of abandoning someone or leaving somebody without help or support. Here, Shakespeare uses the word to make it mean "a deserter", as it is preceded by the verb behold which denotes seeing something unusual, and followed by a compound noun "a beggar born", to be the modifier of the unusual thing. So, the oddity here is to see a deserving person who is born in poverty. Because tolerance of the unusual or the deviant use of language is high in poetry, Shakespeare allows himself to use this word and to give it a new meaning. The result of the double meaning is the pun; the worthwhile person is deserted and is seen at the bottom of the social scale. His miserable state is doubled and widened, and the shock of the poet is sharpened.

c. Grammatical deviation:

The number of grammatical rules in English is large, and therefore the foregrounding possibilities via grammatical deviation are also very large. There are many ways in which a poem can deviate from grammatical norms. One of the striking features in the sonnet is the re-sequencing of phrases inside the clause away from the normal subject-verb-object-adverbial order.

It will be observed that the first line, 'Tired with all these', which is a subordinate clause, is strongly foregrounded. Its subordinating conjunction and its subject are left out. Obviously, the elliptical subject is the speaker as the main clause has its subject "I", and its subordinating conjunction indicates cause as the meaning of the main clause is effect. The next thing we might notice is that the notion of cause is given prominence at the very beginning of the line, in that the elliptical subordinate clause, "tired with all these", is placed in a thematic position. That is to say it has been moved from its normal place in the word order of the sentence and put in an initial position where it acquires the status of the theme of the sentence. This observation may lead us to surmise that the theme of the sonnet as a whole has something to do with tiredness and how the poet can no longer hide and endure the state of fatigue and the causes behind it.

The next thing that one notices, in looking at the language of the sonnet without thinking about what it is attempting to mean, is the preponderance of *antis* initially ten times and preceded by commas. The rule is that the lists of coordinated nouns have the conjunction "and" suppressed between each pair of nouns except the last one. In writing, these deleted *antis* are replaced by commas. Shakespeare breaks the rule and creates a strong foregrounding throughout the sonnet. However, although exaggeration in the use of hypotaxis (i.e linkers) turns out to be a poetic device, we construe it as purposeful. In fact, interpolating the *antis* between each noun helps us to notice the clauses individually. This gives them roughly equal prominence and enables us to perceive more easily the two pairs of paradoxes between the phrases in each line.

3. Literary Pragmatics:

The term Literary Pragmatics has emerged as a discipline exploring the various ways of applying the analytic tools of Pragmatics to literary criticism (van Dijk, 1976; Pratt, 1977). Pragmatics can offer a number of analytic focal points that are of immediate relevance to the critic's needs. Pragmatics brings systematicity and order to bear on the analysis of inherently tricky issues of intended meanings in literature. Of central concern in Pragmatics is the notion of pragmatic presupposition, where the speaker's assumptions are matched against the hearers'. Also important pragmatic concepts include intentionality behind reference and information structure; implicatures (Grice, 1975); speech acts (Austin, 1975) and text acts (Hatim and Mason, 1990); inferential processes and conversational analysis (Levinson, 1983; McCarthy, 1991) relevant to the analysis of dialogues. Some of these pragmatic concepts will be applied to the analysis of Shakespeare's sonnet 66 with the aim of showing their usefulness as analytic tools.

3.1 Implicature: Using the Gricean Maxims

One way of maximizing efficiency in the interpretation of a sample poetic discourse is to rely on one's knowledge of the world. H. P. Grice was the first to systematically study cases in which what a *speaker* means differs from what the *sentence* used by the speaker means. Grice introduced the technical terms *implicate* and *implicature* for the case in which what the speaker meant, implied, or suggested is distinct from what the speaker said. In addition to identifying and classifying the phenomenon of implicature, Grice developed a theory designed to explain and predict conversational implicatures. He also sought to describe how such implicatures are understood. He postulated a general "Cooperative Principle," and four "maxims" specifying how to be cooperative: *the Maxims of Quality, Quantity, Relation and Manner*.

The Gricean maxims (Grice, 1975) provide a useful framework for the exploration of the bearing of that knowledge on daily conversations. One of the pioneers in applying these maxims to literary analysis is Pratt (1977). For instance, the Maxim of Quality instructs speakers to avoid saying that which they believe to be false or that which runs contrary to their common knowledge. If the speaker flouts this principle, a conversational implicature (or implied meaning) will be assumed by the hearer.

A close examination of Shakespeare's sonnet 66 from the perspective of Grice's maxims, furthermore, can bring to light some valuable considerations. The addresser, or the I narrator's voice, flouts the maxims of quantity and relevance by repeating the same idea several times. This is done in order to create an effect of tiredness from repeated suffering. The maxim of relevance is flouted because an idea that has already been communicated to the reader is repeated, as if it were new information (Frossard, 2000). In its turn, the maxim of quantity is flouted through the prolixity of the repetition. In other words, what could be said in two lines takes up twelve lines. Besides, if the reader does not believe the addresser's words on the superficial level, and does not take the couplet literally, one can deduce that the poetic voice flouts the maxim of quality, as the couplet does not convey something truthful or literal.

3.2 Speech Acts and Text Acts:

A major concern in Pragmatics is the performativity of language, whether at the individual utterances level, namely the concept of "speech acts" (Austin, 1975; Searle, 1969), or at the textual level, namely the concept of "text acts" (Hatim and Mason, 1990) or "global acts" (Porter, 1986). However, the performativity of literature has been a very polemical issue as some critics fear that such an approach would deny literature its specificity and difference from daily linguistic transactions (Tan, 1990). For such critics, the aim of literature is saying and not doing. In contrast, the present paper argues that emphasising the performativity of literature should not necessarily lead to denying its uniqueness and "literariness". The argument advanced by Pragmatics is that the more people expect literature to say and not to do, the more responsive readers will be to the values and ideological assumptions expressed therein. This means that perlocution is more likely to be at the mercy of illocution when this illocution is unsuspected. In other words, the messages of a literary text tend to be taken for granted and thus rise above worldly performativity.

Based on this account, it seems clear that, in addition to praising the beauty of the young man, Shakespeare's Sonnet 66 also inevitably does something. Shakespeare's sonnet has to be taken as a political process whereby the poet seeks to "re-write the already scripted social relationship of power and inequality [and] negotiate the unequal political and social relationship" (Schalkwyk, 2002, p.12) between Shakespeare and powerful aristocrats. Basing his analysis of Shakespeare's sonnets on the philosophy of Ludwig Wittengstein, Schalkwyk argues that the language of the sonnets is primarily performative through speech acts rather than descriptive. He offers a fresh perspective on Shakespeare's sonnets by reading them as speech acts and supports the mode of criticism which has the tendency to read the sonnets primarily for clues about Shakespeare's life.

Similarly, Schalkwyk (2002) stipulates that the sonnets "work as a form of action" (Wittengstein, 1953) and "are deeply informed by the player-poet's peculiar self-consciousness about his lowly social status. What also verifies and reflects the logic of autobiography and the view that the Sonnets not only say but also do, perform and act, according to Schalkwyk, is deliberate omission of names and the language used as performative or illocutionary purposes. Accordingly, language operates as a "transformative power within certain utterances or speech acts" aiming to "transform a situation, to make something so merely in saying something" (p.12).

Instead of a Conclusion!

The above discussion has aimed to show that, regardless of the faults or incompleteness of the critical schools presented in the paper, there is something of value to be retrieved from each of them, and that they complement each other in the analysis of Shakespeare's sonnet 66, and that literary pedagogy means to re-engage in controversies. The E Pluribus Unum concept this paper advocates, accordingly, is neither a final prescription nor a fixed paradigm that has to be followed. It is rather a spirit, an argument and a struggle to unravel a vexing tangle in literary pedagogy. Nor can the proposed argument be easily applied like an ointment because no one can claim to understand everything or to have a latchkey to the "correct" meaning of a literary text. The paper calls upon scholars and academics to opt for an interdisciplinary, comprehensive and systematic mode of analysis which pays equal

attention to both 'intrinsic' and 'extrinsic' evidence in the analysis of a literary text. It maintains the idea that to struggle with literary pedagogy is to entertain the possibility that it might contain defects, to scramble for counterarguments, to test any analytical mode for logical soundness by submitting it to criticism and refutation. In other words, the paper argues for a pedagogical approach that opposes centered modes of analysis and enhances plurality and open-endedness for genuine inquiry, an approach where the only way to go wrong is to show refutation or reservation towards other modes of analysis and to decline to meet the challenge. As Michel de Montaigne puts it:

I like a strong, manly fellowship and familiarity, a friendship that delights in the sharpness and vigor of its intercourse, as does love in bites and scratches that draw blood. It is not vigorous and generous enough if it is not quarrelsome, if it is not civilized and artful, if it fears knocks and moves with constraint. For there can be no discussion without contradiction (1985, p.750).

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Analysis of University Survival Factors in Taiwan

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Abstract

Taiwan's public sector predicts that birth population will experience zero growth in 2018 and negative growth in 2023. It is also estimated that university enrollment will decrease by 23% in the next 10 years and 43% in the next 20 years. As the number of births steadily decreases, student enrollment will also decrease. Universities have exerted considerable effort to promote student attendance, but several universities still experience low enrollment rates.

In this study, life tables and Cox regression are used to examine the management survival of various college departments in universities. The focus of this study is to evaluate the survival function and execute an empirical analysis through university surveys that may provide additional information within the prescribed timeframe. In the study, we divide universities in Taiwan into Northern, Central, Southern, and Eastern blocks, and input variables for years of history, numbers of students and teachers, and higher education evaluations and accreditations to observe their survival and hazard rates. The average survival rate of northern universities is higher than that of southern, central, and eastern ones in terms of life tables. Further, variables, such as region, higher education evaluation and accreditation, professors, and students, exert significant differences in the Cox regression. Conclusions and managerial implications are provided, as well as suggestions for further research.

Keywords: Universities, Survival analysis, Cox regression, Hazard rates

1. INTRODUCTION

Wikipedia (2010) says that the word “university” was first used in the 11th century. “University” and “guild” were used to describe craft. In the 13th century, “university” was used to refer to student groups. A university is an integrated approach to teaching and research conditions involving institutions of higher education. When the national government from China moved to Taiwan in 1949, only one comprehensive university and three with three faculty and 5,379 students were established. In 2002, university statistics showed that Taiwan had 53 national and 101 private universities, with the teacher-student ratio pegged at 20.04%. In 2007, 55 national universities and 109 private universities were listed, with a teacher-student ratio of 20.25%. The Ministry of Education (2010) claims that the current number of Taiwanese universities stands at over 165, and the teacher-student ratio is 21.03%. Numbers of full-time teachers and students in Taiwan are increasing rapidly, especially since the popularization of higher education.

Taiwan’s public sector predicts that the birth rate will experience zero growth in 2018 and negative growth in 2023. It is also estimated that university enrollment will decrease by 23% in the next 10 years and 43% in the next 20 years. The decline in population growth could adversely affect university enrollment. The birth rate is a key survival factor that ensures a university’s enrollment and capital. The management and improvement of universities is a primary concern of Taiwan’s Higher Education Research. While most universities are able to promote quality to gain students, several other universities face low numbers of enrollees. There is a strong competitive environment amongst universities, such that most of them now recruit students through recommendations, applications for admission, independent recruitment activities, and so on, hoping to attract more and more numbers of outstanding students.

More countries have come to pay attention to the quality and performance of universities. For example, Bao-Jin Wang (2006) classified universities from various countries into “elite”, “public”, and even “universal”, claiming that institutions for higher education must compete for limited resources, combined with marketization, globalization, and diversification. By 1980, the quality of education had become an important consideration of every government. Clark (1998) claimed that the emerging concerns of the new generation and higher education are not about stability but about the need to recognize issues and evaluate the performance of universities. Hubert (1984) stated that if universities were not evaluated on performance based on key factors and targets, no upgrades nor improvements in their quality would occur. Since the main functions of educational management are to apply, observe, and evaluate the main strategies of the institution, performance evaluation is an important part of every university. Such evaluations are essential in improving the quality of university management.

To address the issues faced by universities in the face of low birth rates, the national government, as well as several other organizations, has begun to study university performance and how they symbolize student in Taiwan. Previous studies on universities usually involved only quality and performance – very few have examined the real reasons behind the poor performance

of schools. Most studies on survival analysis examined the utilization of health, the elderly population, hotel rates, and so on. To the best of our knowledge, no study has yet utilized survival analysis to study the survival rate of universities. In this study, we use life tables and Cox regression to examine the management survival analysis of various college departments in universities. We employ survival functions, hazard rates, and empirical analyses to evaluate universities' survival rates. The results of this study will provide more information regarding university lifetimes.

2. METHODOLOGY

We can define the survival time of an event from the time it occurs until it ceases (Wen-Tong, 2007). Survival analysis is used to research or analyze samples based on some period of time (Chien-Fu, 2008). It is usually applied in medical research, the time points of which could be, for example, the time a patient enters a study, the time a patient's diagnosis is confirmed, the number of days after surgery, or the number of days from a cure until death. However, not all students are usually enrolled in such studies so the available data are often limited. In other words, survival analysis is studies the failures of events. Greene (2000) explains that analysis mainly discusses times and events. It refers to an individual event, usually at the beginning to the follow-up event, occurring at a particular time interval (e.g., years, months, weeks, or even days). Time (e.g., age) can also be referred to as an individual event. For events, survival analysis is applied using statistical methods and is used in the medical or epidemiological fields. The events examined include death, disease, relapse, recovery, and so on. This type of analysis has also been recently used in different fields.

Hill and Lewicki (2007) explain that life tables are one of the oldest methods for analyzing survival (failure time) data (e.g., see Berkson & Gage, 1950; Cutler & Ederer, 1958; Gehan, 1969). This table can be thought of as an "enhanced" frequency distribution table. The distribution of survival times is divided into a certain number of intervals. For each interval, we can then compute the number and proportion of cases or objects that entered the respective interval "alive," the number and proportion of cases that failed in the respective interval (i.e., number of terminal events, or number of cases that "died"), and the number of cases that were lost or censored in the respective interval. Based on those numbers and proportions, several additional statistics can be described:

The Probability Density is defined as the estimated probability of failure in the individual interval, computed per unit of time, that is:

$$F_i = (P_i - P_{i+1}) / h_i$$

where F_i is the respective probability density in the i^{th} interval, P_i is the estimated cumulative proportion surviving at the beginning of the i^{th} interval (at the end of interval $i-1$), P_{i+1} is the cumulative proportion surviving at the end of the i^{th} interval, and h_i is the width of the respective interval.

The Cox Regression model, proposed by Cox (1972) and also called the Proportional Hazard

Model, is an important model for survival analysis. It can analyze a variety of independent variables on survival time, and predict the survival rates by hazard factors in the model. In addition, it is not dependent on specific assumptions to evaluate each parameter distribution. Thus, we can say that Cox regression is a semi-parameter regression model. When the survival time is continuously distributed and the hazard rates interaction of covariance is ignored, we can apply the formula as follows:

$$h(t,X) = h_0(t) \exp(\beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)$$

where $h(t,X)$ is the individual covariance X in the time's hazard rates, $h_0(t)$ is a risk factor, which we assume is proportional to $h(t,X)$, and β_i is the partial regression coefficient estimated from the parameters of the sample when other covariance parameters are unchanged. When X_i changes by one unit, the risk rate of β_i also changes by one unit. That is to say, when $\beta_i > 0$, the factors involved are hazard factors, and when $\beta_i < 0$, the factors are protected. When $\beta_i = 0$, the factors are unrelated. The term X represents the covariance, which can take level or qualitative data. According to Hill and Lewicki (2007), the proportional hazard model (Cox, 1972) is the most general of the regression models because it does not make any assumptions about the nature or shape of the underlying survival distribution. The model assumes that the underlying hazard rate (rather than survival time) is a function of the independent variables (covariates); thus, in a sense, Cox's regression model may be considered to be a nonparametric method. The model can be expressed as:

$$h(t,z) = h_0(t) * \exp(b'z)$$

In the above expression, $h(t,z)$ is the hazard rate, contingent on a particular covariate vector z , $h_0(t)$ is referred to as the baseline hazard, that is, it is the hazard rate when the values for all independent variables (i.e., in z) are equal to zero, and b is the vector of regression coefficients.

In this study, we used life tables and Cox regression to examine the management survival of various college departments in universities. Hill and Lewicki (2007) defined reliable estimates of three major functions (survival, probability density, and hazard) and their standard errors at each time interval. The minimum recommended sample size is 30. We set the value of 0 as "died", and the value of 1 as "lived". The focus of this study is to evaluate the survival function and execute an empirical analysis through university surveys that may provide additional information within the prescribed timeframe. We divided 223 universities in Taiwan into Northern, Central, Southern, and Eastern blocks, and input variables for years of history, numbers of students and teachers, and higher education evaluations and accreditations to observe their survival and hazard rates.

3. RESULTS

The results of the descriptive statistics analysis are displayed in Table 1. The maximum survival time of universities in the North is 59 years, while the minimum time is 1 year. The maximum survival time of Central universities is 49 years, while the minimum time is 1 year. The maximum survival time of Southern universities is 50 years, while their minimum is 1 year. Finally, the maximum survival time of Eastern universities is 16 years, and their minimum is 7 years. Table 1 also shows that the average survival times are 26.14, 13.13, 12, and 16.2 years for Northern, Central, Southern, and Eastern universities and technological universities, respectively.

Table 1. Descriptive Statistics Data

Group label	Min Survival Time (Year)	Max Survival Time (Year)	Mean Survival Time (Year)
Northern	1	59	26.14
Central	1	49	13.13
Southern	2	55	12.00
Eastern	7	16	16.20

The life table estimates of the Wilcoxon (Gehan) statistical data are displayed in Table 2. A p -value < 0.05 indicates that the data has statistical significance. Table 2 shows p -values $= 0.0001 < 0.05$ with an average of 50.42% for Northern universities. This is greater than those of Southern universities, with an average of 20.93%, Central universities, with an average of 13.21%, and Eastern universities, with an average of 12.50%. This shows us that the survival years are different between the four groups.

Table 2. Comparison of Survival Experience using the Wilcoxon (Gehan) Statistic

Comparison of survival experience using the Wilcoxon (Gehan) statistic

Overall comparison statistic = 20.666 D.F. , Prob. = 0.0001

Group label	Total N	Uncen	Cen	Pct Cen	Mean Score
Northern	119	59	60	50.42	29.4790
Central	53	46	7	13.21	-23.8679
Southern	43	34	9	20.93	-44.2326
Eastern	8	7	1	12.50	-42.6250

Distinguishing the time points will allow us to study the effects of the years of operation of universities and technological universities. Hill and Lewicki (2007) defined survival time as the

time at which the cumulative survival function is equal to 0.5. Other percentiles (25th and 75th percentiles) of the cumulative survival function can be computed accordingly. We can see the survival function of each university block in Figure 1. Northern universities have an above average 50% survival time from 0 to 26 years, compared to 0 to 26 years for Eastern universities, 0 to 13 years for Central universities, and 0 to 12 years for Southern universities. This gives a p -value=0.0001, which is statistically very small. Using this to describe the survival rate of universities in the four areas will prove to be very significant.

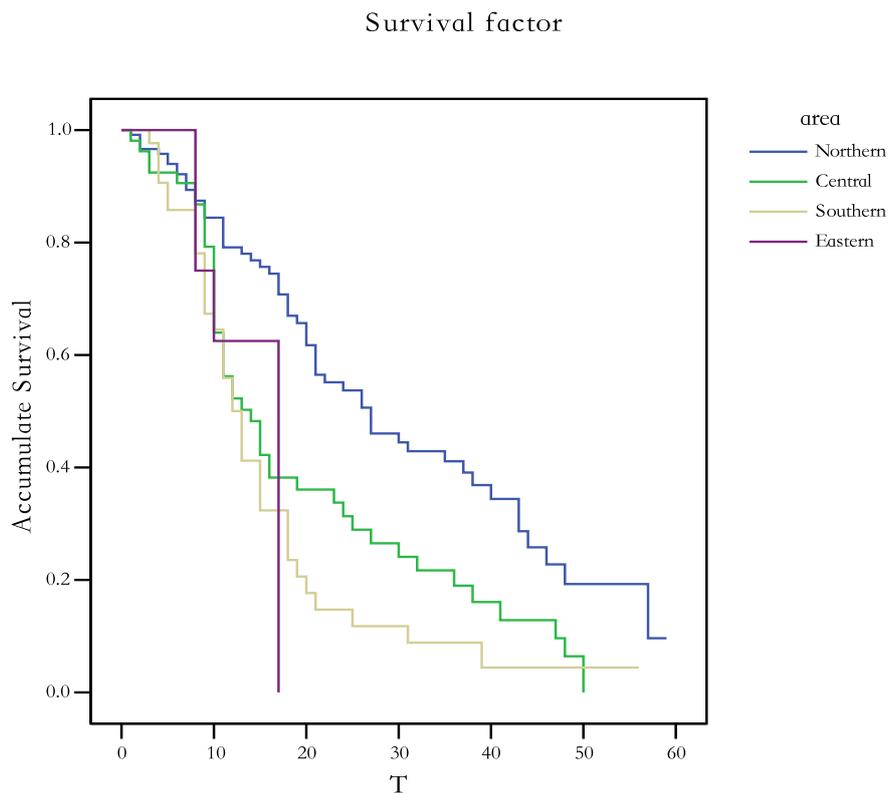


Fig. 1. Survival functions of each of the university blocks

We used the Cox Proportional Hazard Model to analyze the function, and explain variables including area (Northern, Central, Southern, and Eastern), number of professors (not more than 5 called 1, more than 5 called 2), number of students (not more than 50 called 1, more than 50 called 2), and level of higher education evaluation and accreditation (4 is accredited, 3 is conditionally accredited, 2 is not accredited, 1 is observed, 0 is failed). The results of the empirical analysis are displayed in Table 3. In Table 3, we can determine that the outcome of the model is feasible (χ^2 is 17.1528, p -value=0.00181). The four explanatory variables of parameter estimates were -0.398716, -4040521, 1.125551, and -0.331997, and the exponent estimates were 0.671181, 0.667296, 3.081914, and 0.717490. Because the Cox Proportional Hazard Model explains the variables in hazard rates, the significance of the symbols is opposite to the general

regression. In other words, if the coefficients are positive, the variables are danger variables. When the variables increase by one unit, a corresponding relative risk is gained as well and vice versa. Table 3 shows the Area and accreditation are obvious and there are negative obvious, which stand for the Area and Accreditation are main factors to effect universities survival rates. In this study, we can determine that the regional distribution and results of higher education evaluation and accreditation significantly affect university survival times. The effects of numbers of professors and students are minimal.

Table 3. Analysis of empirical Cox Proportional Hazard Model

Group Label	Beta	Standard Error	T-value	Exponent Beta	Wald Statistic	P
Areas	-0.39871	0.17774	-2.2432	0.67118	5.03206	0.02488*
Prof.	-0.40452	0.25656	-1.5766	0.66729	2.48596	0.11487
Students	1.25551	0.71757	1.5685	3.08191	2.46034	0.11676
Accreditation	-0.33199	0.13356	-2.4856	0.71749	6.17834	0.01293*

4. CONCLUSION

Survival analysis is usually applied in medical research, but various industries are now applying it as well. No studies have yet utilized survival analysis in education. This is the focus of this study. Survival analysis is used to determine educational management in universities in Taiwan. The results of this study may help universities improve both their management and organization. This study has three main conclusions:

1. The average number of survival years for universities in the four areas studied is not very high. This is because the study treats mergers and name changes as the death of a department. The high occurrence of name changes and mergers greatly affects the computation for total average survival years.
2. There is a difference in the survival rates among Northern, Central, Southern and Eastern universities. In terms of survival times, universities in Taiwan follow the trend: Northern>Eastern>Central>Southern. The reason on Northern's average survival years is high because there are many schools, long history, few combine survival years. And the factor of Eastern are they established less schools, and the information shows they have no the problem on combine survival years, so we can say the empirical analysis proves the Eastern is better than Central and Southern. On the other hand, the averages 50% of life table in table 2, we can founded the Northern>Southern>Central>Eastern, the factors bigger than Central is because the Southern combine survival years is too small, so the died rates is small, too. So the 50% life table cycles are increase.
3. Of the variables studied, only area and accreditation were found to significantly affect university survival rates. The numbers of professors and students did not appear to be

particularly important. We hypothesized that universities with more full-time professors and less part-time ones will survive for longer periods of time compared to universities with less numbers of full-time professors and more part-time ones. The results do not appear to support this hypothesis. The number of students in a university is also not indicative of its quality, especially since some universities may have student quotas.

Finally, most studies about universities are measure their quality and performance. This study uses survival functions to analyze the difference among the four areas universities with the aim of providing college management with an understanding of the life cycle and hazard rates to recognize the importance of survival rates to draw up strategies to promote the competitiveness of their college.

5. LIMITATIONS

First, given that the study only used life tables for survival analysis to determine the survival and hazard rates, it did not discuss the cumulative survival rates of the universities in the four areas. Future studies could consider using the Kaplan-Meier model to determine other differences between universities.

Second, the study investigates universities and years of establishment, merger years, and renamed variables, while the Cox Proportional Hazard Model investigates areas, numbers of professors and students, and levels of higher education evaluation and accreditation. These are very few variables for this study. Future studies could input other variables for further analysis. Other management departments of universities could also be studied in the future. The results of this study can provide good reference materials for the effective management of universities.

Third, Paul Bracken (2006) defines Net Assessment is one of the principal frameworks for analyzing the national security strategy of the United States. It has been used by the department of defense for a long time. Another say, the net assessment—what it is and what it can do. So, we want to application the Net Assessment to discuss the strategy of universities after Life table and Cox regression analysis, hope to be a certain program to help universities increase their survival times.

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Ideological variations in conceptual metaphors in press coverage on the US health care reform bill

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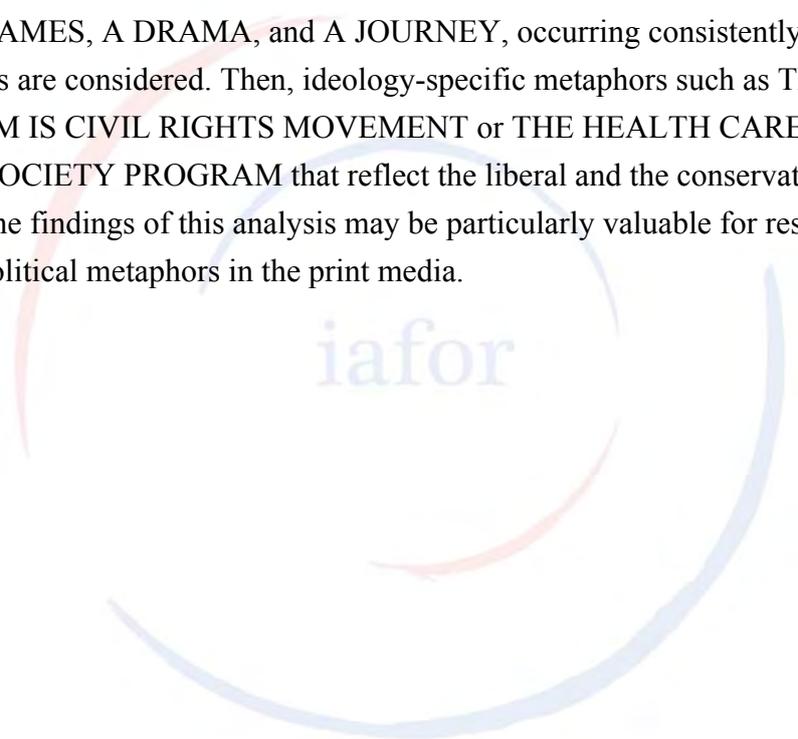
Linguistics

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Abstract

The systematic use of metaphor in news coverage not only reflects ideology but also shapes public opinion on sociopolitical issues. Since Lakoff and Johnson (1980) highlighted the importance of metaphor in conveying ideology, to date I have found several published research on the ideological use of metaphor. The present study addresses this topic with its focus on the use of metaphors to express ideological stance on US health care reform in the print media.

Specifically the study analyzes ideological metaphors in liberal and conservative newspapers. Given that the US health care reform bill triggered a highly partisan public debate, this topic provides a particularly rich site of investigation. First, four conceptual metaphors, THE PASSING OF HEALTH CARE LEGISLATION IS A WAR OR A FIGHT, SPORTS OR GAMES, A DRAMA, and A JOURNEY, occurring consistently throughout both newspapers are considered. Then, ideology-specific metaphors such as THE HEALTH CARE REFORM IS CIVIL RIGHTS MOVEMENT or THE HEALTH CARE REFORM IS THE GREAT SOCIETY PROGRAM that reflect the liberal and the conservative discourse are analyzed. The findings of this analysis may be particularly valuable for research on the realization of political metaphors in the print media.

The logo for the International Association for Frontiers of Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a red one on the left and a blue one on the right, which together form a partial circle around the text.

Ideological variations in conceptual metaphors in press coverage on the US health care reform bill

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1. Introduction

This paper highlights the presence of metaphorical realizations in press coverage dealing with the US health care reform bill and seeks out the metaphoric representations of two opposing ideologies between the liberal and the conservative press. This is accomplished by systematic analysis of the news reports and other columns on the US health care reform bill published in two politically distinct newspapers, the *New York Times*(NYT), and the *Wall Street Journal*(WSJ). The extracts are limited to the news articles from March 21, 2010 to March 24, 2010, around the time President Obama signed the legislation after a long and contentious political debate. These two newspapers have been selected because they are all widely read and each one is representative of two opposing ideological tendencies: NYT reflect a liberal orientation in their respective countries, while WSJ adopt a conservative perspective.

On the basis of these resources, this study aims to identify conceptual metaphors that conceptualize the US health care reform bill legislation, then to carry out analysis of the ideology embedded in the metaphors used in liberal and conservative news reports.

2. Background

2.1 Health care system in the US

For decades, a series of Democratic presidents have failed to reform the US health care system. After a year-long heated debate between Republicans and Democrats, President Obama signed the legislation on March 23, 2010, to overhaul the nation's health care system and guarantee access to medical insurance for tens of millions of Americans. The legislation, effective on September 23, 2010, extends healthcare coverage to 32 million Americans now without insurance and mandates that almost every American must carry health insurance. To help people secure coverage, the legislation expands Medicaid, the federal-state health program for the poor, and provides subsidies to families making no more than \$88,000 a year. However, Republicans characterized the legislation as unconstitutional and as an aggressive government takeover of the health care system that limits an individual's freedom. They denounced the measure, saying that it would increase the deficit tremendously and damage the health care system. Republicans failed to cast a single 'yes' vote for the health care reform bill and assert that they will continue to attempt to repeal the bill, especially if they gain control of Congress in the November 2010 midterm elections.

2.2 Contrastive ideology in the liberals and the conservatives

Ideology is taken as “a set of norms, values, interests, beliefs, and attitudes that inform the way reality is interpreted with respect to the issue in question” (Herrera-Soler, 2006, p.3). The conservatives and liberal ideologies reflect fundamentally different worldviews and conceptual systems, which clearly impact their governing policies. The conservatives believe in personal responsibility, limited government, free markets, individual liberty, and a strong national defense. They also believe that the role of government should be to provide people the freedom necessary to pursue their own goals. Therefore, conservative policies generally emphasize the empowerment of the individual to solve their own problems. On the contrary, the liberals believe in governmental action to achieve equal opportunity and equality for all, and the duty of the nation to alleviate social ills and to protect civil liberties and individual and human rights. They believe the role of government should be to guarantee that no one is in need. Therefore, liberal policies generally emphasize the need for the government to solve people's problems.

Lakoff (1996) introduced two conceptual models underlying these two opposing political ideologies, which are associated with fundamentally different views of the family and morality. At the center of the conservative worldview is a Strict Father model. In this model, once children are mature, they are on their own and must depend on their acquired self-discipline to survive. Their self-reliance gives them authority over their own destinies, and parents are not to interfere in their lives. Accordingly, the conservatives promote self-discipline, individual responsibility, and self-reliance. In contrast, the liberal worldview centers on a Nurturing Parent model. In this view, love, empathy, and nurturing are primary, and support and protection are viewed as part of this process. Thus, strong and responsible parents are required and fairness in helping those who cannot help themselves is promoted.

The differences in the two parenting models help make sense of the polarized political perspectives on the US health care reform bill. Republicans oppose nationalized compulsory insurance based on the principle of small government and individual responsibility, whereas Democrats support equality of access to health care for all Americans regardless of their wealth based on the principle of big government and social responsibility. In Korea, the ruling party, which is conservative, is about to undertake health care reform in the direction of developing the private sector through competition between providers, while the liberal political groups are worried about possible health care deprivation for the poor. These two models structure political stances and conceptual systems, which, in turn, affect topic choice, word choice, and discourse forms deployed by each political party in their texts dealing with the reform.

2.3 Metaphors in political discourse

Lakoff and Johnson (1980) define metaphor as “a conceptual mapping from one semantic

source domain to a different semantic target domain.” The source domains are the conceptual domain from which people draw metaphorical expressions, often those things humans can easily think about, the parts of the physical world which are handy and familiar. The target domains are the conceptual domain that people try to understand, hidden from the senses or otherwise unknown. People borrow the ‘embodied’ conceptual structure of the familiar to make sense of the target domains (Lakoff, 1987). For example, in a conceptual metaphor LOVE IS A JOURNEY, LOVE is a target domain and JOURNEY is a source domain. Between the source and target domain, there are basic, and essential, conceptual correspondences, which is called mapping. The LOVE IS JOURNEY metaphor is followed by mappings that travelers correspond to lovers and vehicle to the love relationship. There are also additional mappings beyond the basic correspondences, which are called entailments. Under the same metaphor, if the vehicle as love relationships breaks down, it can be said that we try to fix the vehicle, or we stay in the vehicle and do nothing. The sum total of structural components of this source conceptual scheme is transferred to the target domain and helps understand the target much more easily and deeply.

Metaphor in political discourse is a crucial means of constructing public world views as well as conceptualizing political issues (Charteris-Black, 2004). Also it plays an important role of creating particular discourses that reflect political ideologies. Santa Ana (1999) shows that the IMMIGRANTS ARE ANIMALS metaphor that appears in the accounts published in *LA Times* constructs racism in public discourse. He found that a series of news articles viewed immigrants as animals to be lured, pitted, or baited, which in turn, promoted the anti-immigrant and racist public point of views. Charteris-Black (2004) also offers the example of the POLITICS IS RELIGION metaphor in the 1997 Labour manifesto and other New Labour speeches. The metaphoric expressions in those speeches such as crusade, dogma, and mission transport the secular domain to the sacred domain and result in shaping the public perspectives of a political need into an ethical value. As such, by conceptualizing social and political issues in accordance with each political group’s ideologies and instilling its worldview in people’s minds, the metaphors in political discourse become powerful tools for social control (Fairclough, 1989; Santa Ana, 1999).

3. Conceptual metaphors in the press coverage about the US health care reform bill

Deborah Tannen (1998, p.14) stresses the power of metaphoric language, saying that “it shapes the way we think and even what we see”. Since media is immensely accessible to the public, the political metaphors in press reporting are much more influential to construct the public perspective for a certain issue.

Four conceptual metaphors on the US health care reform bill are found in both newspapers. They focus on the process of passing the appropriate legislation, rather than the health care bill itself.

3.1 PASSING HEALTH CARE LEGISLATION IS WAR OR A FIGHT

PASSING HEALTH CARE LEGISLATION IS WAR OR A FIGHT underlies most of the metaphoric expressions in the news articles which convey confrontation between Republicans and Democrats. This metaphorical concept is pervasive in both newspapers.

- (1) The final *battle* on the House floor exposed again the divisions that have riven Congress and the nation over the past year. (WSJ, 03/24)
- (2) After decades of failed attempts by a string of Democratic presidents and a year of bitter partisan *combat*. (NYT, 03/24)

War, fight, battle, and combat represent the intensity of the political debate over the bill. When passing the health care legislation is conceptualized as war or battles an array of mappings emerges, including the following: *armies* which gain or lose ground correspond to two political parties; *warriors* who *defend* their positions and *attack* those of the adversary are politicians, *the commander in chiefs* are political leaders in each party; different *strategies* or *weapons* used by *the army* are their ideas and policies; *the battle field* where pro- or anti-health care reformers do their best striving for victory is the House, media or demonstrations. (Lakoff and Johnson, 1980, p.61; Herrera-Soler, 2006, p.3). The war metaphor and mappings enhance the fierce, ferocious, and even violent aspect of the debate or argument over the health care bill and in turn, lead to form a public perspective of the bill into something very controversial, polarized, and even problematic issue. Here are some phrases found in news articles that correspond to each mapping of the conceptual metaphor PASSING HEALTH CARE LEGISLATION IS WAR OR A FIGHT.

Table 1: PASSING HEALTH CARE LEGISLATION IS WAR OR A FIGHT mapping and examples

two armies (troops) at war → two political parties, Democrats and Republicans	(3) Democrats <i>trooped</i> into a crowded television studio. (NYT, 03/21)
tussle, brawl, fight, battle, combat → Political debate over the health care bill	(4) President Barack Obama signed into law Tuesday a sweeping overhaul of the U.S. health-care system, as the yearlong political <i>brawl</i> over the measure entered a new phase that might only be settled in this fall's elections. (WSJ, 03/24)

attacking, flak or barraging → criticizing severely	(5) ... whose office has been <i>barraged</i> all week with phone calls and emails (WSJ, 03/21)
weapons → ideas or policies to repeal the bill	(6) The Republicans have said they will try to block the measure, or at least use procedural <i>weapons</i> to punch as many holes in it as possible by striking out key provisions. (NYT, 03/21)

When passing health care legislation is conceptualized as war and the members of each political party correspond to warriors, in the US news reports, the expressions like (7) and (8) can be generated. That is, one party can be *massacred* by the other party with a heavy defeat at the polls and a disastrous defeat in the election can be connected to a *bloodbath*. Also, as in (9) and (10), ‘sweep’ is commonly used in the US news reports, too, under the cleaning house metaphor, not under the war metaphor.

(7) Democrats would be *massacred* at the polls in November. (NYT, 03/21)

(8) If they're wrong, Mr. Obama's party could face a disastrous replay of the 1994 *bloodbath* when Republicans seized control of the House. (NYT, 03/23)

(9) Even if they *sweep* the House and Senate, President Obama could still veto any repeal bill with little chance of being overridden. (WSJ, 03/24)

(10) The bill is the most *sweeping* piece of federal legislation since Medicare was passed in 1965. (NYT, 03/23)

3.2 PASSING HEALTH CARE LEGISLATION IS SPORTS OR GAMES

The health care legislation process is also conceptualized as a sport and extended to a game and to gambling. The sports reflected in the metaphor are not for fun, but for competition, which is a milder version of fight. Actually, as Charteris-Black (2004) points out, the war metaphors are frequently used in sports reporting and the sports metaphors in war reporting. He suggests several shared features of the war and sport domains: territorial control, physical and mental strength and training, use of technology, newsworthiness in the media (p.113). Therefore, as with war metaphors, a sports metaphor, PASSING HEALTH CARE LEGISLATION IS SPORTS COMPETITION, also entails a concept of the bitter conflict between the two parties.

While this metaphor occurs consistently in both news articles, in terms of sport events, some ideological variations are found. While in (11), the liberal press, NYT, conceptualizes the

legislation process as a *marathon* and in (12), the conservative press, WSJ, sees it as a *sprint* which is a. From the perspective of the winner (i.e., the Democrats), the process is seen as lengthy and tough, while for the loser it is fleeting and insufficient. ‘*Hurdles*’ in (13) and ‘*hoop*’ in (14) that Democrats had to jump over and through respectively emphasize the great difficulties they and Obama overcame, which reflects the NYT’s voice as a liberal newspaper. ‘*A second round*’, which is from the sport of boxing in (15) implies the loser’s (i.e., the Republicans) determination or wish for the next chance.

From (16), the entities of the source domain change slightly. In (16), ‘a *roller-coaster*’ describes a sudden change that turns the riders upside down. It is neither a war nor a sport. It is for fun as a popular amusement ride. Thus, this metaphor is more likely to be used by a liberal newspaper supporting the winner, Democrats than a conservative one. However, for the conservative press blaming the liberal party’s unjust practices on their failure, the opponents’ strategies and efforts become mere *gambits* in (16), which are moves in a game rather than strategies for a full-scale sport. In (17), since Democrats violate the fair play spirit, the game becomes a gamble and they play with *chips* that correspond to their money or political resources. Table 2 below shows the mappings of this metaphor along with examples.

Table 2: PASSING HEALTHCARE LEGISLATION IS SPORTS OR GAMES mapping and examples

marathon → a long and tiring debate	(11) ... picked up the support of members one by one in <i>marathon</i> talks. (NYT, 03/24)
sprint → a fast running process to the legislation	(12) It was a tumultuous <i>sprint</i> to the finish for legislation ... (WSJ, 3/22)
hurdle, hoop → difficulties and obstacles in the passage of legislation	(13) Mr. Lewis and 223 other Democrats strode onto the House floor to formally record their yes votes to lift the bill past its main procedural <i>hurdle</i> . (NYT, 03/21) (14) ... a reflection of public disgust with both the measure and the procedural <i>hoops</i> Democrats were jumping through to get it to the president’s desk.
riding a roller -coaster → going through many sudden or extreme changes in a short time of legislation passage	(15) He spoke to an audience of nearly 300, including more than 200 Democratic lawmakers who rode a yearlong legislative <i>roller coaster</i> that ended with House passage of the bill Sunday night. (NYT,

	03/24)
a gambit → a political strategy	(16) A typical Pelosi <i>gambit</i> (WSJ, 03/21)
chips → money, political resources	(17) Republicans had a chance to do better on health care in 2005 but put their <i>chips</i> on Social Security and failed. (WSJ, 03/24)

3.3 PASSING HEALTH CARE LEGISLATION IS A DRAMA

Another conceptual metaphor on the legislation passage is related to a drama. The LIFE IS A SHOW and the LIFE IS A PLAY metaphors are commonly used not only in American life and popular culture but also in the Korean media. Lakoff and Turner (1989, as cited in Kövecses, 2005, p.185) provide a list of examples of this metaphor use such as ‘It’s *curtains* for him’, ‘He always *plays* the fool’. Kövecses (2005) found some examples in pop songs, including Elvis Presley’s “*Act one* was when we met”, Frank Sinatra’s “And now I face the final *curtain*.” However, while these metaphors focus on a role-playing self, PASSING HEALTH CARE LEGISLATION IS A DRAMA metaphor centers its focus more on the whole story or script as a series of scenes, which contain many happenings. For example, ‘*Drama*’ and ‘*dramatic*’ in (18), and (19) imply manifold ups and downs until the bill finally passed.

(18) The pivotal moment in the long legislative battle came in a *dramatic* Sunday evening vote (NYT, 03/24)

(19) It was a tumultuous sprint to the finish for legislation that has brought Washington many *dramas* over the last year, ranging from a Christmas Eve Senate vote to the surprise January election of Massachusetts Republican Sen. Scott Brown that upended Democrats' plans. (WSJ, 3/22)

3.4 PASSING HEALTH CARE LEGISLATION IS A JOURNEY

The final metaphorical concept to be considered LIFE IS A JOURNEY metaphor is one of the most common and productive metaphors both in Korean and English. As this metaphor relates to the reform bill, the agent who travels is not a politician but the bill itself, and the difficulties the bill goes through are realized. This metaphor using personification produces the following mappings.

traveler → the Health Care Reform Bill

destination of the journey → legislation of the bill

obstacles along the way → difficulties in the process of health care legislation

a bumpy road → a rough process of health care legislation

(20) Republicans vowed to use every parliamentary device at their disposal to slow the measure, which they said was being *rammed through* the Senate in an unseemly *rush*. (NYT, 03/24)

(21) ... the *road* to its completion is a *bumpy one*. (WSJ, 03/22)

(22) Health Bill's *Bumpy* Final Stage (WSJ, 03/22)

Regardless of the ideological differences, four general conceptual metaphors about passing the US health care reform legislation have been uncovered: WAR or FIGHT, SPORTS, DRAMA, and JOURNEY. Next, the ideological differences in metaphor use are examined.

4. Liberal vs. Conservative texts

As metaphors in political discourse reflect a political group's ideology, the metaphors in press reporting also reveal its own ideology, which affects the perspective it takes in reporting on social issues and events. Thus, the same event can be represented in very different ways, which is likely to have differential effects on the opinions of readership.

Both newspapers reveal their ideology explicitly by criticizing the political party that has a contrasting ideology, as is illustrated in the following examples:

(39) Now, Can We Have Health-Care Reform? *ObamaCare* doubles down on a failing system. (WSJ, 03/24)

(40) all the *back-room deals* (WSJ, 03/24)

(41) Democrats ... *victims of vandalism* (NYT, 03/24)

(42) ...if they (Republicans) are seen as inciting an undue level of outrage, *breaching the boundaries of civility* ... (NYT, 03/24)

To evidence the different features in each news report, Lakoff's (2003) Rational Actor model can be drawn on. The Model assumes that it is irrational to act against one's interests and that nations act as if they were 'rational actors' who are individual people trying to maximize their 'gains' and 'assets' and minimize their 'costs' and 'losses'. Given the health care bill debate, what Republicans do is irrational to the liberal media, NYT, and what Democrats do is also irrational to the conservative media, WSJ. Using a metonym '*Obamacare*' in (39), WSJ considers the health care bill not a gain for all Americans but only for Obama and Democrats, which is absurd to the conservative. In (40), Democrats' efforts to pass the legislation are viewed as conducted in an inappropriate hidden process. On the contrary, in (41) and (42), NYT conveys the message that what Democrats do is right and what Republicans do is vandalistic and uncivil.

Moreover, the US newspapers introduce different historical figures to conceptualize the health care legislation process according to their ideology. The following extract is from NYT:

(43) Another Long March in the Name of Change

Forty-five years ago, John Lewis began the third of what became society-shifting *civil rights marches from Selma to Montgomery, Ala.* On Sunday, the anniversary of that famous trek, he joined hands with fellow House Democrats and marched past jeering protesters into the Capitol to remake the nation's health care system. Mr. Lewis said he was not intimidated as he walked to the Capitol with his colleagues, including Ms. Pelosi. In 1965, Mr. Lewis was bloodied and beaten by the police as he marched for civil rights. (NYT, 03/21)

The title "Another Long March" arouses the HEALTH CARE REFORM IS THE LONG MARCH OF MAO TSE- TUNG. The Long March led by Mao is a massive military retreat undertaken by the Red Army of the Chinese Communist Party. This metaphor describes that the health care reform process proved its strength and resilience despite adversity and brought tremendous change in US history as the Long March did in the modern history of China. On the other hand, the rest of the extract evokes the HEALTH CARE REFORM IS CIVIL RIGHTS MOVEMENT metaphor by juxtaposing the civil rights movement in 1960's and health care reform, which leads to the following mappings:

civil rights → health care for all Americans
 civil rights march → Democrats' march to the Capitol
 Martin Luther King Jr. → Barak Obama

Two metaphors and these mappings underlie a great deal of other phrases below repeatedly shown in NYT articles and are used to uphold Democrats' and the bill's righteousness.

(44) Hails Vote on Health Care as Answering '*the Call for History*' (NYT, 03/22)

(45) Past strife and jeers, *another long march in the name of change.* (NYT, 03/22)

(46) Health Care Overhaul becomes *the Law of the Land* (NYT, 03/24)

(47) In health care bill, *a step away from inequality* (NYT, 03/24)

On the contrary, WSJ reveals its political views using a different historical figure and event. The following part of the article brings the Great Society program of Lyndon B. Johnson into the context of health care reform in order to downgrade the bill.

(48) As a piece of social policy, the health bill passed Sunday night by the House of Representatives ranks up there with *the Great Society programs of Lyndon B. Johnson* in ambition and scope. But here's one big difference: The Great Society programs were enacted

in an era when Americans still tended to trust the government to get things done. (WSJ, 03/22)

In this case, WSJ creates HEALTH CARE REFORM IS THE GREAT SOCIETY PROGRAM metaphor. For the conservative, *the Great Society programs* are seen as a social program of big government, which is incompatible with their ideology. Therefore, the health care reform is considered as negatively as *the Great Society programs* to the conservative media. Moreover, to denigrate the bill further, WSJ addresses the difference between the source and target domain, reflects Americans' distrust toward the present government. In this way the health care reform is portrayed as even worse than the Great Society Programs since it has no support from the citizenry.

WSJ introduces another figure, Tony Blair in (49).

(49) Much like Obama does to his critics, *Blair* drove his enemies to distraction. Some he drove almost demented. The resulting anger often *clouded* judgments. (WSJ, 3/23)

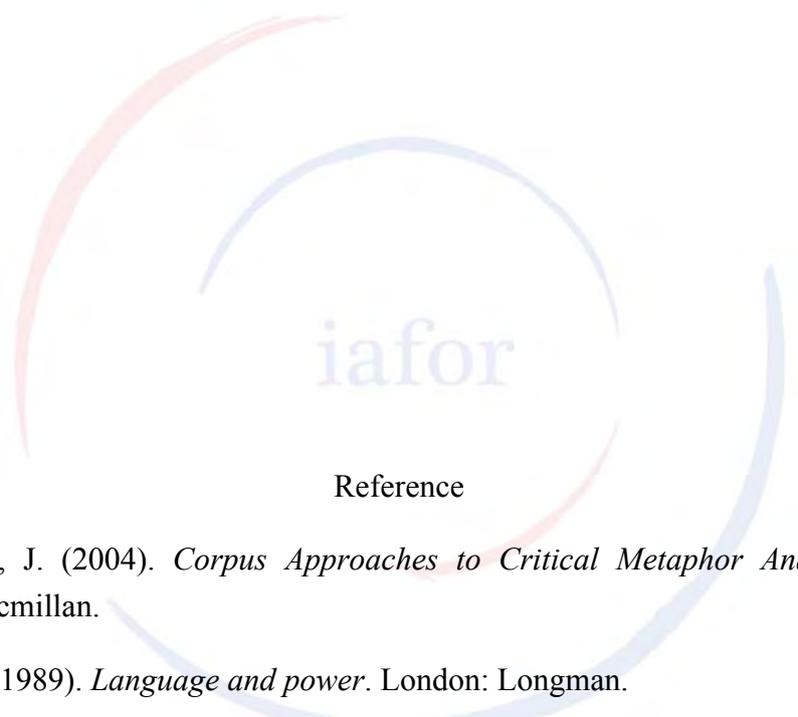
Here, the TONY BLAIR IS BARACK OBAMA metaphor is produced. What is interesting in this metaphor is that Tony Blair is constructed as the target using Obama as the source, even though Obama is still the topic. The source is more physical and the target is more abstract kind of domain (Kövecses, 2005). The target domain is understood in terms of the source domain. What is abstract is more stable and fixed than what is physical. In (43) and (48), Martin Luther King Jr. and Lyndon B. Johnson as source domains, who Obama is conceptualized with, are dead and have solid and concrete characteristics. In (49), by choosing Obama as the source instead of the target, his cunning character, from the conservatives' view, becomes as concrete and physical as Tony Blair's character is understood in terms of him, which results in maximizing his malicious character like a fact. Moreover, given word choice, selecting 'cloud' evokes a 'shadow', 'dark', and 'gloomy' image which is also conveyed by 'distract'.

5. Conclusion

This research has examined how the passage of the US health care reform legislation is conceptualized through metaphors in influential print media sources. It has also documented ideological variation in metaphor use in the print media. First, it has focused on four overarching metaphors. For one target domain, the passage of the US health care reform legislation, four source domains were identified: WAR or FIGHT, SPORTS, DRAMA, and JOURNEY. Each metaphor encompasses several mappings. The next step taken was to explore the ideological difference in use of the metaphors. The liberal and the conservative

media associate different historical figures and events with President Obama and the health care reform respectively in accordance with their ideology.

The metaphors in news articles are a reflection of ideology and at the same time a powerful tool to shape public thought and world-views (Lakoff, 1987, p. 295; Palmer, 1996, pp. 222–245). The US Health Care Reform Bill is a very controversial issue in the US. A limitation of this study is that it is conveyed only four days of news reporting on the topic. Since the conflict over health care is likely to continue well into the future, research should strive to document shifts in the metaphorical concepts utilized by the liberal and conservative media as the confrontation develops.

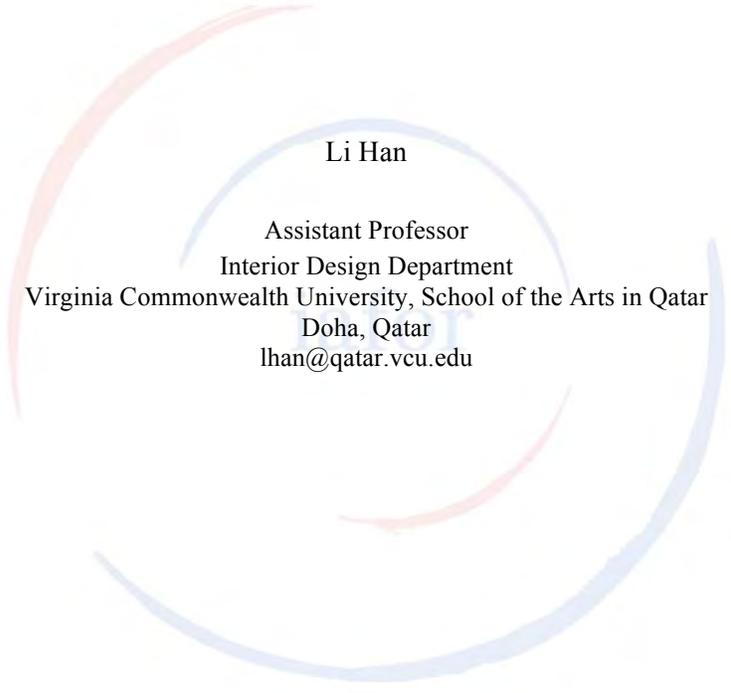
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Hybridization and Creativity- A pedagogical model for design education



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Introduction

The purpose of this paper is to establish a pedagogical model for design education through the employment of hybridization. Why hybridization? What is the advantage of hybrids? A hybrid is the offspring of two different breeds, varieties, species, or genera. In the natural world, hybrids often outperform their parents. Hybrid rice significantly increases the output by 30% (Deng & Deng, 2007). The application of heterosis has been one of the most important contributions of genetics to scientific agriculture in providing high-yielding hybrids in corn, in other plants, and in livestock. Nevertheless, it is largely unclear how hybridization has been affecting design and creativity and what the role of hybridization in design studies has been. Although examples of hybrid design can be found throughout history, the real proliferation of hybrid designs began quite recently, following the footsteps of globalization. In recent years, the domains of various design disciplines have converged at an unprecedented speed, often yielding interesting results and adding knowledge and variety, as well as originality to design. This convergence raises the question: Does hybridization change how designers design? Have designers become more conscious while employing hybridization as a designing tool? Can design educators establish pedagogical models to empower students with more effective and efficient tools in design? Will hybridization generate more creativity and become an important or even necessary method in design education? The goal of this paper is to answer those questions and to create a pedagogical model for design education.

Literature Review

To answer these questions, it is necessary to take a closer look at both creativity and hybridization and how do they affect the pedagogy for teaching design. Creativity is the ultimate goal for all design. Inevitably, the search for the pedagogical model will be led by and evaluated through the effectiveness of teaching creativity. The principle of creativity will provide a guideline and direction for how the pedagogical model will be evaluated. Therefore, the creativity component of this research is imperative.

Pedagogy

The pedagogical model for design education has been going through some constant and dramatic changes since it was first developed during Bauhaus time (1919-1933). The Bauhaus provided a theoretical orientation to modern design through the integration of art and design in order to introduce new forms, new materials, and a new orientation to design in an age of industrialization. As the symbols for industrialism, materials and tools,

the study of nature and construction method were emphasized for design education during that period of time. The deconstructionism then took over the arena and became overpowering and dominate design theory worldwide. Deviated from function and aesthetics, design evolved to be an instrument for rejection following the drastic social changes. In recent years, the focus of design methodology evolved again, shifting from social discourse to high-tech. As the design methodology evolves, so does the pedagogical model. As the role of designers and the focus of design education changed from artistic engineers during Bauhaus to socialists during Postmodernism to high-tech experts recently, so did the pedagogical model for teaching design. Nevertheless, the shift of pedagogical model has not caught enough attention as the teaching content itself. So what is the shift? How the new generation should be taught in order to prepare them for their future career? What should be the new pedagogy based on in terms of teaching design? Barr and Tagg (1995) suggested that the paradigm in higher education is shifting from a focus on teaching to a focus on learning. They suggest that a focus on learning means a change in faculty roles, in which teachers are not only transmitters of information but also are designers of learning who work to develop students' competencies and who engage in the challenging and complex tasks of empowering student learning. In this way, faculty are the designers of learning environments.

The new paradigm focuses on learning rather than teaching. In design education, the ultimate focus of teaching and learning is creativity. Without creativity, designers can no longer be called designers, but engineers instead. How do we teach designers in the era of globalization? Literature suggests that problem based learning (PBL) is widely accepted and promoted throughout all spectrum of higher education (Barrows, 1996; Allen, Duch & Groh, 1996; Glasgow, 1997; Hmelo, 1998; Anderson, 2000; Forsythe, 2001). The modern history of problem-based learning begins in the early 1970s at the medical school at McMaster University in Canada. Until recently the PBL approach has flourished mainly in medical and professional schools. Slowly the sciences in general have begun taking it up, and even more slowly, the humanities. What is the uniqueness of design education in terms of adapting PBL? To answer this question, we need to know what are the problems that today's designers need to solve.

Creativity

Creativity is a very complex subject to study and can be a lifelong research topic. However, it was a very minor concern of psychology up until World War II, when the U.S. Air Force decided that the intelligence tests were not sufficient to select the best pilots—those who could respond innovatively to emergency situations. In 1950, when J.P. Guilford became the president of the American Psychological Association, he gave his inaugural lecture on the importance of studying creativity (Csikszentmihalyi, 1997). Hence, it flourished and drew researchers from many disciplines to conduct research related to creativity. Creativity is an indispensable part of design. Design cannot exist without creativity. However, how do we become creative, and how do we evaluate creativity? Wallas (1926) described the creative process as following four steps: preparation, incubation, illumination, and verification. A designer is also a creative person. Creativity has been studied from the perspectives of behavioral psychology,

social psychology, psychometrics, cognitive science, artificial intelligence, philosophy, aesthetics, history, economics, design research, business, and management. Yet, unlike many phenomena in science, there is no single, authoritative perspective or definition of creativity; nor is there a standardized measurement technique. Nevertheless, a growing number of scholars and educators believe that there are methods of increasing the creativity of an individual. Among them are Alex Osborn, creator of brainstorming and founder of the Creative Education Foundation (CEF), and Sidney Parnes who followed Osborn as president of CEF. They both contributed to building the CPS (creative problem solving) model. The six steps of CPS—Mess-finding, Fact-finding, Problem-finding, Idea-finding, Solution-finding and Acceptance-finding—have provided the guidance for a systematic approach to creative and workable solutions, as well as a foundation for further research (Parnes, 1992).

Hybridization

Why hybridization? Why is it necessary to discuss hybridization while seeking to establish a pedagogical model for teaching design? Given the hybridized world we live in today, some may argue that hybridization is an intrinsic component of any creative practice. Although it is impractical to argue that all the designers worldwide has been influenced by cultures, concepts, ideologies, social constructs or aesthetics that are not their own, therefore every design has acquired a hybridized flavor, it is not difficult to say that design has become more globalized and fused than ever before. In the cultural domain, the demarcation of regional, national and international is diminishing as a result of hybridization. The whole world is coming together rapidly, tearing down many barriers—language, culture, religion, etc. Hybridization is happening in every aspect of people's lives. It changes how people think and behave. Abnormal and foreign ideas, concepts, and ideologies can be adopted overnight.

Research Model

In this paper, the pedagogical model will be constructed based on the theory of Problem-based learning. Design is a mirror of society. As the society became more hybridized, so did design. How did hybridization affect design as well as our approach in teaching design? What are the new challenges confronted by today's designers? How can problem-based learning assist students in developing creative and innovative solutions?

Problems

Problem-based learning (PBL) is a pedagogy that allows students to become actively engaged in their own educational processes. One of the major characteristics of PBL is that learning is driven by challenging, open-ended, ill-defined and ill-structured problems which represent the real world scenario. However, the task of helping students acquire problem-solving skills presents problems to educators. How do we define the success of problem solving? Given the degree of complexity of the world we live in today, the PBL for design education should respond to the hybridized surroundings, from how the problems should be formed to how the design solutions should be evaluated. This

proposed problem-based learning centered pedagogical model has two major components — problem and evaluation. In order to assist students to form good questions, it is necessary to direct the students to search carefully the phenomena happening around them in real life. It is not hard to see that the whole world is coming together through various hybridizations. Many good design problems can be formed through careful investigation of the hybridized world. For example, how do we design a primary school for the kids of Korean migrants living in US? How do we design a kitchen for a couple with the Asian wife and European husband, on top of that, both of them are living in the Middle East? All these problems are real world problems. If the students are sensitive to their surroundings, they would have found many interesting design problems which can be considered good problems for PBL. In addition, creative design solutions also need to be evaluated. The pedagogical model should also provide a way to evaluate the solutions. A project focusing on developing a system to evaluate hybridized design solutions was introduced to the students. In this project, the students were asked to write a critical commentary on the creative solutions based on the three categories — inventiveness, investigation and intention. At this stage, the projects were done by professional designers than students, however, in the future, the design solutions should come from the students themselves.



Research Model

Evaluation System: Inventiveness, Investigation and Intention.

Examples of student critical commentary (the original students' language is kept without editing):

1. Hybrid between a vase and a cabinet.



- a) Inventiveness: Very creative and thought provoking. Works well as a design. This is a hybrid between a freestanding container (Vase/Jar) and a functional Cabinet. Both have the same function of holding things/objects. The combination seems almost like a metaphor for containing /retaining.
- b) Investigation: Careful and thorough investigation was done since the design appears to be working with the desired function.
- c) Intention: The design is intended to be used as a functional table as well as a cabinet. The upper surface can be used as a table top while the cabinets can be used to store things. The design is not only functional but also aesthetically pleasing.

Evaluation: It is a successful design since the function of a cabinet and a jar go well, with a little twist in the shape. The drawers have a curved surface rather than a rectilinear one.

2. Hybrid between a fan and a clock



- a) Inventiveness: This is a clever combination and is definitely creative. It is a better result to make things more visible and fun. The combination of a fan and a clock is not only fun, but the use of black, red and white colors add a classic feel to the clock.
- b) Investigation: Since it is a simple concept, the combination required very less investigation design wise, but must have required much investigation for the mechanical work, such as the functioning of the opening and closing of the fan.
- c) Intention: The intention is clear, simple and direct. The winding and unwinding of the fan reminds one of the fleeting moments of time.

Evaluation: The hybrid is a successful one since the concept of the working of the clock resonates with that of the fan. The clock and the fan both make angles as the hands move.

3. Hybrid between a regular foldable chair and a bench.



- a) Inventiveness: Clearly creative in a humorous way.
- b) Investigation: Investigation was done in determining the type of joints and the materials to be used to create a successful hybrid. The design works well, perhaps in a funny, yet a creative manner.
- c) Intention: The intention of this design is definitely humor. However, the functionality should not be overlooked. It is a good way to add a support to a bench. This could help give support to the body while sitting on the bench.

4. Hybrid between a breaking egg and a light. A cross between an object and a function



- a) Inventiveness: This is a creative way to create an illuminator/light.
- b) Investigation: There was thought and imagination involved in the invention of the design. An investigation of form and function was nonetheless required to produce this product.
- c) Intention: The intention of the product is clear; it is a hybrid between the function of light (illumination) and form (the shells function as shades to the lamp/light).

Evaluation: This design may not be 100% effective owing to the fact that it has a complex bulb. It may be cumbersome to manufacture such a product on a large scale. But it works pretty well as a design and concept.

5. Hybrid of materials



- a) Inventiveness: This is an innovative invention of reusing empty glass bottles.
- b) Investigation: a lot of experiments and possibilities are put forth by adding glass under a heavy wooden chair. It can be a good example for future investigations.

- c) Intention: The ability and strength of glass is put to test here, and many bottles spread evenly take responsibility of sharing the pressure and weight. Thus this design is about balance, and experimenting with new materials.

Evaluation: Although the functionality of the hybrid may be questioned at first, this is still an innovative design and is a courageous step towards defining new materials for hybridization

Discussion

The research on incorporating hybridization in building a pedagogical model based on PBL encompasses a vast number of research topics, spanning the whole spectrum of design and education. It is not possible to have finished a thorough research within the scope of a conference paper. However, the preliminary research goal of building a pedagogical model is achieved in this paper. The proposed research model, comprising three components—hybridization, pedagogical model (problem-based learning) and creativity—is only the beginning. Future research may focus on formulating design problems, revising the criteria for evaluating creative design solutions and seeking for critical commentary from designers and professionals, and creating more hybridized design solutions using the proposed research model.

It is suspected that using the proposed research model will assist students to generate good design problems through careful observation of the highly hybridized world and design solutions more effectively and efficiently. In addition, thinking process can be accelerated. This research is likely to be a continuing effort, and it should not be a linear research experience. Evaluation results might be used to revise the research model. Furthermore, instead of finding the research model of hybridization to be an effective and creative teaching tool, the research finding may show that there is no positive effect of implementing the new pedagogical model.

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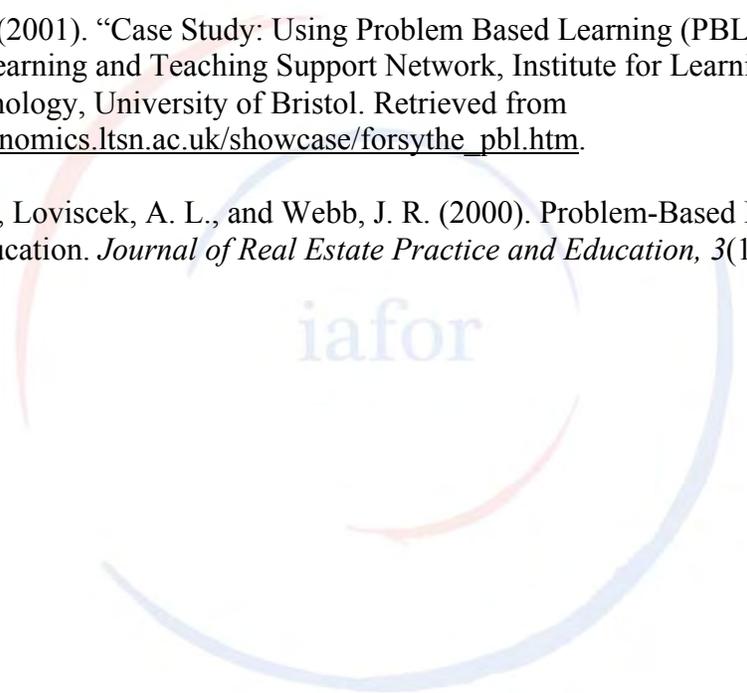
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The logo for the International Association for Frontiers in Education (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of several overlapping, semi-transparent arcs in shades of blue and red, creating a sense of depth and movement.

Vickie Wai Kei, LI

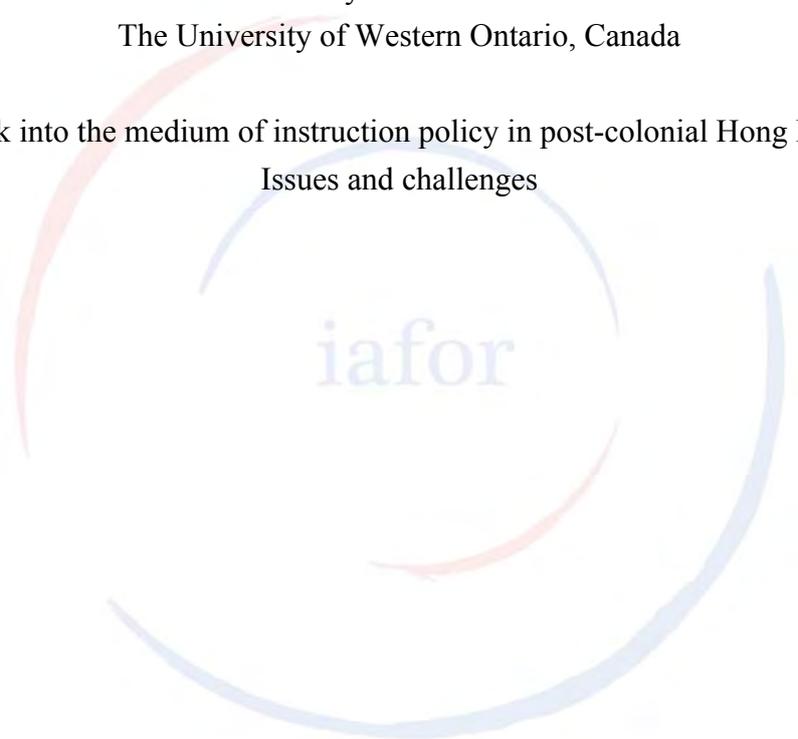
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A look into the medium of instruction policy in post-colonial Hong Kong:
Issues and challenges

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iafor

Abstract

This study examines the medium of instruction (MOI) policy in post-colonial Hong Kong. Hong Kong had been a British colony for 156 years. As in other British colonies, the English language has penetrated into the domains of Hong Kong's "education, government administration, legislature and the judiciary" (Poon, 2004, p. 54). During the colonial period, the British government adopted a *laissez-faire* approach to schools' MOI. A school's decision was usually driven by parental preference for English-medium education. After the transfer of sovereignty over Hong Kong from Britain to the People's Republic of China in 1997, the Hong Kong government adopted a Chinese¹-oriented language policy and implemented the mandatory mother-tongue (Cantonese) education policy in all secondary schools. A shift from English- to Cantonese-medium in teaching indicated the diminution in the roles and status of English in the territory. The present study focuses on the policy impact on Hong Kong students' academic achievement. A content analysis was conducted on the relevant policy documents and students' public examination results were gathered to serve as a policy effectiveness indicator. Findings reveal that the policy is beneficial to students' learning in content-based subjects, and yet, their English performance has been adversely affected by the policy. Recently, the Hong Kong government announced its plans to fine-tune the mandatory mother-tongue (Cantonese) education policy, aiming to enhance students' ability to learn in English so as to prepare them to meet the challenges of globalization and to strengthen Hong Kong's international status. The study concludes with comments on the fine-tuned arrangements, and with recommendations for selecting an appropriate MOI for Hong Kong students.

Keywords: colonization, medium of instruction policy, Cantonese- and English-medium education, post-colonial Hong Kong

Background of the study

Growing up and receiving my education in a British colony, Hong Kong, I always lived under the hegemony of the English language. As in other crown colonies, the English language has occupied a prominent position in Hong Kong's education. Though 90.8% of Hong Kong population speaks Cantonese as their first language (Census and Statistics Department, 2006), English is the main MOI and assessment in the higher education in the territory. To most Hong Kong parents, English-medium secondary education provides an English-rich learning environment, which ensures their children a smooth transition from secondary to post-secondary

¹ Chinese, throughout this paper, refers to both the spoken form, Cantonese and the written form, the Standard Written Chinese.

education. The strong parental preference for English-medium education still persists after the transfer of Hong Kong's sovereignty in 1997.

Journalists from all over the world gathered in Hong Kong at the night of 30th June 1997 to witness the return of Hong Kong's sovereignty from Britain to the People's Republic of China. Upon the end of British colonization, the Hong Kong Special Administrative Region (HKSAR)² government immediately launched a series of language policies and among all, the mandatory mother-tongue (Cantonese) education policy (hereafter referred to as MTE policy) has the most significant impact on the territory's education system. According to the Hong Kong Education Bureau (HKEB),

Research worldwide and in Hong Kong has shown that mother-tongue teaching is generally the most effective learning tool for students. Using their mother tongue to learn, students will be better able to understand what is taught, analyse problems, express views, develop an enquiring mind and cultivate critical thinking. Students can also have more time to concentrate on the learning of English. (Education Bureau, 2009)

The MTE policy compelled all secondary schools to switch from English- to Cantonese-medium. However, there were exemptions. Schools which could demonstrate to HKEB that their students and teachers are able to learn and teach effectively in English could remain in the English-stream. In the end, 114 (out of the total 460) secondary schools were allowed to adopt English in teaching. As stated in Lai (1999), the MTE policy "marked an end to the 40-year-long English dominant area in the history of Hong Kong secondary school education" (p. 191). Lai (2001) went on and expressed that the promotion of mother-tongue education can be seen as a move to play down the importance of English in the territory. However, from my experience as a post-secondary English teacher, I am acutely aware of the fact that the English language still holds a prominent position in Hong Kong's education, especially in higher education.

As stated in Phillipson (2006), post-secondary education is clearly moving towards 'Englishization'. Such a move is due to "the steady increase in educational mobility and the rising numbers of international students at tertiary institutions" (Smit, 2010, p. 3). Hong Kong students' desire to achieve higher English proficiency became even stronger after the handover. The MTE policy induced students to compete for places in the few remaining approved English-stream schools. While teaching English in a post-secondary institution in Hong Kong, I had students coming from both Cantonese- and English-medium secondary schools. I was aware of the differences in their motivation and attitudes in English learning. I was concerned about Cantonese-stream students having difficulties coping with English-medium post-secondary education as they often expressed to me that they felt academically inferior when compared with their English-medium counterpart. As stated in Lin (2001), this group of students is left in a

² Hong Kong was renamed as the Hong Kong Special Administrative Region after its handover in 1997.

dilemma: they see the importance of English for their future but at the same time they have little access to an English-rich environment necessary for successfully acquiring the language. Having the experience of teaching the two distinct groups of students, I came to question the impact of the MTE policy on students' academic achievement, in particular, on their English achievement. The present study aims to address two questions:

- a) Did Hong Kong students learn better under the mandatory mother-tongue (Cantonese) education policy?
- b) How did the policy affect students' English achievement? Is there a tradeoff where students can only be good at either English or other subjects?

In the following sections, I will present an overview of Hong Kong's MOI policy, outline the methodology in the present study, discuss the major findings and provide recommendations for selecting an appropriate MOI for Hong Kong students.

Hong Kong's medium of instruction (MOI) policy

The MOI issue in Hong Kong has attracted much scholarly attention. The complex multilingual situation has made it difficult for policy makers to select a MOI in Hong Kong schools. As Poon (2004) states, "medium of instruction has been the most thorny and tricky issue in Hong Kong education" (p. 55). Tse and Tollefson (2007) also hold similar views as the researchers expressed that "the most debated issue in Hong Kong education is the choice of language as medium of instruction" (p. 135).

About 91% of the Hong Kong population speaks Cantonese as their mother-tongue (Census and Statistics Department, 2006). Cantonese is the language of ethnic solidarity or identity within the Hong Kong population. In de Mejiá's (2002) words, Cantonese "serves as a powerful cohesive factor, together with a traditionally strong family ethos to make for strongly tight-knit society" (p. 192). English, the language of the colonizer, is perceived as the language of power. It is "the language of the dominant elite and the language of administration and the law" (p. 192). This helps explain why Hong Kong parents think that English-medium education will "allow their children access to higher education and socio-economic advancement" (p. 195). The factors that contributed to the high status of English in the territory were also mentioned in Lin (1996).

According to Lin (1996), the Hong Kong government policy has contributed in four main ways to the prominent status of English. First, 156 years of British colonization has consolidated the hegemony of the English language. It was not until 1974 that Chinese language gained an official status in the territory. Second, the establishment of the first English-medium university, the University of Hong Kong, in 1911 further instilled the supreme value of English in the public's mind. Third, the British-based accreditation system of professional qualifications for areas such as accountancy, medicine and engineering suggests that Hong Kong professionals are

required to attain a high level of English proficiency. Lastly, English proficiency is one important selection criterion for most governmental positions. As de Mejía (2002) has noted, there has been “a powerful connection established between perceptions of wealth and prosperity, and proficiency in English” (p. 193). In the following, I will place Hong Kong’s MOI issue in its context, focusing on the colonial and post-colonial period.

Medium of instruction during the colonial period

Before the British arrival, most Hong Kong schools were Cantonese-medium (Boyle, 1997). It was not until after the colonization that the missionary schools were set up in the territory. As stated in Boyle’s (1997) work, these missionary schools used Cantonese as the MOI. At the beginning of its colonial rule, the British government had little intervention in the territory’s education system and it adopted a laissez-faire approach towards schools’ MOI. It was not until 1850s that the colonial government began its intervention and promoted English teaching in schools. According to Evans (2006), the colonial government believed that English-medium education would enrich Chinese students’ intellectual and cultural lives and help form a “bond of union” (p. 296) between the locals and the English-speaking communities and thus, the British’s sovereignty would be secured. As the colony grew, the colonial government began to have more interventions in schools’ MOI.

During the late 19th century, the two governors in Hong Kong, Hennessy and Bowen, proposed to introduce English-medium education in Cantonese-medium primary schools. They also suggested an English examination was required for appointments to government clerical posts. The emphasis on English-medium education was heightened by the establishment of the first English-medium university in the early 20th century. Under a laissez-faire approach to schools’ MOI, most secondary schools would naturally choose English as the teaching medium so as to ensure their students a place in the English-medium university. It was not until the mid-1930s that the colonial government had shifted its emphasis away from English-medium to mother-tongue education.

In the mid-1930s, Edward Burney, an Inspector of Schools from the British government, came to Hong Kong to examine the territory’s education system. Burney criticized the colonial government’s strong emphasis on English learning and suggested a shift in the policy emphasis so that students can have a good command of their first language “sufficient for all needs of thought and expression” and English should only be limited to “the satisfaction of vocational demands” (Burney, 1935, p. 25). In the end, two circulars on language policy were issued, stating that all government-aided schools should adopt Cantonese-medium instruction up to students’ junior secondary level (secondary 1 to 3). Moreover, a Cantonese-medium university was also established in 1963 with a hope to providing students from the Cantonese-medium schools the access to university education. Despite the governments’ efforts to promote

mother-tongue education, it never formulated or implemented a clear MOI policy and insisted a laissez-faire approach. It was not until the last phase of its colonial rule that the colonial government issued firm guidance on the MOI in secondary schools.

Four months before the transfer of Hong Kong's sovereignty from Britain to the People's Republic of China, the colonial government proposed that only 100 (out of the total 460) secondary schools would be allowed to remain in the English-stream. All the remaining schools were required to adopt Cantonese as the MOI. Unquestionably, the public, especially parents, reacted strongly against the government's decision. Unlike before, the colonial government took a firm stance and shortly after the handover of Hong Kong's sovereignty in 1997, the Hong Kong government announced the MTE policy.

Medium of instruction during the post-colonial period

The end of 156 years of British rule has changed the linguistic balance of the two official languages (Chinese and English) in the territory. Two months after China's resumption of sovereignty, the Hong Kong government immediately introduced numerous language policies and the most controversial one was the MTE policy. The policy states that all secondary schools, starting in the academic year 1998/1999, had to adopt Cantonese as the MOI. For schools wishing to use, or continue using English as the MOI, they were required to demonstrate to the Education Bureau that their teachers and students were able to teach and learn effectively under English education. The MTE policy, in de Mejiá's (2002) words, streamed students "according to how far they were able to study effectively in English or Chinese" (p. 196). As mentioned earlier, 114 schools were granted exemption and could use English as the MOI.

Over the years, the government as well as other academic and voluntary organizations conducted numerous studies on the effectiveness of the policy. Some studies (CUHK, 2006; Shum, Tse, Ki, Chan, Leung, Lee & Pang, 2005; Tsui, 2004) reveal the educational benefits brought by mother-tongue education. For example, the majority of the teacher and school principal participants in Shum et al.'s (2005) study expressed that their students performed better in public examinations under mother-tongue teaching and students became more involved in their learning and were able to demonstrate higher order of thinking and get deeper understanding of the subjects. Though previous studies have shown that students have reaped the rewards of mother-tongue teaching, the public, especially parents, were still skeptical about the policy as they concerned about the low level of English proficiency that might have resulted from mother-tongue teaching. Poon (1999, 2004) and Shum et al. (2005) look at the policy impact on students' English learning. The researchers argued that mother-tongue education would limit students' exposure to English, affecting their English performance. In Poon's (2004) words, the policy "weaken[s] students interests in English" and "limits their exposure to the

language” (p. 65). Besides students’ less exposure to the English language, the policy also brought negative labeling effect on the Cantonese-stream students.

While allowing 114 schools to remain in the English stream, the Hong Kong government reinforced the public’s perception that English-medium education is superior to Cantonese-medium education. In parents’ eyes, receiving English-medium education is “the privilege of an elite group of students who have the opportunity of acquiring high levels of proficiency in English in optimum conditions” (de Mejía, 2002, p. 197). The Cantonese-medium students were perceived as those who could not make it to the English-stream and were academically inferior to their English-medium counterpart. From my personal observation, I noticed that students from the English-stream generally did better both in their spoken and written English. Furthermore, Cantonese-stream students often expressed that their difficulties in English learning stemmed from having had insufficient exposure to English during their secondary studies. The present study aims to look at the impact of the MTE policy on students’ academic achievement, especially that on their English performance. In the following section, I will outline the methodology adopted in the study.

Research methodology

The analysis in the present study is largely based on existing sources such as policy documents and students’ examination results. Relevant documents on the MTE policy were gathered from the Hong Kong Education Bureau website. Documents that have been reviewed are: i) Medium of Instruction Policy for Secondary Schools; ii) Medium of Instruction Guidance for Secondary Schools; iii) Report on Review of Medium of Instruction for Secondary Schools and Secondary School Places Allocation; and iv) Medium of Instruction for Secondary Schools and Secondary School Places Allocation Booklet. The policy objectives were identified and students’ results in the two public examinations, the Hong Kong Certificate of Education Examination (HKCEE) and the Hong Kong Advanced Level Examination (HKALE), were collected from the Hong Kong Examination and Assessment Authority (2009a & 2009b) to serve as a policy effectiveness indicator. The results in these two public examinations are important to students as they determine whether they can continue with their senior secondary and post-secondary studies (see Table 1). Press releases related to the policy were also collected from the Education Bureau website. The examination of the collected documents should be able to enhance our understanding of the situation under study. Moreover, opinions collected from other documents including local newspapers and previous literature will also be considered during the discussion with the hope to present a comprehensive view of the policy to readers.

Table 1: An overview of Hong Kong's secondary education system³

Junior Secondary Studies	Secondary 1 Secondary 2 Secondary 3
Senior Secondary Studies	Secondary 4 Secondary 5 Students taking HKCEE Secondary 6 Secondary 7 Students taking HKALE
 Post-secondary education	

Only 12 subjects were chosen for analysis due to the time constraints of the present study. These subjects were selected as they are the most common core subjects provided by secondary schools for students at the senior secondary levels (secondary 4-7). By taking these subjects (the choice depends on whether the student is in the arts or science stream), students are able to meet the minimum requirements of most post-secondary programmes. The selected subjects were put into three groups for analysis: i) language-intensive subjects: economics, geography, history and biology; ii) non-language-intensive subjects: additional mathematics and mathematics in HKCEE, applied mathematics and pure mathematics in HKALE, chemistry and physics, and iii) language subjects: English and Chinese language.

HKCEE and HKALE results over the years 1996-2009 were gathered. The years under study should be able to yield a picture of students' performance before and after the policy implementation. Particular attention will be paid to the results from 2003 to 2009 for the HKCEE and to those from the years 2005 to 2009 for HKALE. By doing so, a comparison can be carried out between HKCEE and HKALE results before and after the implementation of the MTE policy (see Figure 1). The examination of students' performance in the two public examinations helps to ascertain whether the policy, as the Education Bureau has anticipated, enhances students' learning as well as their language proficiency.

³ As of September, 2009, a new academic structure, namely the "3+3+4" structure, would be implemented. Under the new structure, students would receive 3 years of junior secondary studies and 3 years (previously 4 years) of senior secondary studies. As for post-secondary studies, students would complete their undergraduate studies in 4 years (previously 3 years). HKCEE and HKALE would be replaced by Hong Kong Diploma of Secondary Education (HKDSE) Examination, taken at the end of students' six years of secondary education.

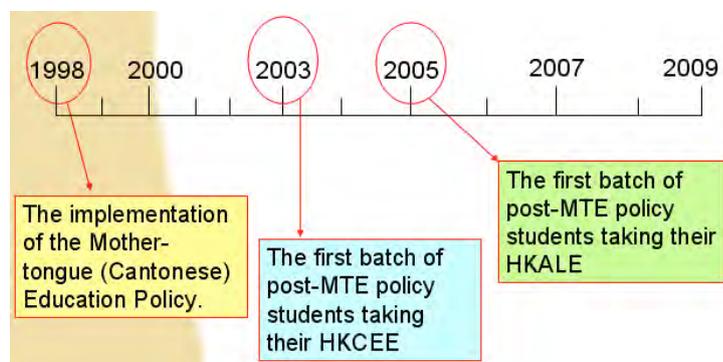


Figure 1: Timeline showing the years in which the first batch of post-MTE Policy students took the HKCEE and HKALE

Research findings and Discussion

To some students, July and August are the best months of the year as most schools have summer holidays in these two months. However, it is not the case for most Hong Kong students. For those who take HKCEE or HKALE, their examination results will be released in July and August respectively. Every year, students as well as the general public anxiously wait for the release of the examination results. As mentioned before, to students, the results will determine whether they can continue with their senior secondary and post-secondary studies. To the general public, students' HKCEE and HKALE results serve as one indicator of the territory's education standard. As stated by the Education Commission (2005), students' public examination results provide an important reference for evaluating the effectiveness of mother-tongue teaching" (p. 10). In the following, I will first look at students' performance in the language- and non-language-intensive subjects, followed by that in the two language subjects.

Students' performance in HKCEE and HKALE language-intensive subjects

Figures 2 and 3 show the percentage of students obtaining a pass (Grade E) or above in the four language-intensive subjects in both HKCEE and HKALE over the years 1996 to 2009.



Figure 2: Percentage of candidates obtaining E or above in language-intensive subjects in HKCEE

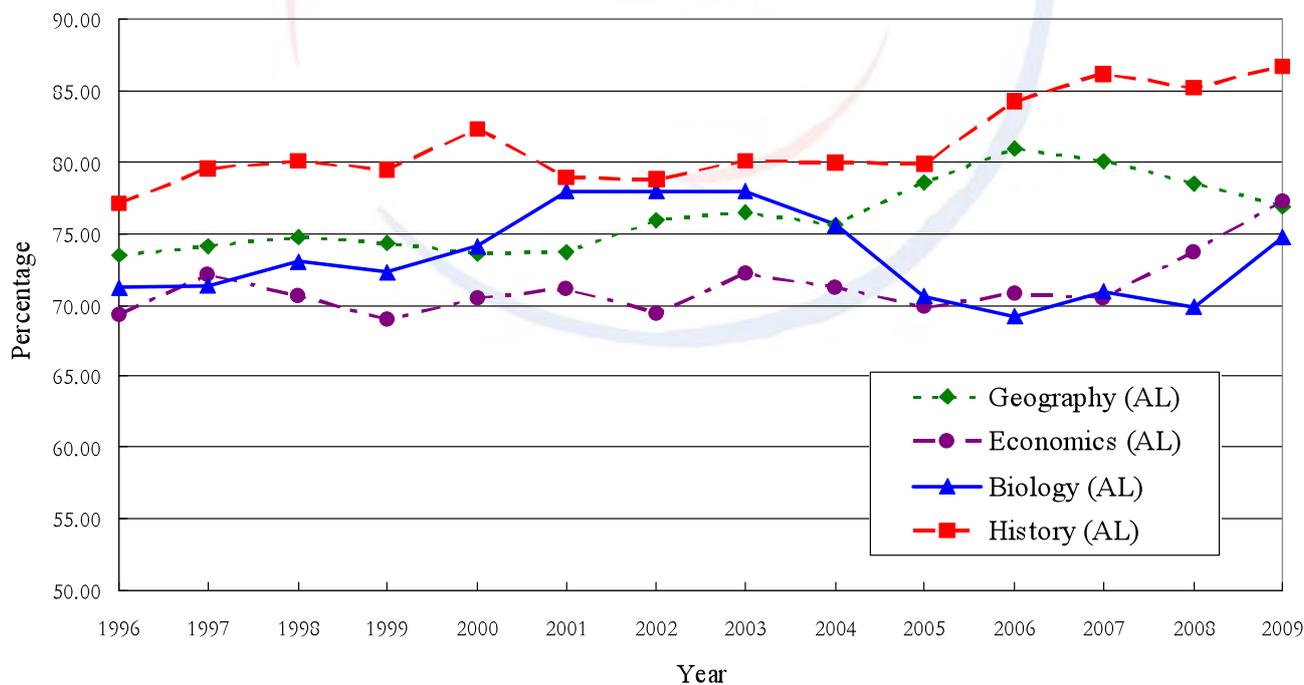


Figure 3: Percentage of candidates obtaining E or above in language-intensive subjects in HKALE

As can be seen in Figure 2, the passing rates for all four subjects are generally rising though fluctuations could be found in particular years. For example, the passing rate of

Geography has hit its highest at 79.3% in 2005. As for History, the passing rate has reached its peak at 78% in 2003 and remained at around the same rate in the subsequent three years. Notable improvement could also be found in students' HKALE language-intensive subjects. As shown in Figure 3, the most significant increase could be found in the passing rate of History. The History passing rate has increased from 80% in 2004 (the year in which the last batch of pre-MTE policy students taking their HKALE) to 86.7% in 2009. Significant increase could also be found in Economics. The passing rate of Economics has reached its highest in 2009 at 77.2%. One major difference between students' HKCEE performance and that in HKALE was found in Biology.

In Figure 3, it can be seen that students' performance in HKALE Biology was less satisfactory when compared with that in the other 3 language-intensive subjects. The Biology passing rate has been dropping and reached its lowest at 69.2% in 2006. It was not until 2009 that the passing rate has risen and hit its highest at 74.7% since the policy implementation. The decline in HKALE Biology passing rate may be attributed to the fact that some science stream students in Cantonese-medium schools, with good HKCEE grades, had chosen to pursue their senior secondary studies in English-medium schools. These students may think that English-medium education would help better prepare them for post-secondary education, which is predominantly English-medium. A shift in the learning mode from their mother-tongue to a second language may pose difficulties to them as they only have two years to learn all the subject-specific vocabulary and language structures in English in order to sit their HKALE Biology. Studies such as Yip, Tsang, and Cheung (2003) also suggest that learning science in English has posed difficulties for Hong Kong students. The researchers compared students learning science subjects in English with those who learn through their mother-tongue. The findings reveal that that "the English-medium students, despite their higher initial ability, were found to perform much more poorly than their Chinese-medium peers" (p. 295). How about students' performance in HKCEE and HKALE non-language-intensive subjects?

Students' performance in HKCEE and HKALE non-language-intensive subjects

Figures 4 and 5 below show students' HKCEE and HKALE passing rates in the six non-language-intensive subjects: additional mathematics and mathematics in HKCEE, applied mathematics and pure mathematics in HKALE, chemistry, and physics.



Figure 4: Percentage of candidates obtaining E or above in non-language-intensive subjects in HKCEE

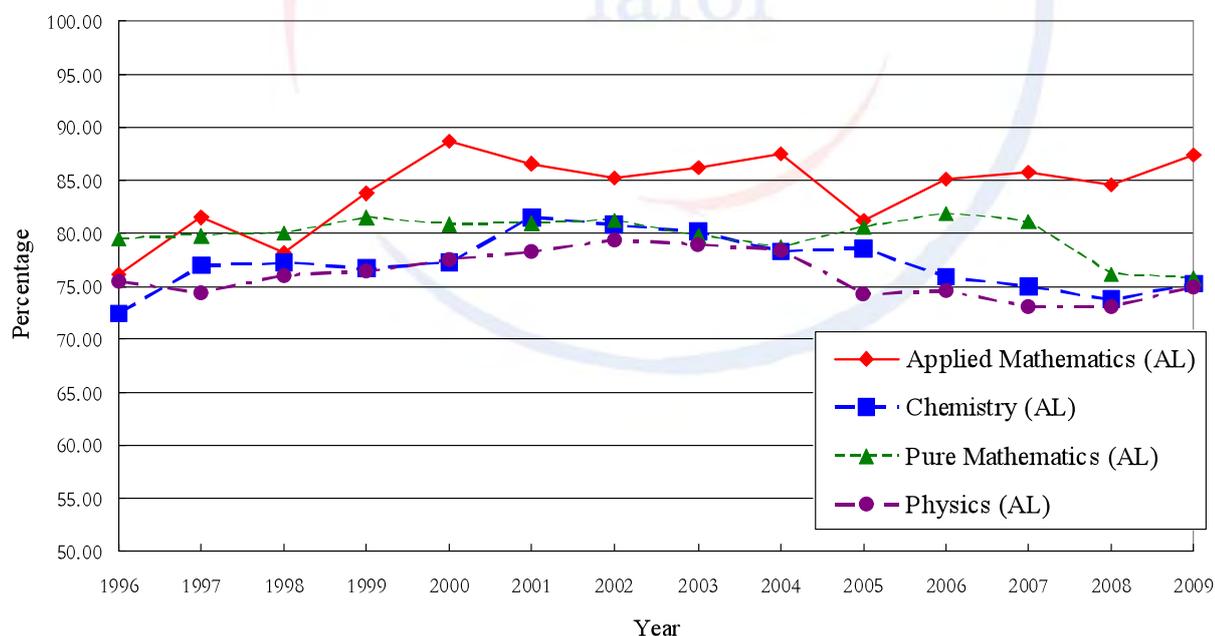


Figure 5: Percentage of candidates obtaining E or above in non-language-intensive subjects in HKALE

As shown in Figures 4 and 5, the positive policy impact on the non-language-intensive subjects appears to be less salient when compared to that on the language-intensive ones. These non-language-intensive subjects are less literately demanding. A change in the language of instruction may have less impact on them. As can be seen in Figure 4, the passing rates for all

the four subjects are slowly rising. However, this is not the case for students' HKALE performance. As shown in Figure 5, students' performance in applied mathematics appears to be better than the other three subjects since the policy implementation. Though the passing rate of pure mathematics rose from 78.7% in 2004 to 80.5% in 2005 and stayed at around the same rate till 2007, the passing rate began to drop since then. One possible reason why student performed better in applied mathematics may be that the mathematics course involves the use of symbolic terminology and thus, not too dependent on the MOI. As for chemistry, the passing rate has been dropping after the policy implementation and has reached its lowest in 2008 at 73.8%. Though the passing rate rises to 75.2% in 2009, the rate is still lower than that before 2005. As for Physics, the passing rate has reached its lowest in 2007 and 2008 at 73.1%. Though it slightly rises to 75% in 2009, the passing rate is still lower than that before the policy implementation. Two reasons may account for such decline in the two science subjects.

First, as mentioned earlier, Cantonese-medium students with good HKCEE results may have chosen to pursue their senior secondary studies in the English-stream. Such a change in the language of instruction may have created a language barrier in learning the science subjects. Second, some Cantonese-medium schools may have switched their teaching mode from Cantonese to English at the secondary levels and thus, the benefits brought by mother-tongue teaching during students' junior secondary levels (secondary 1 to 3) may have diminished as students proceed to a higher level. Their performance in the science subjects may be frustrated by their limited English proficiency.

As can be seen from Figures 2 to 5, the positive policy impact seems to be more apparent in language-intensive subjects and at students' junior secondary levels (as reflected from their HKCEE results). As students proceed to a higher level, the positive impact began to diminish in the science subjects, especially those who opt to move to the English-stream to pursue their senior secondary studies. How about students' English and Chinese performance? Is there really a tradeoff where students can only be good at either English or other subjects under mother-tongue education?

Students' performance in HKCEE and HKALE language subjects

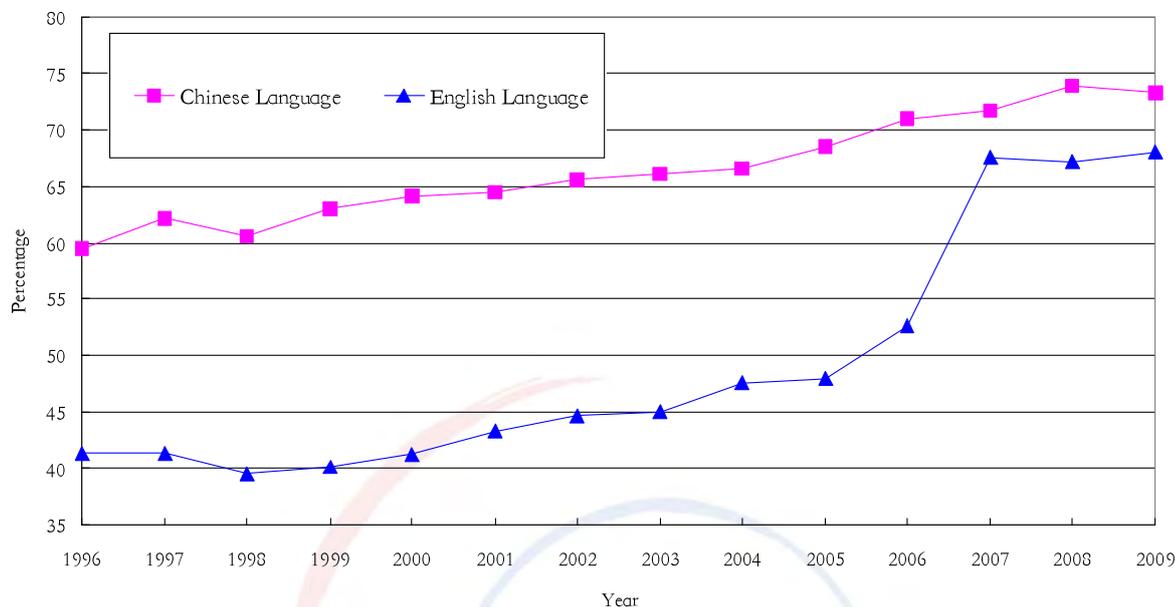


Figure 6: Percentage of candidates obtaining E (or level 2) or above in Chinese and English language

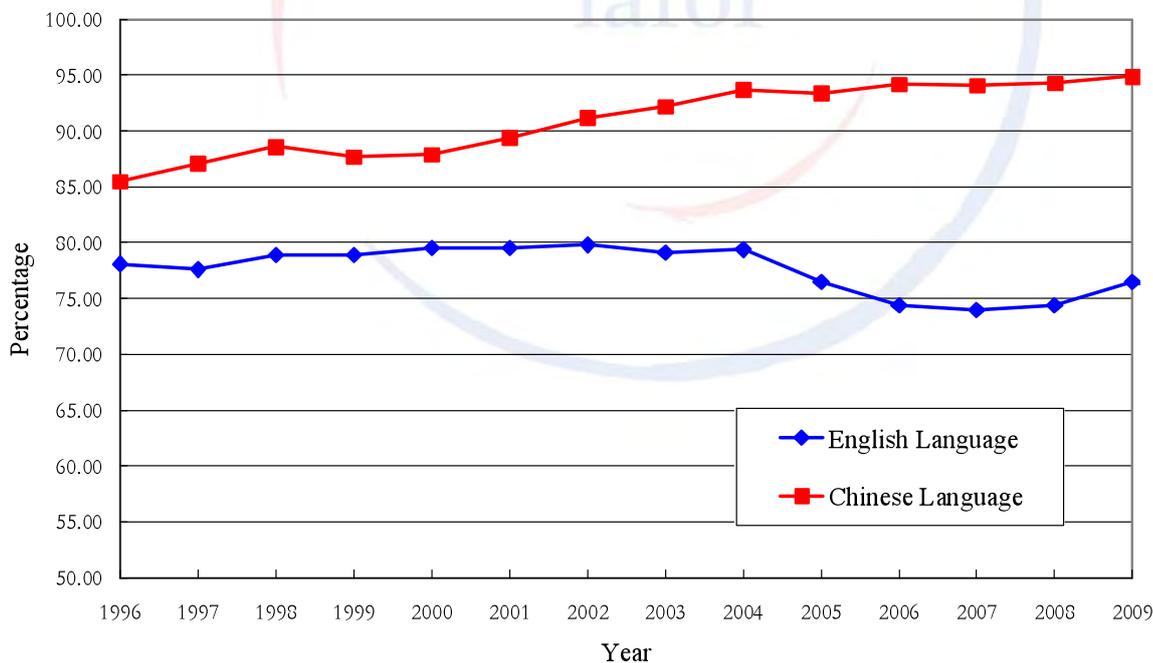


Figure 7: Percentage of candidates obtaining E or above in language subjects in HKALE

Ever since the implementation of the MTE policy, the public has voiced their concerns over students' low level of English proficiency that might have resulted from mother-tongue education. According to the Education Bureau (2009), under mother-tongue education, students can have "more time to concentrate on the learning of English". Lam Fan Kit-fong, the

Education Bureau's principal assistant secretary, also expressed in a local newspaper that "students are now able to learn English as a subject, rather than having to digest English as the medium of instruction for most subjects" (The Standard, August 11, 2005). In other words, students no longer have to struggle with the English language when learning content-based subjects. One might expect then, students' English performance will be enhanced under the MTE policy. However, is it really the case? Before looking at students' HKCEE and HKALE language performance, there is a need to explain the changes in the reporting system and syllabus for the two language subjects after 2007.

Starting from 2007 onwards, the grading system (Grades A-F) for the two language subjects in HKCEE has been replaced by the level system (Levels 1 – 5): Level 1 being the lowest while 5 is the highest. A 5* will be awarded to the very top-performing Level 5 students. Moreover, as of 2007, the two HKCEE English Language Syllabi A and B (the former is easier while the latter is relatively difficult and taken by most English-stream students), will be "brought together with a single set of common standard" (Education Bureau, 2007). The combination of the two English Syllabi, according to the Hong Kong Examination and Assessment Authority, will make it easier for users to understand the true abilities of students. Based on the written descriptors of each level (from Level 1 to 5*) and the distribution of students obtaining different levels in 2007 HKCEE, we can make an assumption that a Level 5* is equivalent to Grade A in the previous grading system while a Level 1 is equivalent to an F (i.e. Fail) in the grading system. Table 2 below shows the equivalence between the two reporting systems.

Table 2 Equivalence between the grading and the level system

Grading system used before 2007		Level system used from 2007 onwards	
Grade	A	Level	5*
	B		5
	C		4
	D		3
	E		2
	F		1
	Unclassified		Unclassified

As for the Chinese language syllabus, from 2007 onwards, students are required to sit five papers (whereas only two were required of them in the previous years) in the HKCEE examination. Instead of answering questions on a set of prescribed texts, students have to "read

widely from an extensive range of texts and answer questions that assess their competence in reading, comprehension, analysis and appreciation” (Education Bureau, 2007).

For ease of comparison, students’ results in the two HKCEE language subjects from 2007-2009 have been converted to their corresponding grade levels (see Table 2) and included in Figure 6. And as mentioned earlier, the HKCEE English language previously had two syllabi, A and B. The former was easier than the mainstream syllabus B. According to the Hong Kong Examination and Assessment Authority, a Grade C in syllabus A is equivalent to an E in syllabus B. Table 3 below shows the equivalence between the two English language syllabi grading system.

Table 3: Equivalence between Syllabus A and B grading system

Grading system before 2007	English Language (Syllabus A)	English Language (Syllabus B)
	A	C
	B	D
	C	E

Over the years, the government has emphasized the positive policy impact on students’ English performance. However, some opponents of the MTE policy criticized such improvement in HKCEE English language was due to the increase in number of students taking the easier syllabus A. Dr. Anita Y. K. Poon, the Assistant Professor of Education Studies at the Hong Kong Baptist University, stated in a local newspaper that the number of students taking the easier syllabus A in 2006 (around 30, 000) is 4 times that in 1997 (approximately 7, 500). In order to get a clearer picture of students’ HKCEE English performance over the years, the number of students obtaining a C or above in syllabus A has been included with those receiving an E or above in syllabus B.

As can be seen in Figure 6, students’ Chinese passing rate has been increasing steadily over the years and has hit its highest at 73.9% in 2008. The improvement in the Chinese language can be explained by the increase in students’ exposure to the Chinese language under mother-tongue education. Students’ HKCEE English performance has also improved over the years. The English passing rate has been increasing since 2002 and hit its highest at 68% in 2009. The tremendous increase from 2006 onwards may be explained by the combination of the two English syllabi. The performance of the higher achievers may have pulled up the overall English passing rate. Though it was shown in Figure 6 that students’ English performance over the years has been very promising, some have criticized that students’ English standard has actually been declining. For example, the principal from Po Leung Kuk Wu Chung College criticized the new level system for giving a false impression that students have performed better in the English

language. To see whether students have really improved their English proficiency, students' HKALE English passing rate may give us some ideas.

Figure 7 shows the HKALE Chinese and English passing rate from 1996-2009. As shown in the figure, the HKALE Chinese passing rate has been increasing steadily and has hit its highest at 94.9% in 2009. The positive policy impact on HKCEE Chinese Language lingers over students' Chinese performance at their senior secondary levels. How about students' English performance? Did the positive policy impact linger over students' HKALE English results? From Figure 7, it can be seen that the HKALE English passing rate has been declining since 2004 and hit its lowest in 2007 at 74%. Though the passing rate has slightly increased to 76.5% in 2009, the rate is still lower than that before the policy implementation.

Ever since the policy implementation, researchers such as Poon (2004) have expressed their concerns about the adverse impact of mother-tongue education on students' English performance. Not only students have less exposure to the English language, they also became less motivated to improve their English as under mother-tongue education, students' performance in other content subjects no longer hinges upon their English proficiency (Poon, 2004). Another possible reason for the continuous decline in the English passing rate can be attributed to the two English syllabi in HKCEE before 2007. For students taking HKALE in the years 2005 to 2008, they either sat the syllabus A or B in their HKCEE English examination. Students taking the easier syllabus A paper would have to sit the same HKALE English paper together with their HKCEE syllabus B counterpart. The syllabus A batch was under pressure to catch up with the syllabus B batch in two years' time. The performance of the syllabus A batch may affect the overall HKALE English results. Moreover, as mentioned earlier, those Cantonese-stream students with good HKCEE grades might have switched their learning mode to English at their senior secondary levels. These students will have to learn other content subjects in English. During their two years of senior secondary studies, they may have to struggle with the English language in content subjects and this may lessen their interests in learning the English language itself, and thus, affecting their HKALE English performance.

While examining students' HKCEE and HKALE results, one may see that the positive policy impact on students' HKCEE results did not seem to linger over students' HKALE performance. This is especially evident in students' HKALE English passing rate. The public's worries over students' declining English standard seem to have become a reality.

Fine-tuning of the mandatory mother-tongue education policy: A long-term remedy?

“I love Cantonese but I want English.”

“I like English most because speaking fluent English makes people look very intelligent and cool...”

(Lai, 2009, p. 79, 84)

These are just two of the many Hong Kong student participants in Lai's (2009) study expressing how they perceived English as a language of power and how English learning can make them feel superior. Though Hong Kong returned to its motherland, China, in 1997, the English language still pervades Hong Kong's education (Tsui & Tollefson, 2007). The continuous decline in students' English performance might have alarmed the Hong Kong government. In March, 2008, the Hong Kong Education Bureau announced the fine-tuning of the MTE policy, which came into effect in the 2010-11 school year. The fine-tuning, according to the Education Bureau, aims to increase "students' opportunities to use and be exposed to English in schools" and to "prepare them to embrace new challenges and enhance Hong Kong's status as an international city" (Education Bureau, 2009, p. 4).

The fine-tuning allows schools, "under certain conditions and according to the ability of their students" (Education Bureau, 2008), to have some flexibility in the MOI. The fine-tuning also aims to "minimize the labeling effect caused by the categorization" (Education Bureau, 2008) of all secondary schools into either Cantonese- or English-medium schools. Not only schools have the flexibility in their choice of MOI, the use of English to supplement mother-tongue teaching can be up to 25% of the total lesson time, excluding the lesson time for the English language. Despite the government's efforts to enhance students' English proficiency, the public criticized strongly against the government's fine-tuning arrangement.

Under the fine-tuning, for schools which previously used Cantonese as the MOI, they can consider having English-medium classes beginning the academic year 2010-2011. The number of English classes is largely dependent on the secondary one intake's English proficiency. As stated by the Education Bureau (2010), if "the average proportion of S1 intake of a school admitted to a class belonging to the "top40%"⁴ group in the previous two years under a six-year review cycle reaching 85% of the size of class" (p. 8) (i.e. 29 students in one class, with regard to the allocation class size in 2010), the schools are given the discretion to decide on their MOI arrangements. In other words, the number of English classes varies from school to school as it depends on the number of secondary one intake belonging to the top40% group, which is accessed as English-medium-capable. However, does high English proficiency necessarily imply higher capability in learning through English?

Furthermore, the fine-tuning arrangements aim to eliminate the labeling effect on the Cantonese-medium students. Similar to the MTE policy, the fine-tuning arrangements were devised based on the idea that only those who are able to attain a certain level of English proficiency will be given the chance to learn through English. In a way, the English-medium

⁴ According to Education Commission (2005), "these 40% students can be identified on the basis of students' internal assessment (IA) results (including the second term of primary 5 and the first and second terms of primary 6) as scaled by the existing pre-Secondary 1 Hong Kong Attainment Test (pre-S1 HKAT)" (p.20). This "top40%" group is accessed as EMI-capable, meaning they are capable of learning through English.

students will continuously be treated as “the elite”. The within-school MOI streaming arrangement in fact, will induce the labeling effect at the class level. As mentioned before, the number of English-medium classes in schools depends on the number of English-medium-capable secondary one intake. This implies that the number of English-medium classes would implicitly indicate schools’ ranking. In other words, the more the English-medium classes that a school has, the more elite the school will be. This will eventually lead to unhealthy competition among schools as students’ academic achievement will be used as a means to promote schools’ ranking. Schools with more English-medium classes will be classified as “first-class” or “the elite group”. While those which use Cantonese as the teaching medium (with zero English-medium classes) will be labeled as “inferior”. The pursuit of more English-medium classes (that is to attract more English-medium-capable students) may eventually become the ultimate goal of teaching. In a causal conversation with an English teacher in a Cantonese-medium school, the teacher expressed to me that her school would start having English-medium classes (with zero Cantonese-medium classes at the same level) in the academic year 2010-11. Teachers who used to teach content subjects in Cantonese are under tremendous pressure as they have to devise new teaching materials and examination papers in English. And most importantly, they have to start teaching the subjects in English. How about those schools which have both Cantonese- and English- medium classes at the same grade level? Having classes with a different teaching medium, teachers have to prepare two sets of teaching materials and examination papers. This inevitably will exert pressure on teachers. They not only have to prepare the teaching materials in two languages, they also have to plan their lessons differently so as to accommodate the needs of students in different MOI classes.

The English teacher also expressed to me that there are some schools, which do not have enough secondary one intake belonging to the top40% group but would like to be categorized as “English-medium”, deliberately cut down the number of classes so that they are able to meet the threshold for having English-medium classes in school. The fine-tuning arrangements have just come into effect. Will the arrangements help enhance students’ English learning as anticipated by the government? Or will the arrangements create an unhealthy learning environment in secondary schools? It is still too early to tell.

Concluding remarks

Hong Kong had been a British colony for over 150 years. Under the British sovereignty, the territory had changed from a fishing port to an international city. The British Empire brought to Hong Kong not only social and economic advancements, but also the hegemony of the English language. English is an international language of business as well as the language of science and technology and international scholarship. The continuous decline in students’ English standard might have alarmed the Hong Kong government. Studies such as Evans & Green (2007) also show that there has been an increase in the number of Cantonese-stream

students having difficulties coping with English-medium post-secondary education. This may be one possible reason why the Hong Kong government has softened its stance and reoriented its language policy direction.

As reflected by students' HKCEE and HKALE performance, Hong Kong students have started to reap the rewards of mother-tongue education. In principle, the Hong Kong government should uphold the MTE policy at junior secondary levels (secondary 1 to 3). In other words, all secondary schools should adopt Cantonese-medium in teaching. Schools which wish to use English in teaching should comply with the prescribed criteria of student ability, teacher capability and support strategies under English-medium education. In addition, a credible quality assurance mechanism should be set up to monitor the policy implementation in schools. For senior secondary levels (secondary 4 to 7), schools should be allowed flexibility in their choice of MOI. Schools which would like to adopt English-medium should comply with the prescribed criteria mentioned above. The Education Bureau should remind all schools that an appropriate MOI should be one that enhances students' understanding but not one that helps boost a school's ranking.

While allowing schools the flexibility to choose their MOI, the Hong Kong government seems to have made a "u-turn" on its MOI policy and it has turned the clock back twelve years to the colonial period during which a laissez-faire approach was adopted towards schools' MOI (Tien, 2008). One should note that learning through English is not the same as learning English. Under English-medium education, students do not necessarily have a higher standard of English. Perhaps we should not overemphasize short-term payoffs and neglect the long-term strength of mother-tongue teaching. What we should provide our students with is a school culture marked by unity and harmony but not one with unhealthy competition among students and schools.

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Reforming ELT Syllabus in Modern Pedagogical Context

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Abstract

Syllabus designing is an ongoing task. Like every intellectual and practical formation of social institutions, the task of syllabus designing is not to be done once for all. Constant process of synchronization with the new changes is an inevitable phenomenon. The field of English Language Teaching (ELT) has been an epicentre of changes. The researches, experiments, innovations and experiences carried out in ELT definitely call for new outlook and approaches in syllabus designing. This paper examines teachers' views about syllabus of English taught at intermediate level in public institutions of Pakistan. A sample of 50 ELT teachers was taken randomly from Federal Government colleges located in Islamabad. A questionnaire consisted of 17 items was used to get opinions of the teachers on various aspects of ELT syllabus and possible changes in modern pedagogical context. Data were statistically analysed by calculating percentages and mean scores. Results showed that existing ELT syllabus lacked modern ELT approaches and needed changes on current academic needs and methodological patterns. It is suggested that focus might be given on use of computer technology, improving four skills of language, using modern assessment techniques, incorporating themes on culture, human rights, ethics, nature etc and harmonizing the learners with current socio-cultural, political, economic and scientific trends of the world to have a competitive ELT syllabus in this age of globalization.

Introduction

During the recent years the Government of Pakistan has given multiplied importance to education. More than one plan have been constituted and projects initiated at the central level. All these roads are logically bound to lead to metabolic changes in syllabus along with other structural changes in ELT system. The field of English Language Teaching (ELT) has been an epicentre of changes. The researches, experiments, innovations and experiences carried out in ELT definitely call for new outlook and approaches in syllabus designing.

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Syllabus designing is an ongoing task. Like every intellectual and practical formation of social institutions, the task of syllabus designing is not to be done once for all. Constant process of synchronization with the new changes is an inevitable phenomenon. There have been innumerable investigations and innovations since then. Linguistics and ELT have been studied from various angles. Social and psychological aspects and influences of scientific, technical and computer age have been part of the research and study. A lot of approaches and methodologies have been experimented. Syllabus designing has not been out of this arena. There has been an ever-continuing process of harmonizing the syllabi with changing requirements of time. The fact leaves no other way than to incorporate new developments. In Yalden's words, "Setting up a new course implies a skilful blending of what is already known about language teaching and learning with the new elements that a group of learners inevitably bring to the classroom: their own need, wants, attitudes, knowledge of the world and so on." (1987: 03) Irrefutably this is need of the time. A study of the modern works and researches in Applied Linguistics and pedagogy become a great source of inspiration for a new research to contribute to the knowledge of the field and in turn to the development of history and civilization. The apparent fragile condition of the syllabus in Pakistani colleges, vital significance of the intermediate level of education and absence of research work for changes in harmony with the modern requirements help focusing the research on syllabus designing at intermediate level. Malik (1996: 04) laments over the loss of failure of students as that of both time and national resources. She very appropriately points out that the failure is a blow to the students in terms of their chances of employment as well as their emotional well being and self-esteem.

Impressing upon the necessity of teacher training as one of the remedies of mass failure of students, Malik (1996: 03-04) speaks of the need of the critical appraisal of the present syllabus along with methods modes of assessment of the compulsory paper of English at the college level. She asserts that the revision of curriculum and delivery methods is necessary to improve the efficiency of the educational set up.

Syllabus is not only a tool to teach the relevant subject, it plays other tangible and intangible roles as well. Definitely syllabuses and training by the teachers play a vital role in either case. National Curriculum for English Language hints at this point where it suggests the themes for selection: These themes should primarily nurture ethical and social attitudes relevant to Pakistani context, and also create an awareness, tolerance and understanding of global audiences. The chosen material should demonstrate gender and cultural neutrality, and should not contain any hate material. (Ashraf, 2006: 144)

Writing on the question of social capital, Ashraf and Christie (2006: 79-92) say in an article: "All the determinants of social capital in Pakistan – these include communication, status, job, participation in the social networks etc. – are affected directly or indirectly by English language learning in Pakistan." It is we to see here how potentially our syllabus of English in its own part contributes to produce a social capital to make it a developed nation.

Theoretical Considerations

The interrelation of language teaching methodology has been a point of controversy. Whether syllabus is significant or language teaching methodology is the debate. Can any type of syllabus, even if quite improper, do, if the teaching methodology is appropriate or do we have to design a befitting syllabus for effective language teaching?

The debate has taken the form of the question of the merger or separation of methodology and syllabus design. There are broad and narrow approaches in this regard. The narrow approach maintains a distinction between syllabus design and methodology. "Syllabus design is seen as being concerned essentially with the selection and grading of content while methodology is concerned with the selection of learning tasks and activities" (Nunan 1993:05). The followers of the broad view don't believe in this separation. They are of the view that with the advent of the communicative language teaching the distinction between content and task is difficult to maintain.

Traditionally most syllabus designers started by making a list of grammatical, phonological and vocabulary items, and graded them according to the difficulty and usefulness. The task for the learner was to gain mastery over these items. "Learning language, it was assumed, entails mastering the elements or building blocks of the language and learning the rules by which these elements are combined, from phoneme to morpheme to word to phrase to sentence" (Nunan 1993:11).

During 1970's communicative views of language teaching began to influence syllabus designing. "The central question before the harbingers of this theory was 'What does the learner want to do with the target language?' rather than 'What are the linguistic elements which the learner needs to master?'" (Nunan: 1993: 11) In the wake of that there was a clear change in the course of action. Now the syllabuses began to be comprising not only the grammatical items which the students were expected to get mastery over but also the functional skill which were required the students to communicate effectively in society.

There was one commonality in linguistically oriented syllabuses and communicative syllabuses. Both focused on the things that learners should know or should be able to do as a result of the instruction, that is, the outcome. Therefore, the traditional distinction between syllabus design, which is concerned with outcomes, and methodology, which is concerned with the process through which these outcomes are achieved, continued to exist.

Recently, however, there are some syllabus designers who are of the view that syllabus contents might be taken in terms of learning tasks and activities. They hold this idea on the ground that communication is a process rather than a set of products. (Nunan: 1993: 11) Therefore, "...with the development of process, task-based, and content syllabuses, the traditional distinction between syllabus design (specifying the 'what') and methodology (specifying the 'how') has become blurred" (Nunan 1993:52).

This was also partially the factor behind the development of English for Specific Purposes (ESP). The harbingers of ESP focused, not only on language functions, but also on experiential content, that is the subject through which the language is taught.

Widdowson, however, maintains the traditional view on this issue. He thinks that the syllabus is the ...specification of a teaching programme or pedagogic agenda which defines a particular subject for a particular group of learner. Such a specification provides not only a characterization of content, the formalization in pedagogic terms of an area of

knowledge or behaviour, but also arranges this content as a succession of interim objectives. (Widdowson, as cited in Nunan 1993: 52)

Nunan points to the arguments Widdowson forwards for his case. Widdowson thinks that structural and notional-functional syllabuses exhaust the possibilities for the syllabus designer. The structural syllabus 'will tend to promote activities which serve to internalize the formal properties of language' (as cited in Nunan 1993:52). He thinks that the learner may not be able to use this linguistic knowledge in daily life communications. 'The functional-notional syllabus introduces activities which attempt to replicate 'real' life communication in class. Classroom activities, therefore, become a 'dress rehearsal' for real-life encounters. Here he thinks that the learners may not be able to use these rehearsed activities in various changed contexts. They might be able to use them in almost the same limited situations. He therefore suggests the following 'methodological solution':

[the methodology] would engage the learners in problem-solving tasks as purposeful activities but without the rehearsal requirement that they should be realistic or 'authentic' as natural social behaviour. The process of solving such problems would involve a conscious and repeated reference to the formal properties of the language, not in the abstract dissociated from use, but as a necessary resource for the achievement of communicative outcomes. (Widdowson, as cited in Nunan: 1993: 53)

Widdowson's suggestion has a strong appeal in it but it is not unopposed. Against his view of inclusion of process considerations in methodology, Breen includes them in syllabus.

An alternative orientation would prioritize the route itself: a focusing upon the means towards the learning of a new language. Here the designer would give priority to the changing process of learning and the potential of the classroom – to the psychology and social resources applied to a new language by learners in the classroom context. One result of this change of focus would be the syllabus could become a plan for the gradual creation of the syllabus of the classroom, jointly and explicitly undertake teacher and learners. Such a plan would be about designing syllabus and, therefore, a guide and servant for the map-making capacities of its users. Primarily it would be a plan for the activities learning within the classroom group (Penny, 2006).

Any syllabus would include all or some of these elements of grammar, structures, functions, notions, topics, themes, situations, activities and tasks. Each of them is either product or process oriented. The inclusion of each of them would be based on the beliefs about the nature of language, the needs of the learner, or the nature of learning.

Research Questions

The purpose of the study was to examine the opinions of ELT teachers about bringing possible reforms in ELT syllabus at intermediate level in Pakistan. Focus was given to suggest reforms for ELT syllabus in modern pedagogical context. Following research questions were designed to address the problem:

1. What are ELT teachers' perceptions about ELT syllabus?
2. What do they think of reforming ELT syllabus?
3. How do they think about possible reforms in modern pedagogical context?

Methodology

English language teachers have their pedagogical experience through syllabus mainly. Different kinds of variables were made points of inquiry in questionnaires for them. Survey was made on the current provisions for teaching in their institution. Comments of the teachers were asked on the current syllabus from various angles including technical and pedagogical aspects. They included the aspects of structure, progression, being fully professional, broadly educative and others. The teachers were also asked to give their opinion on the inclusion of different themes. The objective here was to make the syllabus broadly educative. The respondents were asked questions on the methodology of teaching English in the classroom, on the use of technology and the use of internet for teaching English language.

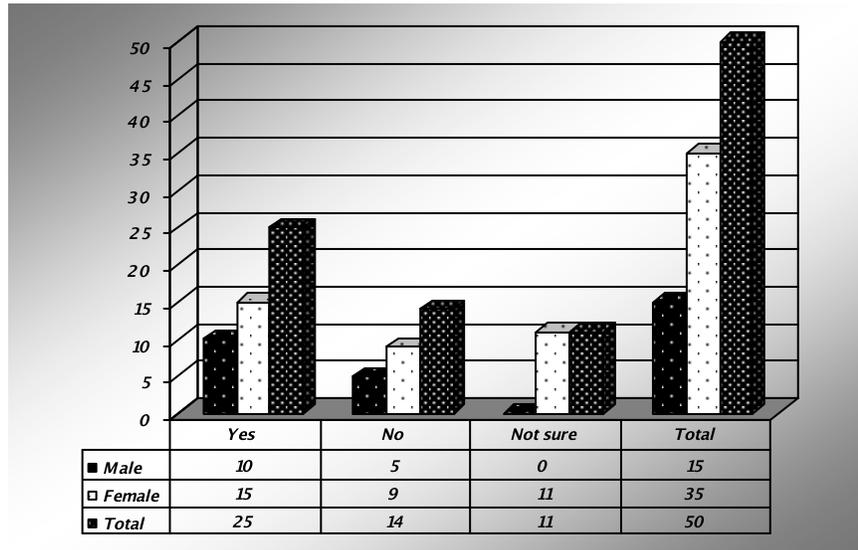
It was a simple survey study conducted in a specific setting, that is, Islamabad (capital of Pakistan). 50 teachers from department of English language and literature of Federal Government Colleges located in Islamabad were selected through random sampling technique. Among the selected teachers, 18 were male and 32 were female teachers. Age of the teachers ranged from 30 to 50 and their average teaching experience at intermediate level was 12 years. 50 percent of the sample had Punjabi as their mother tongue and the rest 50 percent was divided in Balochi, Pashto, Sindhi and other. This showed representation of all linguistic groups in the study.

A questionnaire encompassing various themes as mentioned above was developed by the researchers. It was validated through experts' opinions and pilot-testing. The questionnaire consisted of 22 items among which 12 items were inquired on five point likert scale and the remaining items got responses just in Yes or No form. However, in some cases, four and three options were also given. Response rate was not same on all items. It shows a discrepancy that is because some respondents perhaps did not want to show their real practices.

Analysis

It was a survey study conducted to know the perceptions of the ELT teachers about ELT syllabus and how to reform it in modern pedagogical context. Percentages and average scores were calculated. The following figures along with interpretation would present a clear picture of the results:

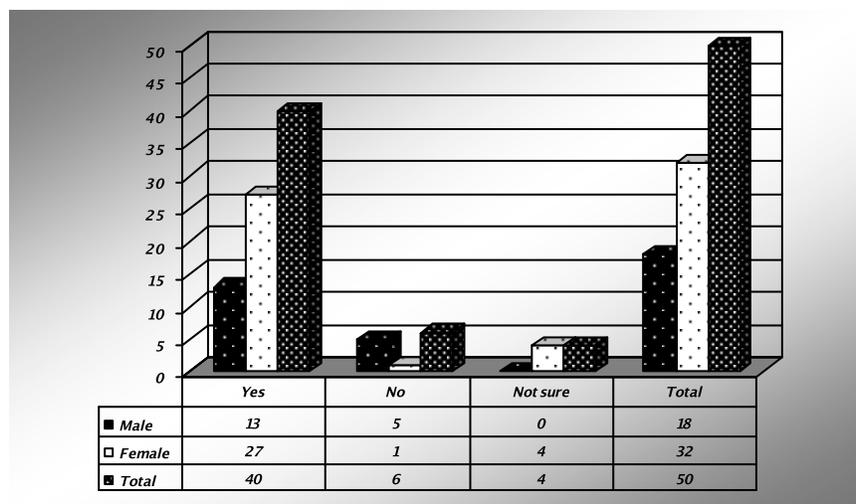
Figure-1 unnecessary components of syllabus



Statement: Do you think some components of the syllabus are unnecessary for objectives of learning English and they should be dropped out?

Responses showed that majority of ELT teachers was in favor of excluding some components of the syllabus as the components seemed unnecessary to meet the objectives of learning English. The components were Drama, Essay, Grammar, Novel, Poetry, short-stories and translation. The respondents agreed that Novel, Short-stories and Translation components need to be dropped from the syllabus.

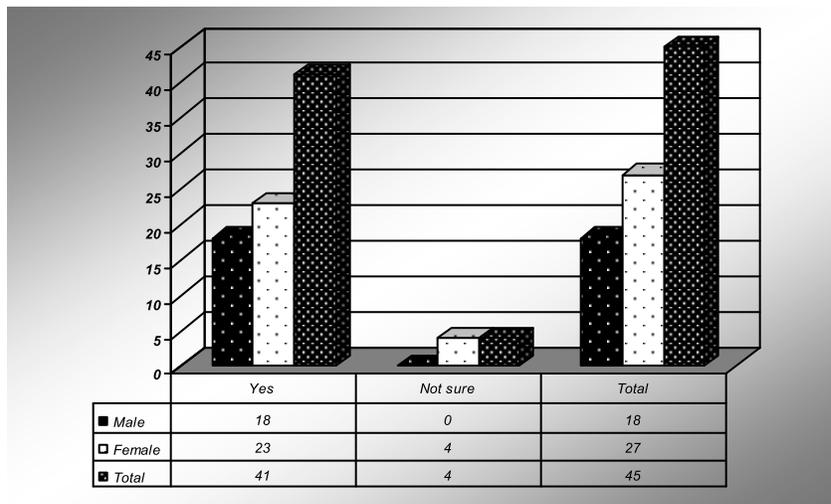
Figure-2 Projects on speaking and writing skills



Statement: Would you like to have some projects based on speaking and writing as part of the syllabus?

An overwhelming majority of the respondents have approved the inclusion of projects based on speaking and writing skills in the syllabus. It indicates that ELT teachers give much importance to speaking and writing skills and they also think that the current syllabus lacks these skills.

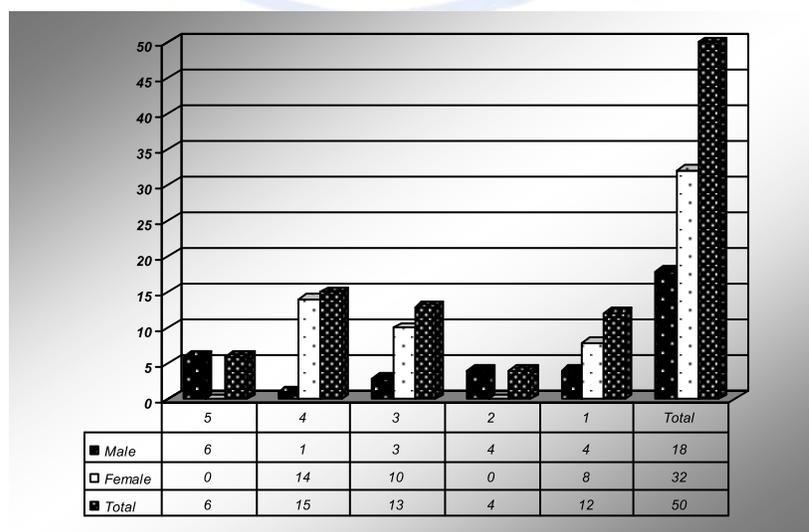
Figure-3 Themes of Culture, human rights, ethics, international affairs



Statement: Do you think the lessons of English should have the above themes?

Most of the respondents have agreed that the themes of culture, human rights, ethics, and international affairs need to be included in the syllabus.

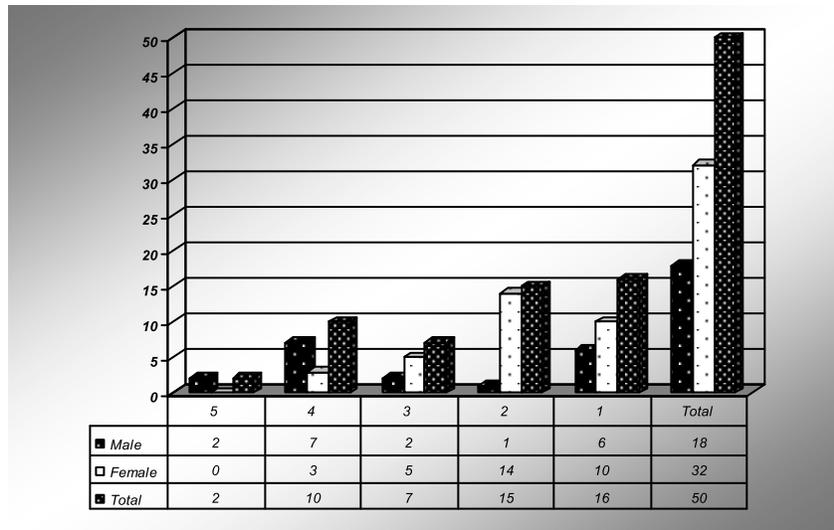
Figure-4 Compatibility of the syllabus



Statement: Is the current syllabus compatible with the level of the students: making advancement on what they learnt in the last phase

This is an average score of 2.98 for compatibility of the course contents with the level of the students. Some respondents agreed to the statement but the view is not supported by an overwhelming majority.

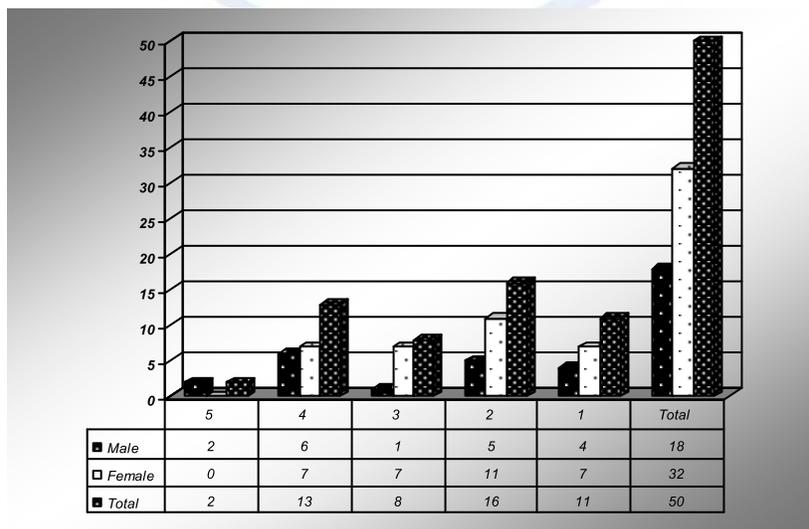
Figure-5 Professional Preparation of the Learners



Statement: The syllabus prepares the learners for a particular profession

The average score was 2.34 for the course being fully professional. This is a weaker score. Perhaps the syllabus is literature based, therefore, does not prepares the learners for a particular profession.

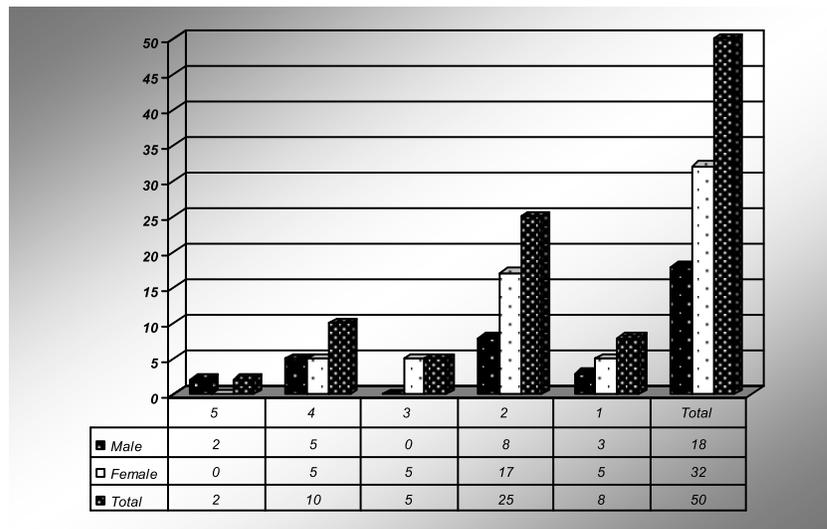
Figure- 6 Development of Autonomy



Statement: developing autonomy: allowing the learners increasing independence of action as the course progresses

The mean score was 2.58 for developing autonomy through current syllabus. Most of the respondents were of the opinion that the syllabus did not give autonomy to the learners and did not develop independence of action as the course progresses.

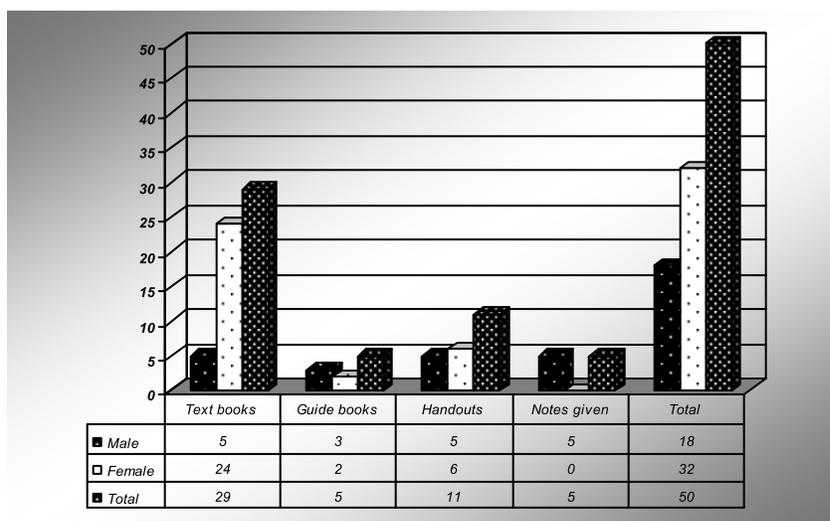
Figure- 7 Synchronizing with the spirit of the time



Statement: Synchronizing with the spirit of the time: harmonizing the students with the current socio-political, economic and scientific world trends current

The mean score was 2.46 for the course synchronizing with the spirit of the modern times. The respondents opined that the syllabus was not capable of meeting contemporaneous challenges. No advancements of the time have been assimilated in it.

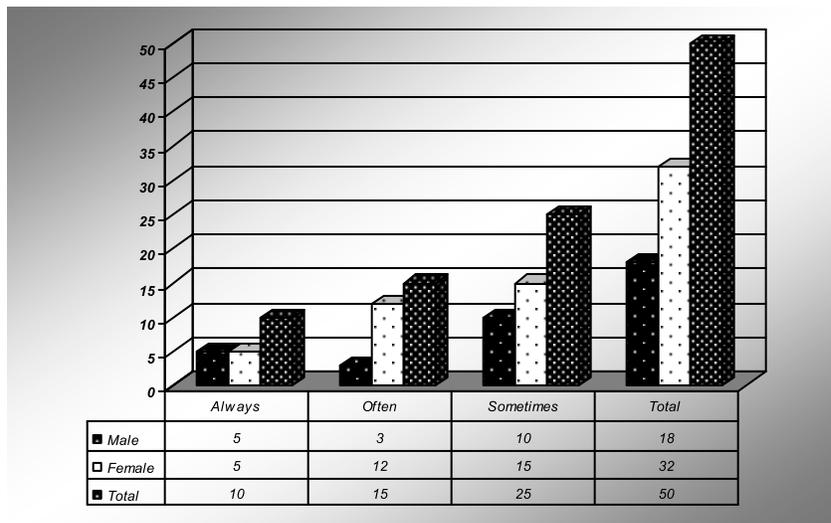
Figure-8 Resource material for teaching English



Statement: Which materials do you regularly use for teaching English in the classroom?

The most commonly used material is text books. It is encouraging to note that handouts are also used by the teachers. They also partially indicate the use of activities. Majority of the teachers use textbooks to teach English in the class.

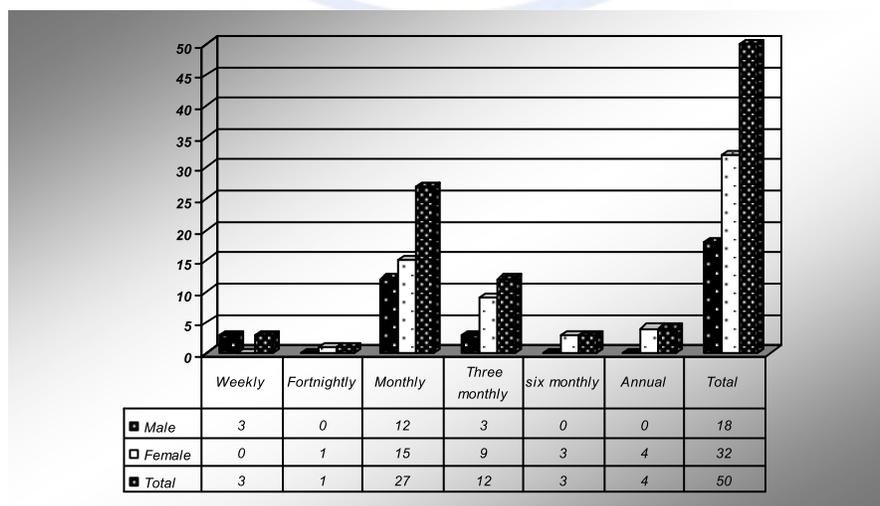
Figure- 9 **Pair or group activities**



Statement: Students do pair or group activities.

There appears to be a healthy trend in the use of pair or group activities in these colleges. But practical realities don't seem to be supportive of the fact.

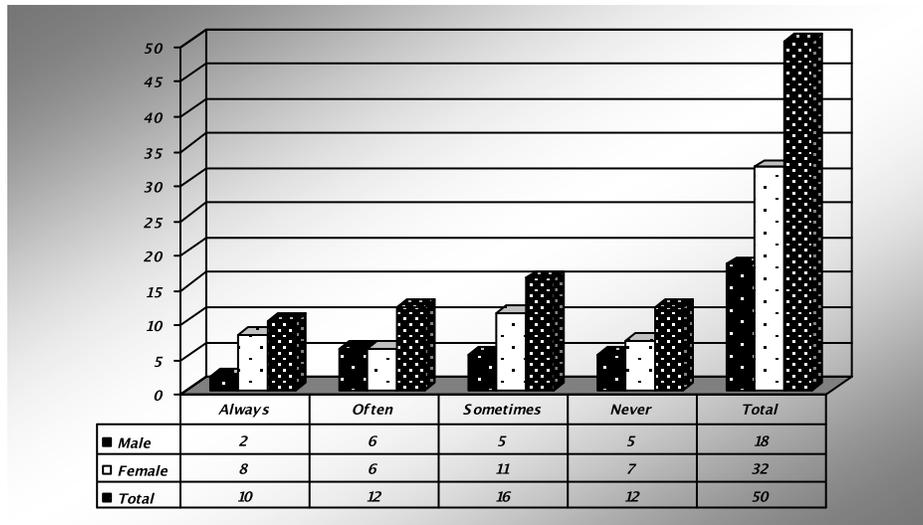
Figure-10 **Assessment of English language skills**



Statement: How are the students' English language skills assessed in your institution?

Data indicated that the most dominant trend appeared to be that of monthly tests. That is a healthy trend. However, it is not according to international competitive standard where weekly and fortnightly assessment practices are in vogue.

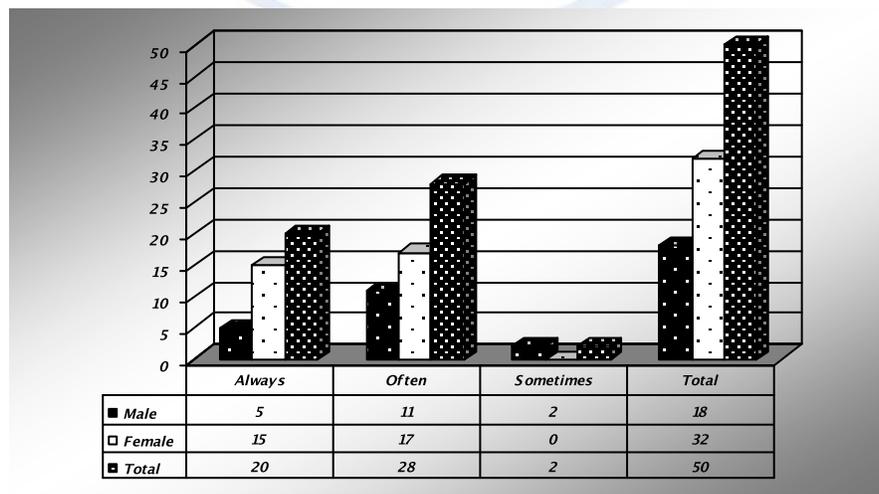
Figure-11 Opinion about oral presentation



Statement: I ask the students to give oral presentations.

The trend of oral presentations is better than that of research tasks and projects. However, as data reveal that oral presentation is not much common among teachers and they do not use it frequently. They need modern methodological pattern to utilize modern practices.

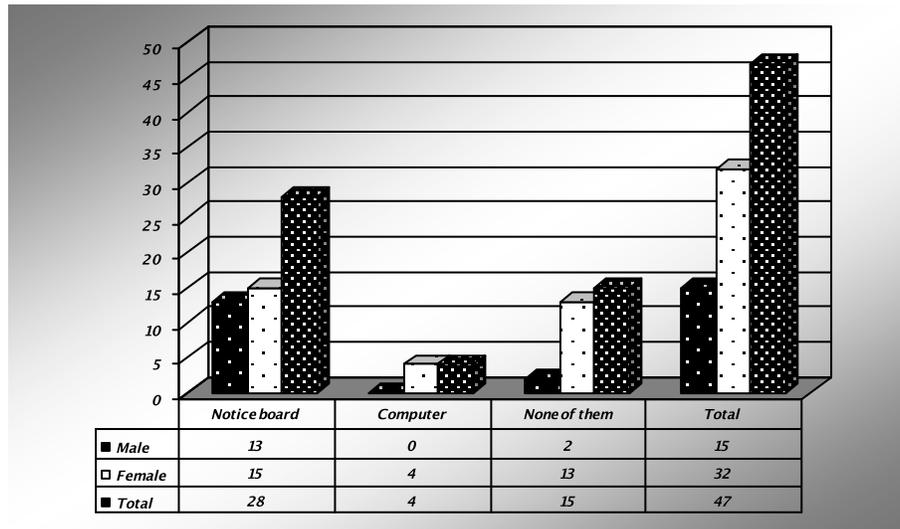
Figure-12 Language of Communication in class



Statement: I use English as the language of communication in the classroom

The frequency of the use of English by the teacher in the classroom is almost directly proportionate to the medium of instruction being English or Urdu in their colleges.

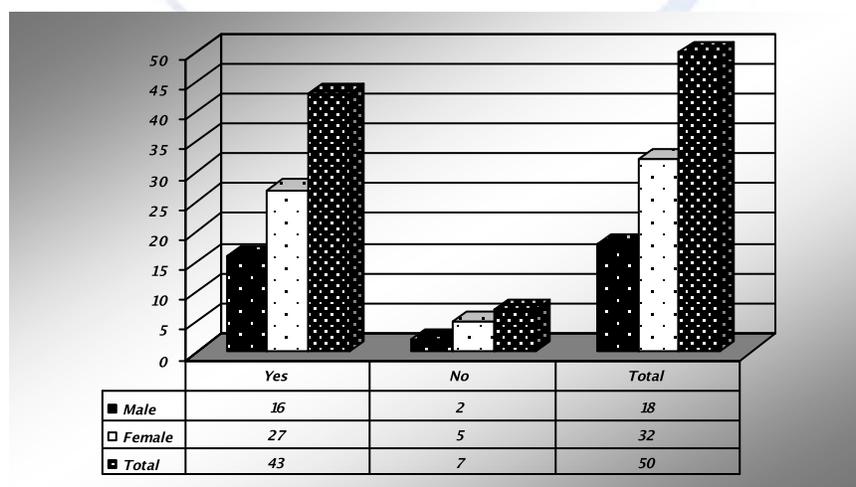
Figure-13 Resources in classroom



Statement: Which of these resources do you have in your classroom?

There is rare use of modern computer technology in these institutions in this age of information and communication technology. This situation would not support the notion of delivering instruction successfully for ELT syllabus.

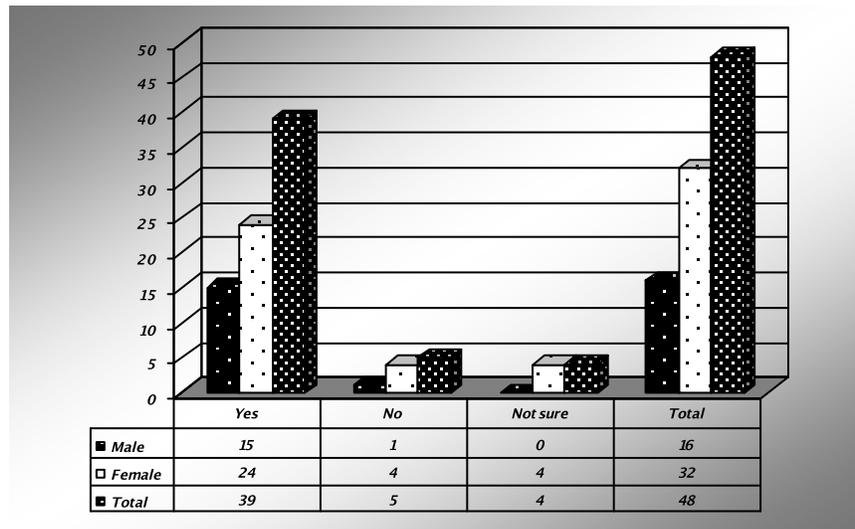
Figure- 14 Use of resources in classroom teaching



Statement: Do you wish the use of these resources in your classroom teaching?

A large majority of respondents wished for the use of technology resources in the classroom. Only few responses were against this idea, perhaps few respondents did not know how to use it.

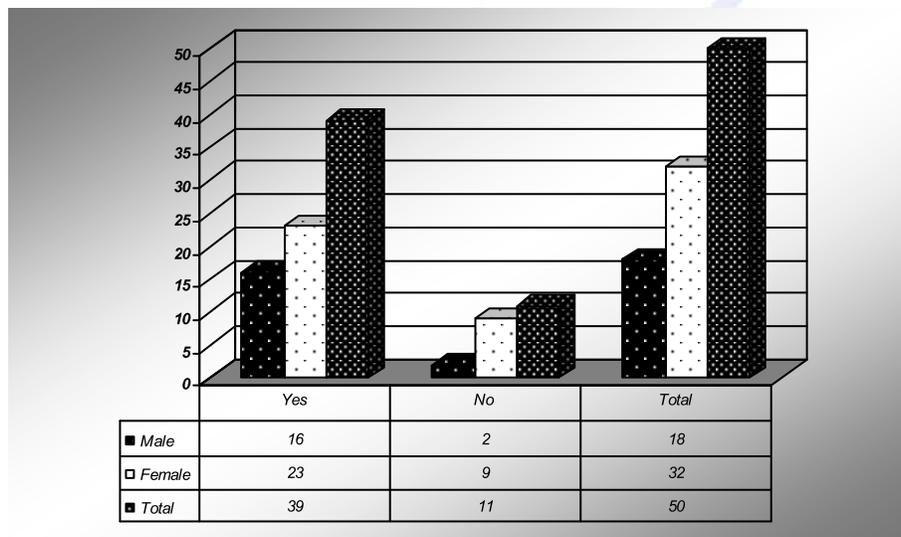
Figure-15 Notes taking and notes making skill



Statement: Notes taking and notes making skill need to be included in ELT syllabus.

Most of the respondents opined that notes taking and notes making skill need to be included in ELT syllabus that is presently missing.

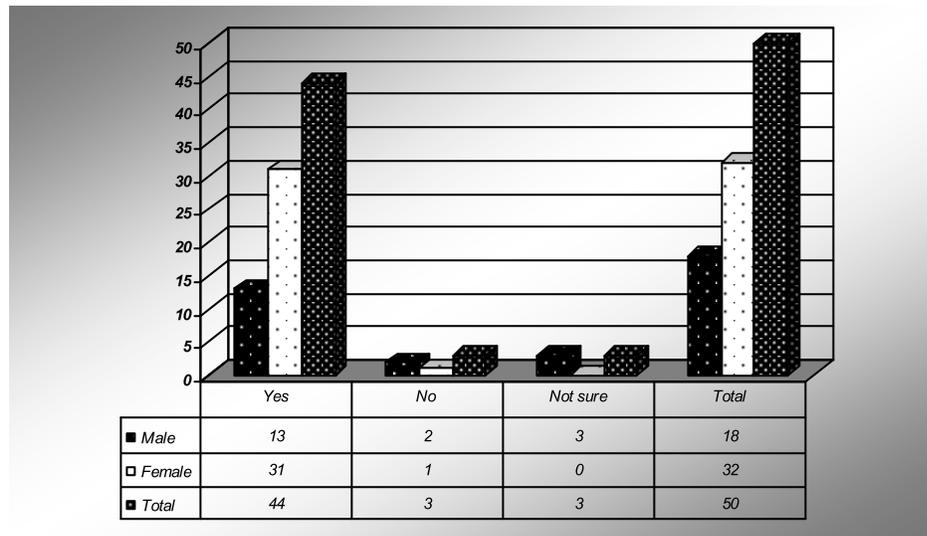
Figure-16 Doing ELT homework on computer



Statement: Do you think student should be given homework to do on computer?

An overwhelming majority of teachers agreed to the idea of giving students homework to do on computer. Only few respondents disagreed to this idea because of the reason that perhaps availability of computer is not ensured for the teachers and the students.

Figure-17 Online teaching & learning programmes



Statement: Do you think your institution to present online programmes as part of the teaching and learning scheme?

A big majority of respondents approved the idea of presenting online programmes for students. That motivates to improve ELT methodology through online programmes.

Discussion and Conclusion

Analysis shows that ELT system in the country is based on traditional patterns. Times have changed but we haven't been able to harmonize our English language pedagogical system with the spirit of modern times. On the other hand, the fact remains that unless we establish our system as per latest developments in the field, we cannot produce superb results. If we don't absorb changes, we cannot survive in our national life even, not to speak of leading the comity of nations.

Teachers have given their intensive and extensive opinions in response to the questionnaire. That leads us towards a better choice of syllabus type. And it cannot be a single type of syllabus again.

The collective opinion of the teachers suggests the overall dissatisfaction of teachers with the present syllabus for effective teaching of English. They have a broadly common thinking of bringing about metabolic changes in syllabus of English. They are aware of the fast appearing changes in the fields of science, technology, communication, commerce and international relations. They seem to realize the demands of the world of today. They are for change. Opinions of the teachers of the current syllabus are expressive of the fact that the current ELT syllabus is not based on themes of

international themes and does not develop awareness of global practices relating to teaching and learning. Reforms might be brought in term of innovative themes compatible with modern time, assessment methods for ELT syllabus and new instructional methodology which may be comprised of utilization of information and communication technologies.

Recommendations for a variety of themes indicate the need for a syllabus based on varied types. New age with new advancements demands newness and variety in syllabus for teaching English. Advancement of technology is one big factor, therefore, modern computer technology might be utilized for effective teaching and learning of ELT syllabus.

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THE STRATEGIES OF REUSING THE VACANT SPACES OF ELEMENTARY SCHOOLS IN TAIWAN

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Abstract : Owing to the decline of the birth rate and the decrease of student population in current years, there are quite some vacant spaces found in the elementary schools globally as they are in Taiwan. There are different planning and designs for school vacant spaces in different areas and schools. The methods of literature and document review and in-depth interview were conducted in this study. The reusing of school vacant spaces not only vitalizes school and community but also creates an opportunity for future development. The qualitative research of interview with education authorities further confirm the perception of planning centrally and action locally. Suggestions made are as the followings: 1.The definition of school vacant spaces should be clearly defined for different reuse plans. 2. A top-down plan is required to initiate a bottom-up action from local community. 3. A close school-community relationship should be developed 4. The current regulations which restricted the reuse of school lands should be reorganized.

Keywords: fewer children, reuse, school vacant spaces

Background

With the decline of birth rate recently, Taiwan's enrollment rate in elementary schools descends and vacant space commonly appears in elementary schools in Taiwan. According to Ministry of the Interior (MOI) statistics, the number of newborn babies in Taiwan reached 191,310 in 2009, with crude birth rate of 8.3 per 1,000 (Crude birth rate is calculated based on the number of babies born per 1,000 people per year) , which registered a decline of 3.7 percent in number and 0.4 per 1,000 in birth rate compared to those in 2008. Having fewer children enrolled, schools have to reduce classrooms, to deal with school vacant spaces, and to figure out how to manage school environment. This paper explores the causes of having fewer children in Taiwan, investigates the current status of school vacant spaces in Taiwan, and attempts to develop strategies to cope with the problem of school vacant spaces in elementary schools in Taiwan.

Literature Review

According to the United Nations statistics, the total fertility rate globally in 1960-1965 was at about 6.0 children per woman and was slow down at 5.0 children per woman in 1995-2000. However, there was a rapid drop in 2000-2005 at 2.7 children per woman. It is estimated that there will be a decrease in fertility rate at 2.5 in 2010-2015.

However, the fertility rate displays two opposing extremes. In 2000-2005, the under-developed countries had high fertility rate, with average of 5.0 children per woman. But the developed countries had low fertility rate at 1.6. In Taiwan the rate went down under 2.0 since 1985. The fertility rate was kept at 1.8 until 1997, and there was a rapid drop in 2007 with 1.1 children per woman (Directorate General of Budget, Accounting and Statistics, 2008)

Furthermore, according to Ministry of Education statistics, there were still having 1,927,197 elementary students in Taiwan in 1999, however, the number dropped to 1,677,303 in 2008. That meant there were fewer than 250,000 children within ten years. With regard to the enrollment, there were 233,299 first graders in 2008, and it is estimated there will be 194, 799 in 2014. That is to say there is a decline of 38,500 children, according to the statistics of the Ministry of Education (MOE) in 2009.

Figures 1 and 2 showed there was a minus growth for the enrollment of elementary school since 2004, and the circumstance transferred to middle school in 2010 and to high school in 2013. The reduce of student number certainly will affect the school management.

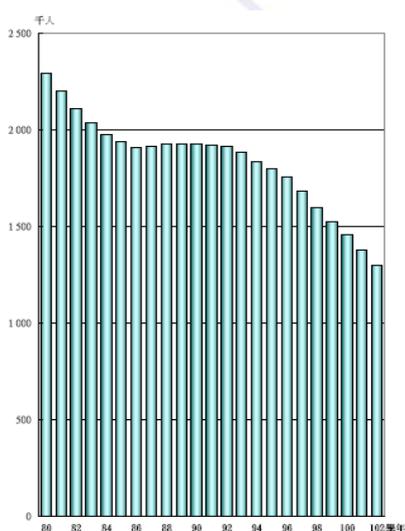


Figure 1: Changes of the Number of the Elementary School Students 1991 through 2013 (source: the estimated elementary school)

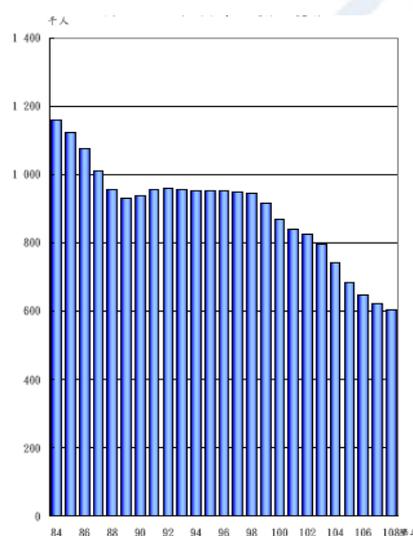


Figure 2: Changes of the Number of the Middle School Students 1995 through 2019 (source: the estimated middle school students).

The fewer children not only made a profound impact on teachers in the job markets but had influenced the usage and maintenance of existing school buildings. Small scale schools were thus restructured or combined. The restructured or combined small scale schools reached to 138 schools from 2001-2007, data collected from MOE. 41 of the 138 small scale schools had been restructured. Among the 41 schools, 28 main campuses being changed as branch schools, 2 main campuses as separate classrooms, and 11 branch schools as separate classrooms. In addition, there were 97 schools being combined, including 13 main campuses, 34 branches, and 50 separate classrooms. With the fewer children enrolled the educational reform in 1994 with the appeal for 「small class, small school」 was realized. Currently 90 percent of school classrooms placed students below 35 in number (Chen & Cheng, 2007)。

To deal with the vacant spaces in schools, MOE of Taiwan organized a master plan for vitalizing school spaces. The plan was to develop a sustainable school by remodeling the campus by developing sport stations, and by introducing digital learning centers.

A new model of school is therefore expected with five functions, fitting with five projects under the master plan. The projects are transforming the vacant spaces of schools to community learning centers, developing each school with specific features, creating schools as energy saving or green bases, establishing schools as sport stations, and extending digital capacity to schools in rural areas.

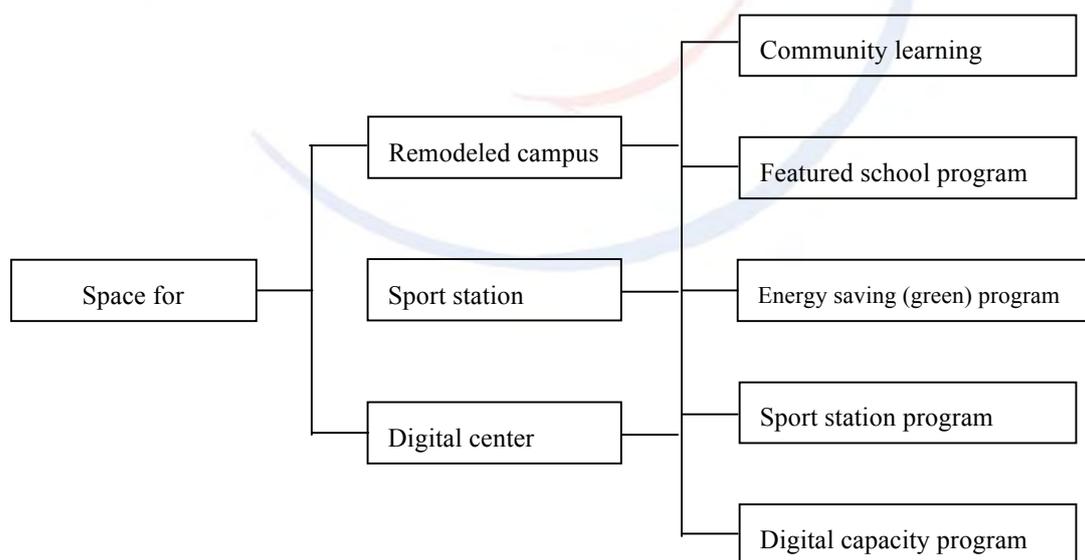


Fig. 3 The structure of the master plan for vitalizing vacant spaces on campus

(source: MOE website, 2007)

As fewer children and vacant spaces in schools become common in nowadays society, especially in developed countries. Take two Asia countries, Singapore and Japan, for

instance. Reviewing these two countries official reports on the reuse of school vacant spaces, it is found that the abolished schools in Singapore are almost transformed into art villages or museums. While in Japan, 50 abolished schools have been found in nine kinds of reuse forms, according to the report of the Ministry of Education of Japan, 2001. The health promotion services particularly appear in Japan in the reuse of the spaces. However, they are only for old people: classes for the old, and day care center for the aged people in the community. In Taiwan, the school vacant spaces have developed in different dimension for the reuse and extension of school's function.

Methods

The methods of literature and document review and in-depth interview were conducted in this study. This paper referred to the literature pertaining to the practice of the reuse of school vacant space in other countries, and analyzed the experiences of that from Taiwan in order to identify the principles both for planning and for evaluating sustainable reuse programs. To probe the current status of reusing vacant school spaces in Taiwan, interviews were made in 2008 with local education officials.

Findings

The Cause of Fewer Children in Taiwan

The vacant space in the elementary schools in Taiwan is an impact of fewer children, and the causes of fewer children in Taiwan are accompanied by social development. In Taiwan the total fertility rate dropped to 2.16 children per woman in 1983 (Chang & Lee, 2001). The rate has reduced through years. The number of newborn babies was calculated totally 137,967 from January to September in 2009, which reflected a decrease of 3.4% compared with same period in 2008. The low fertility rate was a result from followings:

- **The Implementation of the Family Planning Program**

It was a tradition for people in Taiwan in an early date to bring up many children as manpower in agricultural society and for purpose of parents' old age. Therefore, Taiwan government had proposed the Family Planning Program with the notion: "two children are just enough, one child is not less." The program had an effect on reducing the fertility rate. However, as a rapid drop of the rate to 1.05 children per woman in 2008 (Ministry of the Interior, 2009a), the government now has to increase the rate instead and encourage families to have the third child. Nevertheless, it is still hard to reach the goal in the near future because of the rising of price level but not increasing

the birth allowance and parental allowance, and no support of the childcare of the double income families.

- The Increase of Education Cost

A recent survey for the education costs, including breeding and childcare subsidies, for a child from being a baby to he/she finishing graduate school was estimated to 5,000,000 N.T. dollars (Hung, 2006). The cost can only allow the child to spend in public school. As the few children a family has, the less family expenditure it spends. And the few children, the more affluent a family is. With such family economic conditions in mind, many families decide to have few children or not to have a child.

- The Shifts of Social Aspects

As educational background is important in Taiwan's society, and there is an expansion of Taiwan's higher education, people in Taiwan tend to upgrade their education level by spending more time in schooling. Moreover, there is a shift of social aspects from getting married before starting a career to starting a career first. Getting married in the latter stage of lives is a significant tendency in Taiwan recently. According to Department of Household Registration, Ministry of Interior (2009b), in 1971 the average age for marriage is 28.8 for man, and 22.8 for woman. But coming to 2008, the average age is up to 32.95 for man, and 29.5 for woman. Woman's marriage age is long delayed than that of man, and the advanced age of woman is not appropriate for pregnancy. So, most women bear only one child and no more.

- The Growth of Double Income Families

With the prevalence of education, the notion of sex equality, and a demand from industry, many females have participated in job markets. The higher educational background and labor participation rate of women result in an increase of single females. If these women married, they are part of double income families, which are the main family structure in metropolitan cities. The double income families have affluent economic resources but with less time to deal with family matters, and no free time to take care of children is the major reason for parents not to raise children.

The Current Status of School Vacant Spaces in Taiwan

There are some schools and classrooms leaving unused in Taiwan. From the surveys by each city or county, the following administrative regions have found most cases: Taipei county (32schools/434classrooms), Yi-Lan County (29 schools/35 classrooms, Tainan county (23 schools/143classrooms), Kaohsiung county (19 schools being abolished or combined), Pin-tung county (19 schools being abolished or combined),

Chia-yi county (12 schools/105 classrooms). From interviews, it is found that most counties have faced the problem of vacant spaces in schools, and their departments of education have conducted general surveys for further actions.



Figure 4: Comparison of the surveys by MOE and by this research of Taiwan's elementary schools with vacant spaces (both abolished and combined schools are calculated.)

The Reuse of School Vacant Spaces in Taiwan

Though the aged society with few children changes the demographic structure, it provides a situation for generation fusion and an environment for multicultural learning. A school which originally belongs to the young generation of a community may be transformed to be the community's lifelong learning center. Such an arrangement offers the aged generation as well as new immigrants an accessible learning environment. The school vacant spaces can be venues for various functions. Followings are some examples being well developed in schools in north Taiwan.



Fig. 5 Wen Shan Civic Hall, Taipei
(source: Wen Shan District office,2008)

- Being a Civic Hall

Near by the Mu Zha Elementary School, the civic hall was the former president's house. It was remodeled in 2002 and was a combination of the modern and the historical in appearance, and the native and the humane in culture. The civic hall has spaces for exhibitions, meetings, and social occasions and its outdoor square provides multiple functions. It is an exemplar of making the best use of the vacant spaces. Moreover, it is planned to expand its network and communication capabilities and acting as a platform for community people participating in political issues. (Wen Shan District Office, Taipei, 2008)

- Being a Toy Clinic

With the support from MOE, the Xin Tai Elementary School transferred its abolished classrooms to a Community Lifelong Learning Center open to the old and the public of the local community. To teach the school students to treasure resources and make full use of objects, the Center settled a Toy Repair Workshop and Toy Clinic, which is the first workshop of the kind around the nation. 50 volunteers got the certification of Toy Doctor after they received and passed the training as electrician, carpenter, and tailor. More than half of the volunteers are over 60 years old in the community. As eighty to ninety percent of the destroyed toys were restored, the Toy Clinic is popular to children (MOE e-paper, 2008).

- Linking Typical Featured Schools with Nearby Scenic Spots to Develop Study Tour Program

The teachers of the Cyu Chih Elementary School make full use of their school's resources to crease various ecological areas in the school. They are Ecological Exhibit Hall, Tom and Jack's Little Tree House, Crab Handicraft Exhibit Space, Aquatic Pond, Butterfly Passage, etc. The reuse of the school vacant spaces is also linking to nearby scenic spots which allow school children to experience excellent environmental education and outdoor activities. Located at the protection area of water resource, the program of "Waterside Study Tour" of the Cyu Chih Elementary is not only popular to this school's students, but to other school groups as well as the public.



圖 1：特色遊學展示館

Fig. 6 Xin Tai Toy Clinic, Taipei county
(source: MOE, e-paper, 2008)



圖 2：水岸咖啡館標示



圖 3：水岸咖啡館命名為「書木榭」利用創意的方式將名稱表達。



圖 4：水岸咖啡館的內部，有圖書、桌椅等，桌面還放置標動物標本供學生學習觀賞。



圖 5：製作專屬屈尺國小的紀念品。



圖 6：創意木工作品擺設。

Fig. 7 Above photos display the various designs for vacant spaces, Chu Chih Elementary School (source: Chen, Hui-Ru, 2008)



Fig. 8 Bedroom of Cyu Chih School (above), and Tree house of Cyu Chih School (left)

source:
<http://tw.myblog.yahoo.com/jw!lsgDjlWfCQAqhx5150eKvhWH/article?mid=942>

• Setting up an Experimental Farm for Education

With support of community resources, Xin Tai Elementary School set up an Experimental Farm for Education by volunteer groups. The farm occupied 200 pin (7200sq feet) and was designed into seven areas: Aquatic Plant Area, Vegetable Farming Area, Rice Cultivation Area, Herb Garden, Cute Animal Farm, Nectar Plant Area, and Exploring Area. It offers a pleasing countryside scenery in a city.



Fig.9 Experimental Farm for Education, Xin Tai Elementary School, Taipei country
(source: Xin Tai website <http://www.stps.tpc.edu.tw/>)

- Setting up a Senior Citizen Learning Resource Center

The establishment of the “Toy Repair Workshop” in the Xin Tai Elementary School not only benefit to the school children but also to ones who participated. The toy doctors are from the retired people from all walks of life, other volunteers, and school teachers. The old retired people are willing to contribute their wisdom, which is derived through age, and are happy to have the opportunity to contact with newer generation. Their participation not only vitalize school and community but also keep on personal learning.



Fig.10 The Senior Citizen learning Resource Center (left), and a volunteer helps making children’s toy
(source: Xin Tai Website <http://www.stps.tpc.edu.tw/>)

Other strategies for reusing the school vacant spaces are such: (1) establishing a kindergarten operated by private sector, (2) allowing the spaces for rent, (3) the abolished classrooms being rent to extension classes or after school classes (Taipei

County, 2006).

Discussion

The vacant spaces in elementary schools have become a serious problem in Taiwan. Fortunately, both the MOE, local schools and communities recognize the problem and work together with the hope to reuse the vacant spaces and vitalize the school. Although some schools have reached satisfactory outcomes so far, there must be some principles for other schools to follow as strategies:

- A Decision Made by Citizen

As students have privilege to receive education in schools, the school has to provide them with appropriate spaces and environment for learning. The learner must have a sense of belonging and recognize that the space is “a place of mine”, then the space can be fully used (Lin, 2005). Therefore, the user’s opinions and participation is required to decide how to use and plan for the school vacant spaces. Of course, the user also has the right to use the spaces. As to the spaces, various functions and humanized designs together with manageable facilities, recycling system, and access to community resources are all important to maximize the usage of the spaces.

- With Learning-oriented Objectives

As the society change everyday, so do the content of learning and the learner. The school has to adjust itself in teaching and aiming at various learners. The vacant space is a chance for school to open to the community, and to vitalize the school again.

- Sustainable Development Approach

School can be a place for social education if the school allows the public of the local community to make use of school and its facilities. If doing so, the feedback from the community is immeasurable. The interaction of school and community assures a sustainable development for both.

- Community Participation for Lifelong Learning

The school can be an extension of community area. In other words, school is a small community and the school buildings can be a cultural landmark of the community. Therefore, with lifelong learning mission the school can approach to be a happy learning venue as well as a spiritual or cultural or industrial representation of the community.

Conclusions

More and more school vacant spaces is really a crisis on one hand, but it can be an

opportunity on the other. Reusing the vacant spaces in schools can vitalize both the school and its community. Some successful examples in Taiwan approve this by developing out various strategies to reuse school vacant spaces and transformed them into programs. Such transformation benefits both to school and community. However, it still requires a close relationship not only between school and community but between central and local authorities to work for well operating and managing.

The qualitative research of the interview with education officials further confirms the perception of planning centrally and action locally. Suggestions made for this study are: 1. The definition of school vacant spaces should be clearly defined because the abolished schools and schools with some vacant spaces can have different reuse plans. 2. A top-down plan for vacant school space reuse is required so as to initiate a bottom-up action from local community. 3. A close school-community relationship should be developed for the good of a sustainable development. 4. The current regulations which restricted the reuse of school lands should be reorganized, and authorities from sectors concerned should work together to make it out.

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**Project-based Learning and Teaching of Professional Subjects at Selected
Secondary Professional Schools in Slovakia**

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Project-based Learning and Teaching of Professional Subjects at Selected Secondary Professional Schools in Slovakia

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Introduction

The aim of our survey was within the grant project supported by the agency KEGA (Ministry of Education, Science, Research and Sport of the Slovak Republic), Project No. 031-035STU-4/2010 – Models of Project-based Learning at Secondary Professional Schools, to determine the current state of the project-based learning implementation of professional subjects at selected secondary professional schools in the Slovak republic. Then we tried, based on the analysis of the realized survey, to propose the methods, how to increase the motivation of teachers at solving the short-term and long-term projects and that way to contribute for better learning process at this type of schools.

Project-based learning at secondary professional schools

Project-based learning promotes principle of individuation and operating principle of pupil, who learns from his own experience in the real environment and this activity enhances his knowledge.

Project-based method is not a simple method, it can only take place using several methods, techniques and forms of work. It's a way of teaching and learning, in which the starting point is meaningful and interesting task, a problem that students want and need to resolve. Choice of the solving method is retained as much as possible for pupils. They will come to the result applying their experience and capabilities. [1] Pupils are responsible for the process of work, and the result itself, they participate in its evaluation.

Therefore project-based learning can be described by these attributes:

- solving the problems is socially relevant,
- projects are interdisciplinary in nature,
- based on the interests and needs of pupils,
- pupils are involved in the planning, implementation and evaluation,
- pupils are responsible for solving a result,
- the importance of self-esteem and intrinsic motivation,
- role of the teacher is changing,
- emphasis of the individual work, student creativity. [2]

In project based learning so it goes on the education for autonomy and own responsibility of individual pupils, but also groups, teams. Teacher seeks to eliminate borders between subjects across the curriculum, he shapes pupils to the general topic (e.g. Energy), specific stimulus (e.g. energy resources), or specific problem (e.g. exhaustibility of resources and their replacement). [3] The aim is to learn to argue, prove, convince, etc. Projects may also have a

creative character, when pupils are trying to create, design something new. [4] Good project involves thinking, intuition, sensory cognition, emotions, motivation, integrates mathematical and logical thinking with verbal approach, integrates various teaching methods, experiences of pupils with new knowledge, controlled activity with self-regulation, and not least integrates children, parents, teachers, and also the school with the world.

Realization

The diagnosis was made at 15 secondary professional schools in Slovak republic. Schools were selected thus to cover all regions of Slovakia. The survey was participated by 112 teachers of professional technical subjects, especially of electrical engineering, mechanical engineering, civil engineering and economic major. Women were represented in 58.93% and men in 41.07%, corresponding to the gender representation in the teaching electorate of technical professional subjects at studied secondary professional schools.

In June 2010 was distributed the exploratory questionnaire to the respondents. Questionnaire consists of 16 closed ended questions with multiple choice and 6 half-open ended questions, where respondents within the selected menu complement the individual responses. In July 2010 we processed answers using statistical methods.

Evaluation

We found out that up to 96.15% of surveyed teachers considered generally appropriate using project-based learning at secondary school professional subjects, but at school, where they teach, considered it appropriate slightly smaller percentage (91.84%) of teachers. As shown in Figure 1 only a small percentage of teachers considered to be inappropriate to apply the project-based teaching at this type of school.

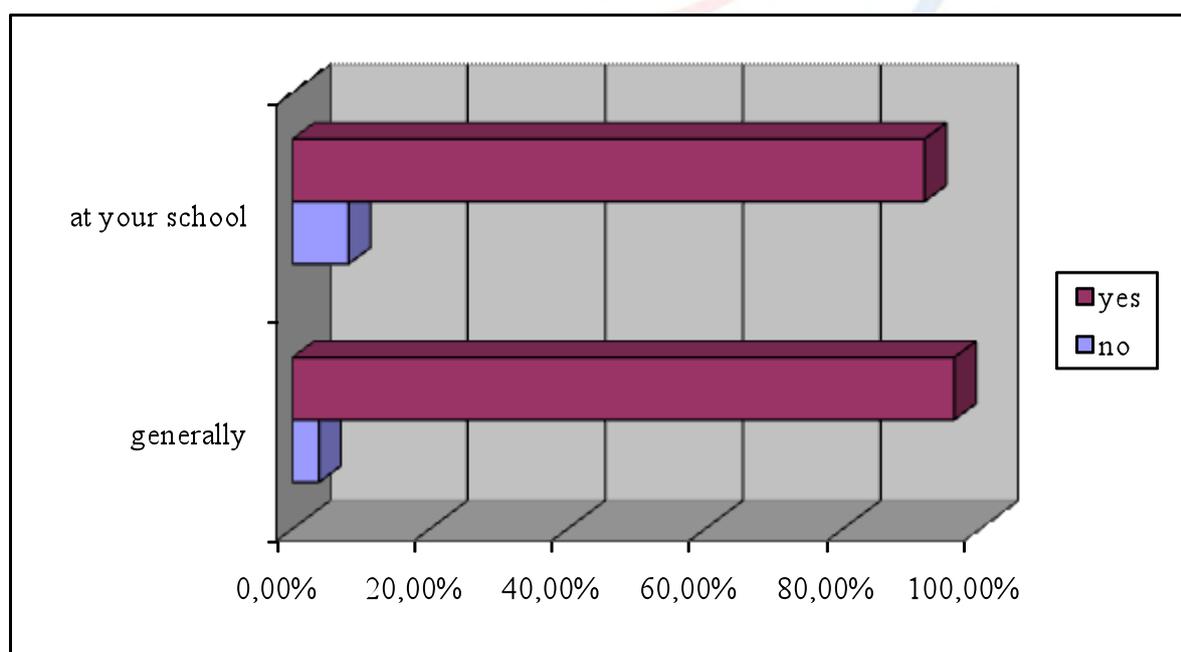


Figure 1: Do you think it is appropriate to use the project-based learning at secondary school?!

The most frequently mentioned reasons of teachers for using project-based learning at secondary school were:

- better possibility of bringing together theory and practice,
- improving the clearness of teaching technical subjects,
- possibility of using complex knowledge learned in several subjects,
- improving interaction between teacher and pupils,
- improving the transformation of curriculum content,
- possibility to develop logical thinking,
- possibility to develop creativity and activity of students
- supporting independence in thinking and action of pupils.

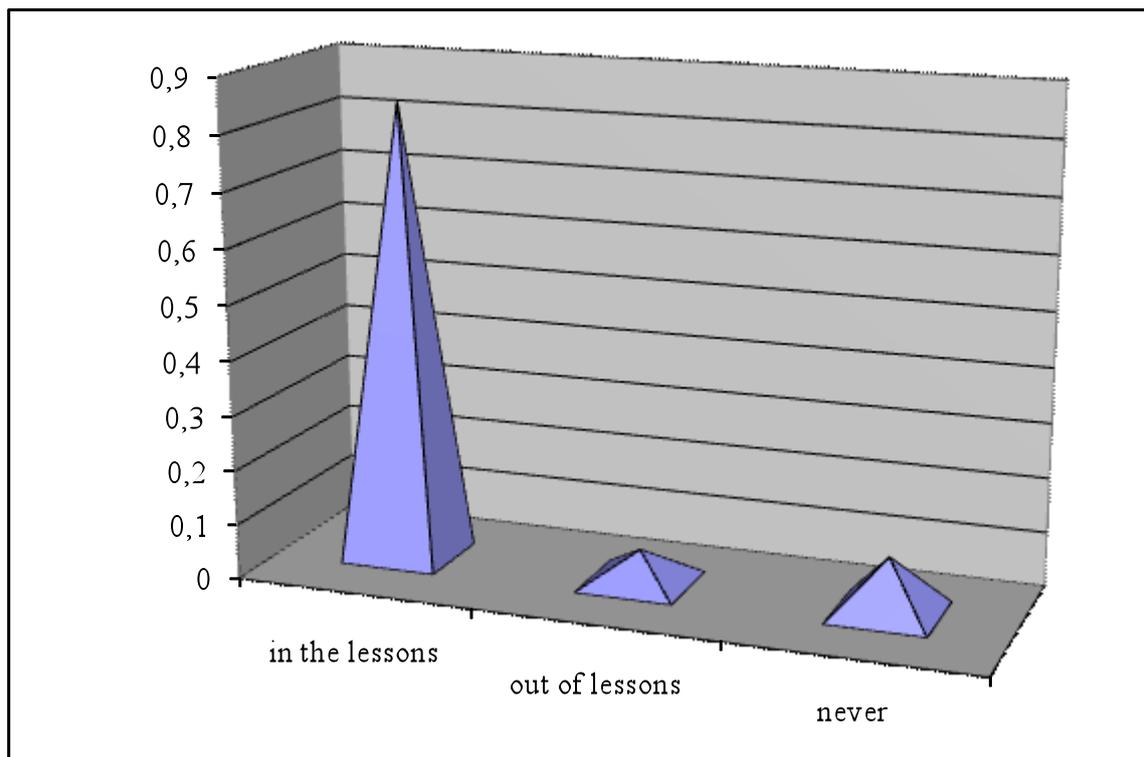


Figure 2: Have you ever practiced project-based learning?

Despite these findings, as shown in Figure 2, only 83.67% practiced project-based learning in their lessons and 6.13% out of lessons, but up to 10.20% practiced it not at all.

We were interested in the main reasons leading teachers not to apply project-based learning to their lessons or out of them. We found out (Figure 3) that up to 71.43% of teachers see a barrier in large quantity of the curriculum, which they are not able to handle and then teach through project-based learning in available time. Less than 15% considered an obstacle in funding gap of education system (14.31%) and excessive bureaucracy (14.26%).

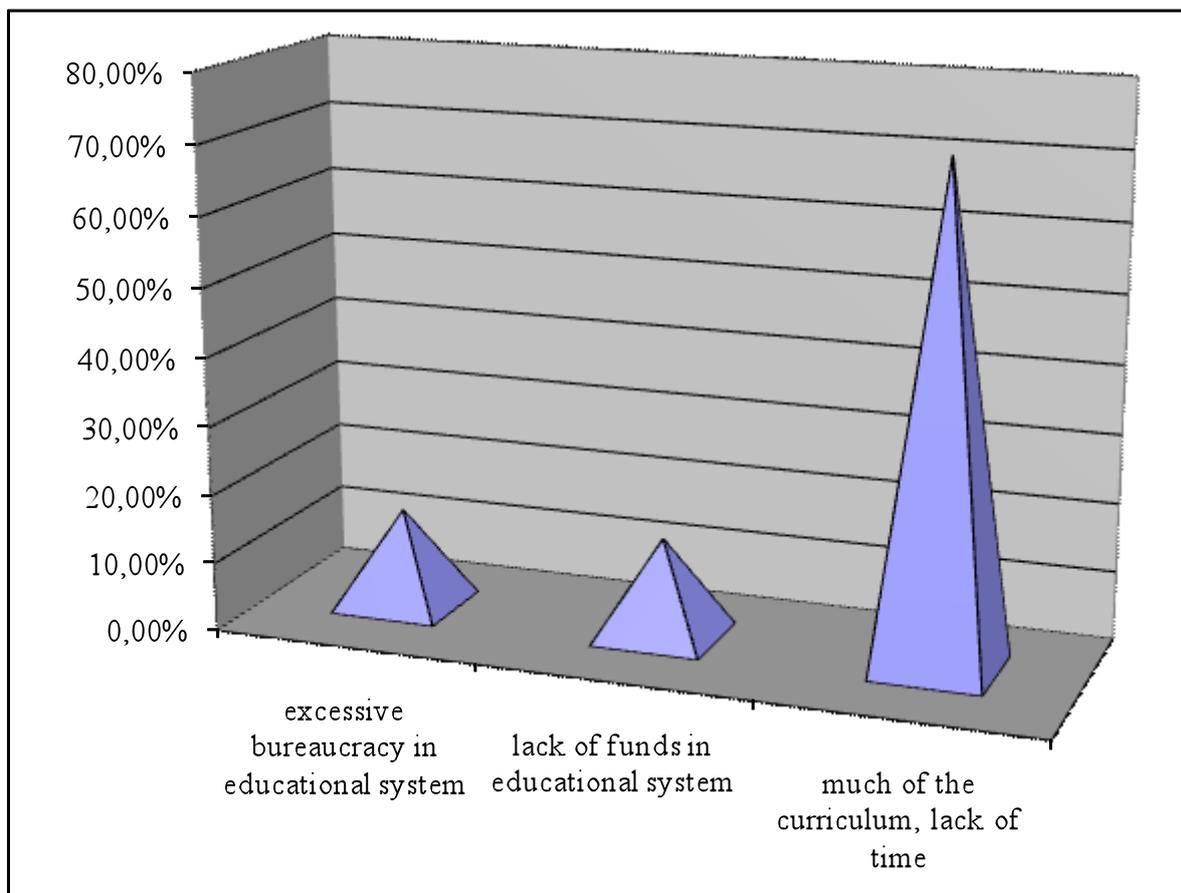


Figure 3: If you don't apply the project-based learning, select or add the reasons

Conclusion

With pleasure, we can conclude that the project-based learning is an integral part of teaching the professional technical subjects at secondary professional schools. However there are also opportunities for improvement, especially for beginning teachers it is necessary to:

- perform training courses focused on project preparation,
- inform teachers about themes suitable for application in education projects,
- increasingly exchange information between professional schools with related specialization, especially after the implementation of successful projects,
- evaluate teachers – implementators of successful projects.

In the field of didactics of professional subjects is necessary to deepen the cooperation between professional schools worldwide. Economic globalization is forcing us in the preparation of technical experts to have a closer connection between theory and practice. Readiness of professional schools' graduates for the labor market has to match strict requirements of employers.

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Factors Influencing the Attitudes of University Faculty toward Research

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The study determined the factors influencing the attitudes of University of the East (UE) college faculty toward research. A researcher-developed instrument was used to collect data from 203 regular faculty members across all colleges in Manila and Caloocan campuses of UE. The results indicated that the respondents considered need for competence as the most important research motive; and time as the greatest barrier to faculty research engagement. While faculty members held favorable general attitudes toward and personal interest in research, they were ambivalent towards the value of research training, and the value of research in enhancing their function of instruction. The hypothesis is partially upheld since only some factors considered in this study significantly influence the research attitudes. A mixture of extrinsic and intrinsic reward strategies is recommended to promote faculty participation in the university's research function.

Introduction

Higher education institutions are the primary source of research-generated knowledge in many academic fields for achieving economic progress and social well-being. However, Sanyal and Varghese (2007) found out that research is not yet an integral part of the responsibilities of universities in the developing world. This finding has also been observed in the Philippines. Bernardo and Sarmiento (1997) investigated whether the various researches give attention to the four goals of the Commission on Higher Education (CHED): (1) quality and excellence, (2) relevance and responsiveness, (3) access and equity, and (4) efficiency and effectiveness. They discovered that there were very few researches which dealt with these goals. Other local studies (Deza, 1999; de Jesus, 2000; Fetalver, 2002; de Guzman, et al., 2006) also indicated that research productivity level in the higher educational institutions was low in terms of both quantity and quality. The launching of the National Higher Education Research Agenda (NHERA) in 1998 provided the policies, priorities, procedures and guidelines on the research environment required to promote, and support research in Philippine colleges and universities.

In the University of the East (UE), its president, Dr. Ester Albano-Garcia, acknowledged the value of research as one of the trifocal functions of the university together with teaching and community extension. She also emphasized that the research experiences of the faculty members make their teaching more vibrant. Dr. Olivia C. Caoili, director of UE Office of Research Coordination (UE-ORC), pointed out that the office has since school year 2005-2006, facilitated several seminar workshops to help faculty members develop and strengthen their capability to conduct research projects and publish the results of their research. Academic Circular No. 1 Series of 2004 (as amended August 8, 2006) stipulates the attractive incentives for doing research. However, only a few faculty members have actively participated in the university's research program.

It is in the light of the foregoing data that this study was undertaken. It aimed to provide a deeper understanding of the college faculty members' attitudes toward the challenge of research work by investigating the (1) faculty respondents' personal, teaching and research profile; (2) factors which motivate and hinder faculty research engagement; (3) faculty attitudes toward research; and (4) relationships among them.

Theoretical Framework

This study assumes that faculty attitudes toward research may be inferred from their cognitive, affective and behavioral inclination responses indicating positive, negative or undecided evaluations of research as an important academic responsibility. Such attitudes are influenced by personal and environmental factors. This view agrees with Herzberg's

theory which considers the two factors that affect people's relation to their work: intrinsic and extrinsic. Intrinsic factors in this study pertain to personal characteristics such as need for autonomy and competence; research skills; research productivity and experience; educational attainment and teaching rank.

The theory of planned behavior predicts that the college faculty members with higher degrees of perceived behavioral control tend to have both stronger intentions to engage in research and more likelihood to perform their research roles in appropriate conditions. Expectancy-value theories also propose that workers are inclined to do a task when they are certain that they can execute the task. This idea is also maintained by the self-determination theory which explains that the more autonomous the faculty members in engaging in research the more positive are the outcomes which, consequently, influence them to have positive attitudes toward research.

It is clear based on the above mentioned theories that intrinsic factors such as self-perception of one's ability to successfully perform research are related with positive research attitudes.

Highlighting the person-environment dialectic, organismic theories support the assumption of this study that the research attitudes of the faculty are affected by external factors such as institutional research policies and reward structure, opportunities for research training, working conditions, and time for research. In this dialectic, there is a two-way relationship: (1) the person acts on the environment out of an intrinsic motivation to search for and influence changes in it, (2) the environment pushes the person to adjust and accommodate to it. This results to a consistently-changing synthesis in which the person's needs are satisfied by the environment, and which generates in the person new types of motivation (Reeve, 2005).

Organismic theories provide the present study with a framework on how to explain why faculty members need environmental resources such as facilities and rewards to actualize their latent research capabilities. Thus, nurturing an environment conducive for research is necessary to motivate academic personnel to do research.

Related Literature

Research Attitudes

According to de Jesus (2000), research is a highly demanding undertaking whose excellent execution relies not only on cognitive and psychomotor abilities but also on attitudes. Hence, the present study focuses on the attitudes of faculty members toward research.

Tang and Chamberlain (1997) investigated differences between administration and faculty members on six distinctive factors of attitudes toward research and teaching: (1) research orientation, (2) teaching orientation, (3) rewards influence research, (4) rewards influence teaching, (5) personal interest, and (6) mission of the university. They found out that administrators tend to think that research and teaching are mutually interdependent and that both research and teaching is the mission of their university. On the other hand, faculty members are less likely to agree with the mission of their institution that both teaching and research are essential parts of their work in the university. They believe that teaching is pleasurable, that research interferes with teaching, and that they should be required to do either teaching or research, but not both. Based on these differences, administrators and faculty members may develop different behavioral patterns in an educational institution. It is postulated that administrators may persist to expect professors to be more productive in terms of research, while carrying many teaching loads. Thus, it is concluded that university professors should spend more time in research and publication than to instructional activities so that they will be regarded positively by administrators when they are aiming for tenure and promotions.

In the Philippine higher education institutions, faculty members value research not only for knowledge sake, but also the importance of research for reform and development, and as an instrument of producing ideas for improving education in colleges and universities. For instance, Banaag (1994) indicated that the faculty members in a state college in Indang Cavite value research positively. De Jesus (2000) also found out that attitude wise, the faculty members are in general, have positive consideration about research.

Salazar-Clemenena and Almonte-Acosta (2007) indicated the characteristics of a research culture that would improve research productivity in Philippine Higher Education

Institutions. These are: "time, strong belief in research endeavor, faculty involvement, positive group climate, working conditions and organizational communication, decentralized research policy, research funding, and clear institutional policies about research benefits and incentives." Furthermore, their faculty respondents who are actively engaged in research disclosed that their productivity was enhanced by the graduate training program they had attended.

Relationship between Demographic Characteristics and Research Attitudes

The research attitudes of purposively selected college teachers in the University of Santo Tomas were investigated by Catalan (1997) through correlation and comparative analyses. The study disclosed that educational attainment, college affiliation, nature of employment, academic rank, sex, age, status of employment, and length of service, in this order of importance, were significantly correlated with the teachers' research attitudes. Additionally, civil status and teaching load were not associated with the teachers' attitudes. The comparative analysis result suggests that: (1) the positive research attitudes of the teachers with higher levels of education and teaching rank are marked by their perception that doing research is a rewarding activity; feeling that research contributes to school policy decisions; and predisposition to recognize the value of competent researchers, and to support the school's encouragement for teachers' research engagement; (2) the lack of the following: motivation, adaptation resources, and awareness of the benefits that can be derived from research, appear to be the reasons why engaging in research is a less-preferred activity among faculty members who are older and have lower educational level attained and teaching rank; and (3) the discomfort experienced by faculty members who are younger, who have not completed their graduate studies and who have not earned higher academic ranks may be caused by their anticipation of difficulties in meeting the demands of research, doubts about one's research competence, and unwillingness to give up their leisure time.

Relationship between Contextual Variables and Research Attitudes

The study made by de Guzman et al. (2006) sought to ascertain the research psychographic characteristics of a select group of nurse professoriate in a comprehensive university in the Philippines. Results of the quantitative and qualitative analyses of this study revealed that the overall attitudes of the nurse professoriate are favorable. Though the respondents hold a strong positive interest in research, issues such as research incompetence and time constraints prevent them from being involved in research undertakings. Through the use of multiple correlation and regression analyses, the results indicate that teaching status, research know-how, educational attainment, and civil status greatly influence the nurse professoriate's positive research psychographics. The results further revealed that the respondents' training and exposure to research and attitudes toward research engagement, benefits and payoffs, research utilization and availability and overall attitudes toward research are negatively correlated.

Relationship between Research Attitudes and Research Productivity

The study made by de Jesus (2000) reveals that positive attitudes toward research do not necessarily lead to a higher level of research productivity. To a certain extent, the relationship between research attitude and productivity, either assessed in terms of output or publication, appears to be negative. For instance, faculty members with "highly positive" regard for research have fewer research outputs as well as published research works, compared with those holding "moderately positive" research attitudes.

In summary, the findings reviewed thus far indicate that the important correlates of research attitudes are gender, age, civil status, and highest educational attainment, teaching status, teaching rank, length of teaching service, research training and research productivity. Aside from these aforementioned variables, this study considers other factors that may somehow influence research attitudes. These are teaching assignment, research interests, and length of professional research experience, awareness of the university policy on faculty research, research motivating factors and research hindering factors.

Methodology

The study used the descriptive survey technique. It was conducted during the first semester of school year 2009-2010. The respondents were 203 regular faculty members of UE.

The instrument used for gathering data is a researcher-made questionnaire composed of four parts: Faculty Profile; Research Motivating Factors Inventory (RMFI); Research Hindering Factors Inventory (RHFI); and Research Attitude Scale for Teachers (RAS-T). The research instrument has been pilot tested to establish its validity and reliability.

In describing the respondents' personal profile, teaching profile, and research profile, descriptive statistics such as the computation of frequency distribution, percentages, mean and standard deviation are employed. The weighted mean are computed to determine the level of importance of the motivating factors, the extent of the hindering factors, and the degree of the favorability of the attitudes of the respondents toward research. Inferential statistics such as correlation analysis and regression analysis are used to ascertain how the respondents' profile and other factors, singly and collectively influence their attitudes toward research.

Findings

It can be described that in UE, female faculty (52.2%) slightly exceeds the number of the male faculty (47.8%). As to their age, the majority (39.4%) belongs to the age bracket of 40-49 years. One hundred forty (69%) of the faculty are married. Eighty-two (40.4%) of the respondents have doctorate units. Majority (40.9%) are presently at the associate professor level teaching on a full-time basis (94.6%) and handle four or more subject preparations and stayed in the teaching profession for 11-20 years (52.7%).

In regard to the respondents research characteristics, Table 2 indicates that eighty-one (39.9%) have only one research field of interest which is the field of education (32.5%). Majority (62.1%) has one to five years of research experience and participated in not more than five research trainings (75.4%) during the past five years. One hundred sixty-five (81.3%) are aware of the university policy on faculty research. In terms of their research-related productivity, more than half (53.7%) are slightly productive as determined by the total score computed from the points affixed to each research output they indicated in the survey questionnaire.

Among the extrinsic factors, affiliation has the highest mean value of 3.76 while status and social recognition has the lowest mean value of 3.38. Looking at the intrinsic factors, the data disclose that competence is regarded the most important motive with a mean value of 4.13 while autonomy is the least important motive with a mean value of 3.83. On the whole, all the motivating factors are regarded as "very important" except for status and social recognition, which is perceived as "moderately important" by the respondents.

The data further reveal that intrinsic factors ($M=3.99$) tend to motivate the teachers to engage in research more than the extrinsic factors ($M=3.58$). In other words, the faculty members in the respondent institution may be more likely to engage in research because of the satisfaction, autonomy and competence the activity provides more than the benefits that are separate from the research work itself such as extrinsic rewards and incentives, affiliation, and status and social recognition.

In sum, both the extrinsic and the intrinsic factors are perceived to be "very important" research motives. It may be inferred that faculty members can simultaneously hold strong extrinsic and intrinsic motivations in relation to research. This supposition is in accord with the Amabile, et al. (1994) conclusion that one type of motivation does not necessarily undermine the other. Thus, it is clear that both types of motivation play an important role in faculty research activities.

The respondents consistently view all the hindering factors as "moderate barriers" to pursue one's research activities. Interestingly, it appears that the institutional barriers ($M=3.10$) exert a greater hindering influence on the faculty members' research endeavors compared with the personal barriers ($M=3.05$). It can be assumed that if the faculty members perceive that the institutional barriers hinder them more than the personal barriers, they may use this as an excuse for them not to be very active in research. In addition, they may blame it more to the institution why they are not becoming productive in terms of their research outputs.

Table 1 presents the summary of the average means for the research attitudes. Based on the results, the respondents hold ambivalent overall attitudes ($M=3.40$) toward research. This is because, although they have positive beliefs about research, and are disposed to act favorably to do research, they have ambivalent feelings about their general attitudes, the value they give to research training, and the value they attached to research in enhancing their function of instruction. These results also reveal that their research attitudes are more of a general attitudes toward and personal interest in research rather than attitudes toward the value of research training. It is not also seen as an attitude toward research as a prime mover to enhancing instruction. The actual scenario should be research for the value of research because it is only in the academe where new knowledge of man can be rooted upon. Faculty research attitudes therefore should be positively directed towards their research interests including the enhancement of research competence through appropriate training, and most importantly the contribution of research to their teaching function.

Table 1
Overall Computed Means of Indicators and Components of Research Attitudes

Attitudes Toward Research Indicators and Components	Mean	Standard Deviation	Verbal Interpretation
COGNITIVE COMPONENT			
General Attitudes Toward and Personal Interest in Research	3.77	0.75	Favorable Attitude
Value Given to Research Training	3.48	0.64	Ambivalent Attitude
Value Attached to Research in Enhancing Function of Instruction	3.55	0.83	Favorable Attitude
AVERAGE	3.60	0.50	Favorable Attitude
AFFECTIVE COMPONENT			
General Attitudes Toward and Personal Interest in Research	3.37	0.54	Ambivalent Attitude
Value Given to Research Training	2.99	0.58	Ambivalent Attitude
Value Attached to Research in Enhancing Function of Instruction	2.90	0.87	Ambivalent Attitude
AVERAGE	3.09	0.44	Ambivalent Attitude
BEHAVIORAL TENDENCY COMPONENT			
General Attitudes Toward and Personal Interest in Research	3.64	0.62	Favorable Attitude
Value Given to Research Training	3.62	0.76	Favorable Attitude
Value Attached to Research in Enhancing Function of Instruction	3.26	0.75	Ambivalent Attitude
AVERAGE	3.51	0.57	Favorable Attitude
OVERALL ATTITUDE	3.40	0.42	Ambivalent Attitude

Table 2 presents the summary of the significant results of the correlation analyses. In regard to the correlation between highest educational attainment and value attached to research in enhancing the function of instruction ($X^2= 30.78$ $p = .014 < .05$), statistical analysis reveal that faculty members with higher levels of educational attainment are less ambivalent toward the value of research in enhancing their teaching function. This finding is supported by the research made by Catalan (1997) which concluded that faculty members with higher educational attainment seem to have a definite research orientation. The highest educational attainment also has a significant influence on the overall research attitudes ($X^2= 27.33$ $p = .001 < .01$) meaning that those faculty members with higher educational attainment tend to

have more favorable attitudes toward research. Catalan (1997) also pointed out that the favorable attitudes of the faculty members with higher educational attainment seem to indicate that they have a “greater confidence in their ability to read with ease journal articles, better comprehension of the language that statistics conveys, and an ability to translate meaningfully elicited information.”

Among the teaching profile indicators, only teaching rank is found to have significant correlations with the value faculty members attached to research in enhancing their function of instruction ($X^2 = 22.12$ $p = .036 < .05$), and overall research attitudes ($X^2 = 20.20$ $p = .0036 < .01$). These results reveal that the faculty members who are more ambivalent toward the value of research in enhancing their teaching function are the instructors. This finding is consistent with Catalan’s study which disclosed that faculty members with higher academic rank believed that including relevant research findings in classroom discussions enhance teaching. It also appears that, as faculty members move to a higher teaching rank, they become less ambivalent in their overall attitude toward research, and hold more favorable overall research attitudes. This finding is also supported by Catalan’s conclusion that faculty members with higher academic rank regard research as a rewarding activity and exhibit more inclination to support the school’s “prodding” for faculty members to engage in research.

The awareness of the university policy on faculty research ($X^2 = 13.13$ $p = .004 < .01$) and research-related productivity ($X^2 = 24.39$ $p = .018 < .05$) are significantly correlated with the general attitudes toward and personal interest in research. These results indicate that, the faculty members who are aware of Academic circular No.1 series of 2004 (As Amended August 8, 2006) have more favorable general attitudes toward and personal interest in research than those who are unaware of the said policy. It may be that, as faculty members become aware of the university research policy, to some degree, they become encouraged to conduct research. Indeed, according to UE president Garcia, the research policies adopted by the university since 2004 have begun to bear fruit. “There are now faculty members who have been able to publish their research in national and international refereed journals” (UE Research Bulletin, 2008).

Statistical results indicate that the faculty members who have higher levels of research-related productivity hold more favorable general attitudes toward and personal interest in research. Perhaps they become more active producers of research because their positive beliefs about research are somehow validated by their research experiences.

Surprisingly, the results indicated that the value faculty members give to research training and research profile variables are relatively independent. It appears that the research characteristics of the faculty respondents have nothing to do with the value they give to research training.

There are three research profile variables which significantly influence the respondents’ attitudes toward the value they attach to enhance their teaching function: (1) awareness of the university policy on faculty research ($X^2 = 12.87$ $p = .012 < .05$), (2) research-related productivity ($X^2 = 29.06$ $p = .024 < .05$), and (3) length of professional research experience ($X^2 = 32.65$ $p = .037 < .05$). These results indicate that, the faculty members who are not aware of Academic Circular No. 1 series of 2004 (As Amended August 8, 2006) are more ambivalent on the value they attach to research in enhancing their function of instruction. It appears that the recognition of the importance of research in teaching may depend on the information about research policies of the university. Statistical results also indicate that, the faculty members who have lower levels of research-related productivity are more ambivalent toward the value they attach to research in enhancing their function of instruction. It may be that, as faculty members become uninvolved with research activities, they become less certain about the value of research in their classroom teaching. On the other hand, those who are active producers of research may be undertaking research that is so closely linked to the subjects they are teaching, that is why their research work enhance and reinforce their teaching function. In the study of Fairweather (1997), he concluded that when the faculty member is confronted with a substantial classroom teaching assignment and the desire to publish, the deciding factor may be his own attitude and beliefs about the importance of research or teaching.

Statistical results also reveal that, the faculty members who have less number of years of professional research experience are more ambivalent toward the value of research in enhancing their function of instruction. It may be that, as faculty members spend fewer years in doing research, they may lack knowledge of the value of research in the teaching profession.

The results show that the research profile variables which have significant correlations with the value the teachers attach to research in enhancing their function of instruction are the same variables which have significant correlations with the overall research attitudes of the faculty respondents.

Correlations between extrinsic and intrinsic research motives and the research attitudes are all significant. Apparently, the need for affiliation is the strongest extrinsic motivation for faculty research engagement. It may be that their desire to be associated with expert researchers facilitates positive evaluation of research and interest to pursue such scholarly activity. Perhaps they perceive that being with distinguished researchers can provide them with adequate research exposure and eventually they can also become competent researcher. According to Salazar-Clemena and Almonte-Acosta (2007), opportunities for novice faculty to work together with expert researcher are essential for faculty involvement in research activities.

In terms of enjoyment/research satisfaction, it appears that, as faculty members seek more pleasure in doing every aspect of the research work, they become more interested to conduct research. This finding is supported by the expectancy-value theories which assume that the individual will choose to do a task that arouses the greatest feeling of pleasure (Franken, 2007). The data also reveal that autonomy has a significant influence on the general attitudes toward and personal interest in research. This finding conforms to Lindholm's (2004) conclusion that the intrinsic interests in research of the faculty are associated with the strong need for autonomy.

All types of personal barriers are negatively correlated with the respondents' general attitudes toward and personal interest in research. It could be, therefore, that faculty members who are less preoccupied with family responsibilities and leisure/recreational activities are more likely to have favorable general attitudes toward and personal interest in research. Perhaps they become more focused on their roles in the university if they think less about personal concerns. Moreover, it could be inferred that as faculty members expect less about how time consuming research is and the difficulties they can experience in doing research, they are more likely to hold positive general attitudes toward and personal interest in research.

In regard to self-assessment of research competency, it appears that, as faculty members assess more about their research knowledge and skills, they are less likely to have favorable general attitudes toward and personal interest in research. Perhaps they are less confident about their research capabilities. As noted, the respondents of this study have attended only a maximum of 5 research seminars and workshops in the past 5 years, and have 5 years and below professional research experience. These factors may have contributed to their doubts about their research competency.

The aforementioned findings support the research by de Guzman et al. (2006) in which they found that though the faculty respondents have expressed a strong positive interest in research, issues such as lack of research capability and being preoccupied with other priorities hinder them from doing research activities.

As might be expected, the value given to research training is influenced by research culture which is defined as an institutional barrier pertaining to limited opportunities for research training. This means that if the faculty members strongly believe that the university provides limited opportunities for research training, seminars and workshops they tend to be more ambivalent as to the value of research training.

Table 2
Summary of Correlation Analyses of College Faculty Research Attitudes with Independent Variables

INDEPENDENT VARIABLES					
Indicators of Research Attitudes	Personal Profile	Teaching Profile	Research Profile	Research Motivating Factors	Research Hindering Factors
General Attitudes Toward and Personal Interest in Research	None	None	Research-related Productivity (24.39*) Awareness of the University Policy on Faculty Research (13.13**)	All Factors**	Preoccupations (-.269**) Expectancy of Research Demand (-.159*) Self-Assessment of Competency (-.183**)
Value Given to Research Training	None	None	None	All Factors**	Research Culture (.148*)
Value Attached to Research in Enhancing Function of Instruction	Highest Educational Attainment (30.78*)	Teaching Rank (22.12*)	Length of Professional Research Experience (32.65*) Awareness of the University Policy on Faculty Research (12.87*) Research-related Productivity (29.06*)	All Factors**	None
Overall Attitude Towards Research	Highest Educational Attainment (27.33**)	Teaching Rank (20.20**)	Length of Professional Research Experience (26.24**) Awareness of the University Policy on Faculty Research (14.88**) Research-related Productivity (25.87**)	All Factors**	Preoccupations (-.163**)

*p < .05. ** p < .01.

The significant results of the regression analyses are summarized in Table 3. These results clearly indicate that the faculty research attitudes and attitude indicators are much affected by research profile variables and intrinsic research motivating factors. Moreover, the other explanatory variables for some indicators of research attitudes include highest educational attainment, gender, teaching rank, and research culture.

Table 3
Summary of Regression Analyses of College Faculty Research Attitudes
with Independent Variables as Predictors

PREDICTORS					
Indicators of Research Attitudes	Personal Profile	Teaching Profile	Research Profile	Research Motivating Factors	Research Hindering Factors
General Attitudes Toward and Personal Interest in Research	Highest Educational Attainment ($R^2=.080$) Gender ($R^2=.039$)	Teaching Rank ($R^2=.090$)	Research Fields of Interest: Education ($R^2=.047$) and Law ($R^2=.042$) Research-related Productivity ($R^2=.127$) Awareness of the University Policy on Faculty Research ($R^2=.046$) Length of Professional Research Experience ($R^2=.031$)	Intrinsic Factors-grouped ($R^2=.297$)	None
Value Given to Research Training	None	None	Research Field of Interest: Education ($R^2=.047$) Research-related Productivity ($R^2=.030$)	Autonomy ($R^2=.136$)	Research Culture ($R^2=.022$)
Value Attached to Research in Enhancing Function of Instruction	Highest Educational Attainment ($R^2=.079$)	Teaching Rank ($R^2=.062$)	Research Field of Interest: Language ($R^2=.025$) Length of Professional Research Experience ($R^2=.091$) Awareness of the University Policy on Faculty Research ($R^2=.042$)	Competence ($R^2=.139$)	None
Overall Attitudes Toward Research	Highest Educational Attainment ($R^2=.093$) Gender ($R^2=.026$)	Teaching Rank ($R^2=.087$)	Education ($R^2=.056$) Research-related Productivity ($R^2=.120$) Awareness of the University Policy on Faculty Research ($R^2=.040$) Length of Professional Research Experience ($R^2=.032$)	Intrinsic Factors-grouped ($R^2=.283$)	None

Summary of Findings

1. In general, the college faculty members are concurrently extrinsically and intrinsically motivated to engage in research. However, personal and institutional factors hinder them to pursue research activities to a moderate extent.

2. The college faculty members have favorable general attitudes toward and personal interest in research. However, when it comes to the value they give to research training and the value they attach to research in enhancing their function of instruction, their attitudes are described to be ambivalent. In addition, although these faculty members hold positive beliefs about research and are inclined to engage in research-related activities, they have ambivalent feelings about research. Thus, their overall attitudes toward research are found to be ambivalent.

3. Based on a descending number of significant correlations, the independent variables namely: intrinsic research motives (enjoyment/research satisfaction, competence, autonomy) (4), extrinsic research motives (extrinsic rewards and incentives, affiliation, status and social recognition) (4), research-related productivity (3), awareness of the university

policy on faculty research (3), length of professional research experience (2), highest educational attainment (2), teaching rank (2), preoccupations (2), self-assessment of research competency (1), expectations of research demands (1), and research culture (1) are the factors on which the college faculty members' research attitudes depend. In addition, the predictors of faculty research attitudes are: research-related productivity (3), highest educational attainment (3), teaching rank (3), length of professional research experience (3), field of education (as a research interest) (3), awareness of the university policy on faculty research (3), intrinsic motivating factors (grouped) (2), gender (2), competence (1), autonomy (1), law (as a research field of interest) (1), language (as a research field of interest) (1) and research culture (1), in this order, based on a descending of significant proportions of the variances in their research attitudes that can be explained.

Conclusions

The significant findings of this study affirm that the attitudes of college faculty members toward research are influenced by both personal and environmental factors. As predicted by the theories guiding this study, favorable attitudes are associated with factors affecting one's ability to successfully perform research and unfavorable environmental conditions affect one's attitude to be ambivalent towards participating in research training as well as in recognizing the value of research in their teaching activities.

The hypothesis is partially upheld since only some factors considered in this study significantly influence the research attitudes.

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Reading Strategies and Motivation to Learn English



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Introduction

Motivation is said to be the key to be a successful language learner. There are some methods proposed to increase learners' motivation (Dörnyei, 2001, Dörnyei & Schmidt, 2001, Schunk & Zimmerman, 2008). As for understanding what 'motivation' is, there still are unclear areas.

It is often said that there are two types of motivations in learning such as Instrumental and Integrative motivations (Gardner & Lambert, 1972) in the language learning field and intrinsic and extrinsic motivation (Deci & Ryan, 1985, Sansone & Harackiewicz, 2000) in the field of psychology. But at the same time, there is a peculiar type of motivation. It is called resultative motivation. The feeling of capability can motivate language learning (Skehan, 1989). If one can read English well, can that affect the learner's motivation to learn English? This study starts from that question.

The studies before the present one, resultative motivation was not fully investigated (Mashiyama, 2009). In this study, relation between reading strategy instructions and learning motivation is examined.

Methodology

The data were collected in two general English classes. The data sources are (1) two sectioned surveys collected at the beginning and the end of the term, (2) term end questionnaire with open-end questions about the general classroom instructions, and (3) the researcher's journal.

Participants

The participants were the students of two classes of the second and the third year students of Japanese literature major. The number of the students registered was 24 each class. The two classes used different textbooks but both of them were targeted TOEIC® test.

Lessons

The reading strategy instructions were introduced to the classrooms with extensive reading activities. Thus the participants were given the opportunities to practice using the strategies to read on the books they chose. Six lessons were carried out in this style. The introduced reading strategies were: (1) skimming and scanning, (2) previewing, (3) key words and topic sentences, (4) finding paragraph types, (5) checking connection words, (6) summarizing, and (7) top-down and bottom-up approaches. These strategies were explicitly presented in class with short example paragraphs.

Extensive reading activities were employed as a part of the classroom instructions. At the end of lessons, after the reading strategy instructions, the students were given about 10 minutes to read the books of their choice. The books were brought to the classroom. The students were shown the book shelves at the beginning of the term and encouraged to choose from there too. The total minutes spent to read books in class were 80 minutes in Class A and 119, in Class B.

Surveys and questionnaire

There were two sections in the surveys used in this study. The first section, Section A had 14 statements on attitudes toward English learning. The participants were asked to indicate how much they agreed with the statements on 5-point Likert Scale. Section B, on the other hand, was about reading strategies the participants used. Question 36 and 37 were different from other statements and asked their own assessment of their English reading proficiency and how much they liked English on 10-point Likert scale.

Survey 1 was distributed on April 28th, Class A, and on May 11th, Class B. Survey was administrated on July 21st, Class A, and on July 27th, Class B. There were almost three months between Survey 1 and 2.

At the end of the semester, a questionnaire was also distributed on July 21st, Class A, and on July 20th, Class B. It had two sections: on e-learning and on the classroom instructions. Except the first section on e-learning, the questions on classroom instructions were either open-ended or given multiple choices to answer.

Findings

Results of Surveys

The numbers of the participants who answered the surveys were 20 in Class A and 23 in

Class B. The numbers were the same in Survey 1 and 2. The results of Section A were shown in Table 1 and 2.

Table 1: Mean and SD of Section A of Surveys (Class A) n=20

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Survey 1	Mean	2.50	2.75	2.95	2.55	3.25	3.85	1.75	1.45	3.05	3.30	3.25	1.95	1.95	2.95
	SD	0.92	0.94	1.16	0.67	0.99	0.85	0.70	0.59	0.86	0.71	0.70	0.80	0.74	0.67
Survey 2	Mean	2.45	2.95	2.47	2.75	3.45	3.55	1.70	1.75	3.05	3.60	3.50	1.90	1.80	2.95
	SD	1.07	1.02	1.09	0.70	0.97	1.02	0.71	0.94	0.74	0.86	0.81	0.94	0.81	0.80

In Table 1 most of the means of Survey 1 and 2 of Class A did not change. Q3, “Mastering English is rather a talent,” reduced 0.48 but it was not significantly different. The highest point in Survey 1 was Q6 (3.85) and the lowest, Q8 (1.45). In Survey 2, the highest was Q10 (3.60) and the lowest, Q7 (1.70). The participants seemed to believe “English proficiency can be improved if one studies hard (Q6).” They did not agree with the statement “I make a habit to study English everyday (Q8).” But the point went up at the end of the semester. It can be said that they started thinking studying everyday or regularly would help them improve their English proficiency. At the end of the semester it seems that the students recognized the importance of reviewing (Q10). Reflecting the reduction in Q3, they indicated they did not believe that “It is no use to study English because it is a talent (Q7).” Their attitudes towards learning English slightly changed.

Table 2: Mean and SD of Section A of Surveys (Class B) n=23

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Survey 1	Mean	2.78	2.96	2.61	2.22	3.74	3.70	1.74	1.52	2.96	3.48	3.43	1.83	1.91	3.09
	SD	0.98	1.20	1.13	1.18	0.94	1.04	0.74	0.93	1.20	0.77	0.92	0.92	0.78	1.10
Survey 2	Mean	3.09	2.96	2.87	2.48	4.09	3.48	1.78	1.48	2.52	3.78	2.48	2.00	1.65	3.00
	SD	1.10	1.08	1.12	1.02	0.93	1.25	0.83	0.77	0.88	0.83	0.83	1.14	0.81	1.10

Class B shows a different picture (Table 2). Q5 “Speaking and listening are more important than reading or writing” increased 0.35 point, but it was not significantly different. Reading was emphasized in class, so this result was unexpected. The points of Q9, “I cannot catch up with the English lessons without previewing,” reduced from 2.96 to 2.52. The points of Q10, “Reviewing is more important than previewing in learning English,” increased 0.30. It supports that the participants started thinking reviewing was

important in language learning.

Another good indication is that the point in Q1, "I love English," increased 0.30 and it was significant. This result was confirmed in Section B.

Section B is about reading strategies (Table 3 in Appendix A). Among the participants of Class A, there was a slight difference observed which indicated their transition from the grammar-translation approach to more active reading approach. They used translation approach at the beginning of the term, because they most agreed to the statement "I always translate English sentences into Japanese (Q4) (3.55)," and they least agreed with "I confirm the content of each paragraph (Q20) (1.85)." They just decoded English texts and changed them into Japanese without thinking what they meant.

Then at the end of the semester, the participants agreed with the statement "Before I read the texts, I think about the content seeing the title and illustrations (Q6) (3.90)" most. They started using previewing and top-down approach to read.

The participants also learned more reading strategies. The points of Q7, Q8, and Q21 increased and Q30 decreased. Q7 "I compare the contents of the texts to what I expected when I read (0.50 increased)" and Q8 "I think what the author wanted to say when I read (0.60 increased)" and Q21 "I find the topic sentence of the paragraph and the passage (0.50 increased)" relate to active approaches to read. On the other hand Q30 "I copy the correct translation given in class (0.69 decreased)" lost its popularity. The participants used more active approaches to understand the texts.

They seem to acquire more active approaches to read, though, their own assessments of their reading ability (Q36, 0.30 decreased out of 10) and fondness of English (Q37, 0.65 decreased) declined. As if they had lost their interests and confidence in English.

Class B also demonstrated the change from passive to active approaches to read (Table 4 in Appendix B). Five statements showed large differences between the points in Survey 1 and Survey 2. All of them were significantly different. Q4 "I always translate English sentences into Japanese (0.48 decreased)", Q11 "I make comments during reading English texts (0.52 decreased)" and Q30 "I copy the correct translation given in class (0.48 decreased)" presented a mixed picture. Decrease of points in Q4 and Q30

indicated the participants stopped using more passive approaches to understand the texts. But Q11 might show that they stopped their dialogue with the texts.

They rather seemed to keep a distance from the texts. Q16 “I reflect if it was easy to read after reading the texts (0.52 increased)” and Q25 “I presume what was the aim of the passage I read (0.61 increased)” suggested that the readers reflect after they read the texts, not during they read as stated in Q11.

Table 5: Mean and SD of Q36 & Q37 (10-point Likert scale) in Section B of Surveys

	Class A (n=20)		Class B (n=23)	
Survey 1	Q36	Q37	Q36	Q37
Mean	4.25	5.20	3.78	4.96
SD	1.18	2.06	1.61	2.51
Survey 2	Q36	Q37	Q36	Q37
Mean	3.95	4.55	4.39	6.09
SD	1.28	2.01	1.63	2.17

Table 5 shows the results of Q36 and Q37. These two questions were answered with 10-point Likert scale. As for their assessment of their own English reading aptitude (Q36, 0.61 increased out of 10) and fondness of English (Q37, 1.13 increased) the participants of Class B showed higher points than the points of Class A, except the reading aptitude assessment in Survey 1. At the end of the term, the Class B students had more confidence in their English reading ability and they liked English more than before.

Results of Questionnaire

The results of the term-end questionnaire indicated an interesting outcome (in Table 6 & Table 7 in Appendix C).

Table 6: Results of Q6 of Term-End Questionnaire of Class A (n=21) & Class B (n=22)

Q6: Was there a change in your mind towards English?		Class A	Class B
Yes	Positive Change	9 (42.9%)	11 (50.0%)
	Negative Change	1 (4.8%)	1 (4.6%)
No		9 (42.9%)	9 (40.9%)

When they were asked if there was a change in their mind towards English, 47.6% of the students of Class A said yes and 54.6%, Class B. Among the students who answered yes, 42.9% of the Class A students said the change was positive, and 50.0%, Class B. The participants of Class B seemed to receive the change more positively than the Class A students.

When we see their impressions to English, the differences between Class A and Class B became clearer (Table 7 in Appendix C). Class A students felt that English was difficult (42.9%) but they wanted to improve their English ability (38.1%). Class B students also thought that English was difficult (68.2%) and they wanted to improve their English ability (63.6%). Both of the groups demonstrated the same mixed feelings to English, it's difficult but worth improving, but Class B thought so more strongly than Class A.

Probably the next item displays their differences more obviously. The participants of Class A, 28.6% answered there was no change in their attitudes toward English. On the other hand, none of the participants of Class B said so. The statement "English is enjoyable," the half, 50.0% of the Class B agreed but 14.3% of Class A did.

Although the results of the surveys did not show the significant differences between Class A and B in many cases, there was seen a tendency that the class indicated more strategy use, Class B, evaluated their reading proficiency higher than the other class. The results of the open-end questions also indicated their higher interests in learning English. The participants of Class B expressed the positive changes of their attitudes towards English learning after the term.

Discussion

Teaching reading strategies can be beneficial to the learners in terms of English proficiency (Farrell, 2001, Salataci & Akyel, 2002). But the effect of reading strategy instructions seems to extend to the learners' affect in learning. In this study the relation between the participants' reading strategy use and their motivation to learn English was investigated. Of course the influence of the atmosphere of the class must be there (Young, 1998). In general, however, the results indicated (1) the participants started to use more active approaches to read in English, (2) the class which showed higher strategy use liked English more and evaluated their English proficiency higher, and (3) the class showed higher strategy use expressed more positive attitudes towards learning English.

Seeing the results above, it might be said that using more variable and active approaches to read English and taking more positive attitudes towards learning English, in other words, motivation to learn are connected. We still do not know which causes which or how they are related. In the future investigation, that “how” part should be explored.

Conclusion

The results of this study were different from the results the researcher gained in other contexts (Mashiyama, 2009). The possible reasons were (1) the level of the participants’ English proficiency, (2) the participants’ attitudes toward studying English, and (3) the styles to master the language. To understand the differences clearly, more detailed research is needed.



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Appendix A

Table 3: Mean and SD of Section B of Surveys (Class A) n=20

		1	2	3	4	5	6	7	8	9	10
Survey 1	Mean	3.05	2.95	3.35	3.55	3.20	3.50	2.75	2.60	3.15	2.00
	SD	1.12	0.92	0.96	0.86	0.98	0.92	0.99	0.86	0.96	0.55
Survey 2	Mean	3.00	2.95	3.20	3.25	3.15	3.90	3.25	3.20	3.35	2.35
	SD	0.95	0.86	1.03	0.89	0.91	0.77	0.83	0.75	0.85	0.91

		11	12	13	14	15	16	17	18	19	20
Survey 1	Mean	3.00	2.50	3.25	3.45	2.15	3.10	2.20	2.30	2.80	1.85
	SD	1.05	1.07	0.94	0.97	0.96	1.09	0.75	0.90	0.75	0.48
Survey 2	Mean	2.80	2.95	3.20	3.55	2.25	2.85	2.30	2.25	2.65	2.30
	SD	1.03	1.07	0.81	0.80	0.99	0.85	0.78	1.13	0.79	0.84

		21	22	23	24	25	26	27	28	29	30
Survey 1	Mean	2.30	3.25	3.00	3.40	2.70	2.65	3.10	2.85	2.11	3.74
	SD	0.95	1.34	0.77	1.07	0.78	0.96	1.14	0.73	0.97	0.64
Survey 2	Mean	2.80	3.25	2.80	3.05	2.95	2.60	3.20	3.05	2.10	3.05
	SD	1.17	1.13	0.98	1.02	0.74	0.92	0.87	0.86	0.99	1.16

		31	32	33	34	35	Total
Survey 1	Mean	2.68	3.21	3.37	3.53	2.15	100.73
	SD	0.86	0.95	1.22	0.99	0.96	40.26
Survey 2	Mean	2.85	3.15	3.30	3.75	1.95	102.55
	SD	0.96	0.91	1.14	0.99	0.74	16.12

Appendix B

Table 4: Mean and SD of Section B of Surveys (Class B) n=23

		1	2	3	4	5	6	7	8	9	10
Survey 1	Mean	3.57	3.39	3.17	3.39	3.61	4.13	3.27	3.22	4.00	2.39
	SD	0.58	1.01	1.17	1.09	0.87	0.74	1.01	1.02	0.66	1.05
Survey 2	Mean	3.35	3.52	3.26	2.91	3.78	3.78	3.13	3.22	3.65	2.39
	SD	0.70	0.93	1.22	0.93	0.83	0.88	0.80	1.02	0.96	0.92

		11	12	13	14	15	16	17	18	19	20
Survey 1	Mean	3.09	3.65	3.48	3.74	2.39	2.87	2.00	2.09	3.13	2.13
	SD	1.18	0.87	0.77	1.03	0.97	1.08	0.72	0.78	0.90	0.99
Survey 2	Mean	2.57	3.39	3.43	3.70	2.39	3.39	2.13	2.26	3.30	2.48
	SD	1.14	1.09	0.77	1.04	1.05	1.05	0.68	0.90	0.86	1.17

		21	22	23	24	25	26	27	28	29	30
Survey 1	Mean	3.13	3.57	2.35	3.22	2.70	2.48	3.52	3.52	2.13	3.70
	SD	1.12	1.06	1.09	1.10	1.00	0.97	0.97	1.06	1.08	1.20
Survey 2	Mean	3.22	3.74	2.59	2.91	3.30	2.87	3.43	3.43	2.57	3.22
	SD	0.93	0.74	1.11	1.02	0.80	1.08	1.06	1.06	1.10	1.10

		31	32	33	34	35	Total
Survey 1	Mean	3.30	3.30	3.74	3.87	1.74	108.83
	SD	1.04	0.86	0.85	1.15	0.85	8.97
Survey 2	Mean	3.48	3.65	3.48	3.70	1.96	109.48
	SD	0.97	0.63	1.17	1.04	1.08	10.78

Appendix C

Table 7: Results of Q7 in Term-End Questionnaire of Class A (n=21) & Class B (n=22)

What is your impression of English?	Class A	Class B
It is difficult.	9 (42.9%)	15 (68.2%)
It is enjoyable.	3 (14.3%)	11 (50.0%)
I don't want to see it anymore.	0 (0%)	0 (0%)
I'm tired of it.	0 (0%)	1 (4.6%)
I want to learn more.	1 (4.8%)	3 (13.6%)
I want to improve it more.	8 (38.1%)	14 (63.6%)
No change in attitudes towards English.	6 (28.6%)	0 (0%)
I think I can improve it more.	3 (14.3%)	3 (13.6%)
It is easy.	0 (0%)	0 (0%)
I know how to study it now.	0 (0%)	1 (4.6%)
I think I can do well.	2 (9.5%)	2 (9.1%)
I'm fed up with it.	1 (4.8%)	0 (0%)
I feel familiar with English.	2 (9.5%)	3 (13.6%)

A Study on the Recycling Efficiency of Environmental Education and Awareness

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Abstract

Industrial development is increasingly causing serious environmental pollution; hence, there is an urgent need to raise public knowledge on and concern for the environment. Government agencies use a variety of education and communication channels to increase environmental awareness, as well as to make people understand the importance of environmental protection and conservation. Different interventions, particularly those that can easily be adopted at the household level, are already being proposed. Approaches, such as recycling, can be easily applied in our daily lives. This study investigates whether the government's education and awareness programs can improve recycling efficiency in Taiwan. The results of this study are expected to provide the Taiwanese government relevant information on whether there is an excess or shortage of needed resources.

We use data envelopment analysis to analyze Taiwan's 23 cities and counties in terms of their efficiency in promoting environmental education and awareness. We also rank cities in terms of their efficiency levels. This study looks at educational propaganda and considers variables, such as educational propaganda budget (million), type of propaganda (sort), and promotion activities (person-time). The output variable is the recycling volume (quantity) of the enforcement authority. The results show the effects of environmental education and awareness programs on recycling efficiency in Taiwan.

Keywords: Environmental education and awareness, data envelopment analysis, efficiency.

1. INTRODUCTION

Education plays important roles in environmental awareness at different levels. Some of these roles have been cited in the education sector study of the World Bank, entitled “Sustainable Pathways to an Effective, Equitable, and Efficient Education System for Preschool through Secondary School Education.”

The growth of industries is increasingly causing serious environmental pollution; hence, public knowledge and attitude toward environmental protection, public environmental awareness, and even the quality of life must be enhanced. Increased awareness improves the governance and management of environmental conservation and protection efforts (Li et al., 2007). Moreover, public education and awareness facilitate the implementation of technology-based interventions, and they are important points in the successful adoption of relevant policies (Chao, 2007). In addition, environmental awareness and education influence people’s attitudes toward recycling and effectiveness (Chung and Poona, 1996; Larsen, 1995). Consequently, massive education and awareness-raising interventions on environmental protection significantly affect the implementation of programs and policies.

Environmental education is a need; hence, government departments conduct education campaigns through various channels. Su (2000) claimed that focusing too much on community residents may lead to immature participation; trust should first be built between the government and the residents. After all, local politics tend to complicate talks on environment and ecology. Meanwhile, industries produce much waste, making it impossible for environmental protection bureaus to handle the job alone. They need to work with other government agencies, private enterprises, environmental groups, and the people.

The government has already developed a plan involving local communities, recycling businesses, and local authorities. It has also funded four projects, including the implementation of recycling policies. It encourages people to actively participate in waste reduction and recycling, and participation is improving (He, Huang, 2007). Li et al. (2007) discussed the implementation of government policies that focus on enabling people to actively participate in teams, the utilization of private resources, and the initiative to communicate or give feedback. If government-initiated education campaigns can be properly implemented, leading to an increase in the level of the knowledge of residents, then executing environmental tasks will be less difficult.

Hensher and Daniels (1995) asserted that when performance differences among organizations are high, it is difficult for the government to implement programs. To management and decision-making authorities, this study offers proofs and causes of inefficiency. It also proposes effective management strategies to improve the performance of relevant departments, which can lead to improvements in performance

evaluation techniques.

Environmental education leads to enhanced environmental performance. Moreover, environmental education and promotion aim to popularize the practice of recycling effectively. This study evaluates the efficiency of environmental protection education in Taiwan, particularly its impact on the practice of recycling (determining comparative efficiency). The results may assist authorities in determining the existence of an oversupply or undersupply of resources.

2. METHODOLOGY

(1) Basic Data Envelopment Analysis

Data envelopment analysis (DEA) involves data processing in an input and output statistics system to estimate production frontiers. It is used to measure and evaluate the productive efficiency of decision making units (DMUs).

DEA is a score system used by the state under current planning laws. All DMU input and output are projected, and linear programming is used as an assessment technique. The unit formed by the most efficient connection, which falls on the efficient frontier, is relatively effective; the opposite is relatively inefficient. The advantages of DEA include its ability to handle multiple inputs and outputs in the assessment of the efficiency of units with various policy values; immunity to human subjective factors, thereby yielding fair results; and easy understanding of DMUs and resources, which allows for improved management decisions. Its disadvantages, however, include the propensity for bias errors due to easy data production and the possibility of extreme values affecting results. DEA is suitable for performance evaluation among non-profit units, and given a number of input and output estimates (Wu and He, 2008).

Farrell (1957) was the first to measure the efficiency of modern scholars, and he believed that the efficiency of DMUs involves two areas: technical efficiency and locative efficiency. The consideration of both areas represents total economic efficiency. The CCR model, which uses a number of inputs and outputs, operates on the concept of relative efficiency assessment. The decision-making body of the output and input factors are a linear combination. The linear combination of the two-ratio values is representative of the efficiency of the decision-making unit, and all policy unit efficiency values lie between 0 and 1. The CCR model works on the assumption that production is a constant and returns to scale. When the proportion of input variables is increased, the output becomes proportional to such size increase.

The CCR model proposed by Charnes, Cooper, and Rhodes in 1978, 1979 and 1981, respectively, follows the following formula:

$$\begin{aligned} \text{Max} \quad & h_i = \frac{\sum_{r=1}^s u_r Y_{rj}}{\sum_{i=1}^m v_i X_{ij}} \\ \text{s.t.} \quad & \frac{\sum_{r=1}^s u_r Y_{rj}}{\sum_{i=1}^m v_i X_{ij}} \leq 1, \quad j = 1, \dots, n \end{aligned}$$

$$u_r, v_i \geq \varepsilon > 0, \quad r=1, \dots, s, \quad i=1, \dots, m$$

Inefficiency may be due to different returns to scale derived from the operation if there is production inefficiency. Therefore, understanding individual decision-making bodies through which the state returns to scale can provide more relevant management information. Banker, Charnes, and Cooper (1984) revised the CCR and BCC models to the following formula:

$$\begin{aligned} \text{Max} \quad & h_i = \frac{\sum_{r=1}^s u_r Y_{rj} - u_0}{\sum_{i=1}^m v_i X_{ij}} \\ \text{s.t.} \quad & \frac{\sum_{r=1}^s u_r Y_{rj} - u_0}{\sum_{i=1}^m v_i X_{ij}} \leq 1, \quad j = 1, \dots, n \\ & u_r, v_i \geq \varepsilon > 0, \quad r = 1, \dots, s \quad i = 1, \dots, m \end{aligned}$$

(2) Model orientation and variable selection

Our model can be divided into input- and output-oriented directions. The input-oriented direction hypothesizes against the need to reduce the output, and focuses on reducing the number of input. Meanwhile, the output-oriented direction hypothesizes against the need to reduce the input, and focuses on controlling the number of input (Wu and He, 2008). It is generally difficult to control output under many circumstances. This study therefore uses model inputs to evaluate whether there is excessive waste of capital investment and to suggest improvements.

The assessments based on DEA show that the difference between the number of input and output is at least twofold (Kao et al., 2003). Most importantly, the input and output numbers of the 23 cities do not exceed 11. The environmental education package includes books, transparencies, video films, and CDs. These materials enhance students' environmental awareness and promote various school activities (Ballantyne et al., 2001; Knapp and Poff, 2001). The type of propaganda is added as

an input variable.

Based on the foregoing principles, secondary data, and literature review, this study focuses on the promotion of environmental education projects. We select three input variables and one output variable. We select one input variable from the areas of funding, packaging, and participants. Many enforcement authorities are set to implement recycling-related environmental protection measures under the government's efficiency targets. Table 1 shows the variables used in this study.

Table 1. Research variables.

Input/output	Variable	Unit	Item
Input 1	Educational propaganda budget	million	Higher authority subsidizes and manages the budget; folks donate
Input 2	Type of propaganda materials	sort	Single-sheet flyers, printed fact sheets, books, playbills, movies, and other propaganda materials
Input 3	Promotion activities	person-time	Schools conduct education campaigns and other related activities.
Output 1	Volume of garbage recycled by the executive agency.	volume	Clean up events through communities, schools, institutions, and associations

3. RESULTS

We use DEA and BCC to analyze the environmental education and awareness efficiency of Taiwan's 23 cities and counties. Data on our input variables, i.e., educational propaganda budget (million), the type of propaganda (sort), and promotion activities (person-time), are obtained from the 2009 Annual Report of Taiwan environmental statistics. The output variable is the volume of garbage recycled by the executive agency. Specifying these efficiency measures helps in identifying counties with poor efficiency and in suggesting steps for improvements.

There are 6 efficient and 17 inefficient cities. Based on areas, one or more of the central cities are core cities that economically link smaller cities with the center; towns and townships (referred to as satellite towns) constitute regions. The entire population is at least one million. If cities are divided into megalopolitan and non-metropolitan areas, there are five efficient cities and eight inefficient cities in metropolitan areas, and one efficient and nine inefficient cities in non-metropolitan areas. Megalopolitan areas have an average efficiency of 39%, whereas non-metropolitan areas have an average efficiency of 10%. It can then be concluded that megalopolitan areas are more efficient than non-metropolitan areas (Table 2).

Table 2. Efficiency Value.

	Efficiency	Inefficiency	Total	Average efficiency
Megalopolis areas	5	8	13	0.38
Non-metropolitan areas	1	9	10	0.1

Total	6	17	23	0.26
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The efficiency of environmental protection programs in Taiwan varies by region. The area effectiveness (inefficiency rating) of the northern, central, southern, and eastern regions is 2(5), 1(5), 2(5), and 1(2), respectively. The eastern area then appears to be most efficient (Table 3).

Tables 3. Efficiency of Areas.

	Efficiency	Inefficiency	Total	Average efficiency.
Northern area	2	5	7	0.29
Central area	1	5	6	0.17
Southern area	2	5	7	0.29
Eastern area	1	2	3	0.33
Total	6	17	23	0.26

4. CONCLUSION

Government environmental education and awareness-raising programs are obviously inefficient and ineffective in various cities and counties in Taiwan. The government should then pay more attention to such programs so it can better promote recycling efficiency. Based on slack analysis, environmental protection activities should be enhanced in Taichung. Increased marketing activities and better implementation will improve Taichung's efficiency rating.

There is a need to increase funds for environmental protection programs in Nantou County. Such funds can be used to subsidize, implement, and promote protection programs, thereby ultimately increasing Nantou's efficiency rating. Hualien County must not only increase its funds for environmental protection education but also enhance its educational activities. Aside from conventional marketing techniques, books and CDs may be used to improve the overall efficiency of environmental protection programs.

The government has a long way to go in terms of implementing environmental protection guidelines in various cities and counties in Taiwan. Aside from broadening educational resources and adjusting manpower allocation, the government should also adopt the following activities:

- (1) Strengthen guidelines that environmental protection bureaus must adhere to and increase the number of symposia on environmental awareness. This will encourage various departments of the local and national government to be more vigilant in protecting the environment. Educational activities can also effectively increase environmental awareness.

- (2) Enhance environmental protection activities based on the rules prescribed by the Environmental Protection Administration, and increase government ratings from relevant groups.
- (3) Develop effective communication strategies among government agencies, environmental protection associations, and the general public. Effective communication can result in the efficient promotion and implementation of environmental protection activities and guidelines.

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Challenges and Issues Implementing and Integrating Educational Technology for Teaching and Learning English at University in the Northeast of Thailand

Abstract

An increasing numbers of English teachers are calling for high standards and challenging classroom activities. Practical educational technology can provide new learning experience for students. E-learning has become well known and is being put to use by English teachers who are implementing and integrating educational technology into the classroom. Unfortunately, most English classes at Ubon Ratchathani Rajabhat University (UBRU) are lagging behind on this trend for a variety of reasons. This study explores the facts influencing teachers who integrate educational technology including E-learning into their conventional classroom. Two research instruments; a questionnaire and semi-structured interview were used to collect the data in the study. The results show that there are challenges and issues for teachers and students who use the technology to enhance teacher's teaching activities and students' learning skills which will be discussed throughout this study. Most English teachers at UBRU do not implement educational technology into their classroom effectively due to a few key factors that slow down the teaching process. These factors are excessive teaching loads, outdated equipment, lack of resources and absence of guidance. In contrast, most students in the study were motivated to use educational technology and E-learning during their education, both in and out of the classroom. The outcomes of the research also suggest that time, effort and resources are needed to bring teachers to a level of educational technology literacy. Teachers need support not just for learning to use new technologies but also for acquiring skills in designing and implementing high-quality, student-centered projects (Kopp & Ferguson, 1996). The impact of conventional and E-learning being blended on the outcome is an area requiring further research intention. Therefore, the results of this study assist the researcher to develop and construct an application integrated with technologies to teach English to improve students' basic skills for their career field.

Preliminary Problem

Technology has become an important element of educational reform in Thailand. It is also seen as an important resource for instructors in English language teaching. An increasing numbers of English instructors are calling for high standards and challenging classroom activities (Young, 2002). Practical educational technology can provide new learning experiences for students. Modern educational such as E-learning has become known and is being put to use by English instructors who are implementing and integrating educational technology into the classroom (Okoto, 2005). Unfortunately, most English classes at UBRU cannot wholly deliver lessons through modern educational technology.

The Ministry of Education has developed the National Information and Communication Technology (ICT) for Education Master Plan (2004-2006) as standards for the start of ICT to education. A significant amount funds from the government have been assigned for the development of learning quality, educational management and direction,

education preparation through application of ICT, teaching and development of ICT-related teachers, and issues of ICT basis for education (ONEC, 2006).

The English department at UBRU has been attempting to construct an e-learning system since 2007. Unfortunately, the project has become dormant due to various factors. Such as, the instructors had limited knowledge to use Internet for education, and their lack of understanding on how to operate e-learning systems.

English Language Instructors Attitudes towards the Use of Computers and New Technology

It is believed that highly motivated instructors with the right attitude will always aspire for excellence in his/her teaching practice. Professional development not only motivates but helps instructors to keep up to date with new and effective practices in teaching and learning. However, substantial and effective professional development is rare, and many instructors naturally gravitate towards the more familiar methods they remember from their own experience as students (Sparks, 1998). These traditional teaching techniques often conflict with new instructional strategies introduced in any education developmental programs that require instructors to use cooperative learning, deploy solving activities and of late, to use the computer in their teaching. Instructors may accept or resist the introduction of information technology into schools or may avoid it altogether. Those with a positive attitude towards the use of computers in education behave differently from colleagues with a less positive attitude (Ajzen, 1988).

Instructors have to realize that their past and present teaching styles and methods are not necessarily incorrect but need to adapt and grow. They also have different beliefs about knowledge, teaching and learning and display a wide range of familiarity with software and vary in their motivation to use the computer (Porter, 1993). Therefore, regardless of how passionate administrators and policy-makers may be about the new machines, because of these differences among instructors, they will vary in using the new technologies (McKenzie, 1993)

The era of information and communications technology is moving and quickly progressing. Instructors will have to prepare and provide themselves with the relevant knowledge and skills in the information technology-related area (Sparks, 2004). Instructors today have easy access to computers and technology. They are beginning to recognize them as a useful tool in the teaching and learning process. It is believed that students today need different skills to be able to learn, work and adapt in the dynamic world (Su, 2006). Therefore, instructors have to be aware of how they can locate their needs through the use of important technology in classroom teaching. In other words, instructors should learn, and be familiar with, computers and new technology for education.

However, there are many instructors who are still using their traditional method of “chalk and talk” and textbook style of teaching (Young, 2002). At the same time, the educational policy from the government is really concerned about improving the ability of the young generation to use English with technology effectively. To realize the government’s purposes, serious attention must be paid to instructor motivation and attitude as well as the various problems that the English language instructors face in using the computer and new technology for education.

Previous Studies

Blumefeld (1992) referred that some teachers are not comfortable or skilled in the use of the computer and new technology for education. Therefore, they are unable to use technology to enrich the learning experience. There were also many teachers who show little interest in accepting an active role in the use of this instructional technology, while others support and make full use of it. According to Cox and Preston (1999), the development of communication networks will change the image of the classroom for the twenty-first century. The classrooms around the world will be connected by networks that reach everywhere the world and between subject areas. It will not be possible for schools to resist the increasing influence of computers and new technology in the teaching and learning process. In addition, the marketplace will increasingly grow and schools will have to prepare students to be the workers and consumers of a networked society. Therefore, it is urgent that teachers and schools bring the issues to be more challenges. The scholars also argued that the most important factors for teachers to determine on using computers and new technology in the classroom are time and support.

However, the findings of McKenzie (1993) and Stallard (1998) suggested that the main problem is teachers' attitude on using computers and technology for education. Their research found that the majority of teachers are afraid of the computer and new technology. They are unaware of the resources available online. They are unwilling to expand the extra effort in planning to use it in their teaching plans. Although, research has found the different beliefs of teachers towards instructional technology throughout the last four decades, many recent studies have shown that most teachers want to use computers and new technology for education to prepare their students for the world of technology outside the school (Dilworth, 1991). The attitude towards computer use is caused by an individual's beliefs about the outcomes of continued use and their evaluation of the results (Ajzen, 1988).

A primary motivation for computer and new technology adoption and use is the user's belief regarding the usage outcome or perceptions of the usefulness of the technology (Davis, 1989). Therefore, a positive attitude towards the outcomes of computer and new technology use results in a higher rate of usage. Attitude formed by beliefs and beliefs regarding computer and new technology use can exist on several levels, among the users beliefs. Blumefeld (1992) found that the decision on using computers and new technology is influenced by teachers' beliefs about the unique potential of computers to motivate students and enhance their self-esteem. According to the theory of Ajzen and Fishbein (1977) on Planned Behavior and the Acceptance Model by Davis (1989), the use of computers is predicted by the motive intentions to use them. This will be influenced by the beliefs of the users about its usefulness.

The primary motivational factors for accepting and using computer and new technology in the classroom are determined by their perceived usefulness. If teachers think that computer and new technology use is important to enhance teaching and learning, they will view computer use as having a "positive impact on their work, making them more professional, more creative, better informed, and generally better educator" (Passey & Samways, 1997). Thus, teachers' behavior to use or reject computers and new technology is determined by their intention to perform such behavior and this intention is influenced by the attitude both positive and negative, subjective norms (i.e., perceived social pressures from educational reform, parents, students, etc.) and beliefs about the value of using computers and new technology for education. Hence, the presence of motivated teachers has a positive attitude towards the outcomes of computer use results in a higher rate of usage.

According to Porter (1993), external motivation refers to the performance of an activity. It is seen to help gain secondary valued outcomes that are different from the activity itself, such as improving career performance, income, etc. Internal motivation refers to the performance of activity for no reason other than the process of performing it. As shown in technology acceptance studies, perceived usefulness is an example of external motivation, while perceived usefulness of use is an example of internal motivation (Sedebery & Clark, 1990).

Research Methodology

The methodology applied in this research consists of both qualitative and quantitative methods. The quantitative data was analyzed from questionnaire answers. The qualitative data was analyzed from interview answers.

Research Questions

1. How do students and instructors at Ubon Ratchathani Rajabhat University (UBRU) use educational technology to promote learning and teaching English?
2. What are the problems students and instructors encounter while using educational technology to promote learning and teaching English?
3. What are the possible solutions to solve the problems?

Participants

The respondents to the questionnaire came from 25 contract teachers in the English Department of UBRU. The participants consisted of 15 instructors who have earned a masters degree and 10 instructors were only at the minimum level with a Bachelor Degree. None of the respondents have reached the doctorate level. Questionnaire distributed to them in order to determine their use of educational technology. They were then interviewed about the topics relevant to the research study.

Instruments

The research instruments employed in the study were based on questionnaires and interviews. Firstly, the questionnaire was developed to find out how students and instructors use educational technology and what problems they encountered during that use. Secondly, interviews were conducted with instructors who actually implemented technology into their instruction. The instructors who used technology in the classroom were interviewed for the qualitative part of the study after completing the questionnaire. They were interviewed by the researchers with semi-structured interview about how exactly they used each technology and what problems they have encountered. Moreover, the interview was conducted to find out their opinions about what possible solutions to solve to problems when they applied technology for learning and teaching English.

The Results and Discussions

A. The following results answer the research question 1

- ▶ 100% of the respondents own an email and chat account that they use for both official and personal business on a regular basis.
- ▶ 96% use social networking sites such as Hi5 and Facebook for the purpose of communicating with students beyond the classroom environment, keeping in touch with colleagues, and playing online games. However none use them for English teaching supplementation.
- ▶ 32% use a personal blog to share their daily activities outside of work.
- ▶ Software applications like MS Word and MS Power Point are used by 100% of the respondents for producing documents and slide presentations for teaching materials.
- ▶ None of the respondents ever used Moodle or any other Learning Management System (LMS) in their teaching.
- ▶ 75% have used educational technology in the form of CD-ROM, MP3 and DVD in the classroom environment.

What can be implied from the results is that all instructors who responded to the questionnaire have a basic knowledge of technologies but have failed to implement them into the classroom. It can be deduced that there is a lack of know how required to adapt those technologies into the teaching/learning process. One respondent stated she did not want to learn how to implement any new educational technologies system into teaching because it would result in an increased workload. It is preferred to remain with traditional methods rather than use extra time to learn contemporary ones.

B. The following results answer the research question 2

The instructors shared their opinions about complementing technology in English classroom;

- ▶ Lack of knowledge and understanding about modern educational technology for teaching and learning English.
- ▶ Lack of training on how to use educational technology such as electronic equipment, computer programs and information search techniques for learning and teaching English.
- ▶ The university executive does not support, promote or encourage the use of educational technology by students and instructors.
- ▶ Content that has been found and collected from the Internet sources was found to be irrelevant to and incongruent with the curriculum.
- ▶ A percentage of information retrieved from web sources was determined to be non-reliable and non-creditable.

- ▶ Lack of funding by the university to purchase upgrade, and maintain educational technology equipment.
- ▶ Insufficient computer and the Internet access connection resources that can be utilized for preparing teaching materials.
- ▶ Available educational technology equipment is outdated and incompatible with software and applications needed for preparing teaching materials.
- ▶ Teaching and learning English in the classroom using new technology is restricted due to limited computer and the Internet connections.
- ▶ Cannot teach or learn English with new technology because the department does not have an effective language learning center
- ▶ Lack of teacher understanding of classroom management and discipline while using modern technology
- ▶ Restrictive use of technology in the classroom due to a large percentage of students with little or no computer experience.
- ▶ Lack of necessary experience, knowledge and skills by teachers for creating electronic teaching materials.

C. The following results answer the research question 3

The instructors shared their opinions as to possible solutions;

- ▶ Instructors should be provided with a credible reason to use new technology in the classroom. It is extremely important in order to facilitate change for instructors to be encouraged to apply technology to their instructional needs.
- ▶ It was suggested the instructors be taken on an information finding tour of other universities that have already integrated technology and be briefed in regards to successes, failures and lessons learned.
- ▶ The instructors would appreciate an intensive training course to teach and prepare them for applying technology in their classroom. Additionally they would like an expert available on a long term basis for follow-up and ongoing training.
- ▶ The instructors thought that a good foundation of modern educational technology inventory would be sufficient. They felt there is no need to have access to all technology that is available.
- ▶ The instructors identified a need for long term support for equipment and training by the university administration.

Conclusion

Several types of educational technology were introduced to English instructors at the English department at UBRU. Most of the instructors appeared to be impressed by the capability of the technology at the beginning. However, the effective E-learning system for English courses using LMS had lasted only 2 semesters of an academic year at UBRU. Most of the instructors who create those courses began to be critical of additional workload on maintaining and updating the course online updated. Moreover, the online courses not only did not help students achieve the learning target as planned but also the teaching methods to educate students how to use autonomous learning technique during learning English online were not successful.

There were factors that pushed instructors away from continued using of technology (Sparks, 1998). They gave up to maintaining and applying the system to serve their teaching purposes after using for 1 or 2 semesters. According to the prior study, those instructors had a difficult time to accessing and monitoring the students' learning process, their learning progress and the product of their own learning outcomes. Also, the instructors had problems assigning students to work in groups or individually on the system. There were, however, possibilities for those instructors to adapt the learning procedures to connect students' needs and purposes of language learning through the e-learning system. This will help students to be more aware, active and responsible for their own learning style (Porter, 1993).

There are hundreds of educational technologies that instructors can apply to their teaching plans and help them more easily to conduct their teaching methods. An effective educational technology can help English instructors organize their teaching materials, improve their medium of communication, and retrieve their records of interaction with students when necessary (Young, 2002). Therefore, the study and experiment research to find out how to make the most of educational technology usefulness in English teaching should not be ignored.

For further study, it should be explored more deeply on how English instructors use technology to promote teaching English by comparing with other universities which have succeeded in applying technology in the classroom.

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The Difference Between Teacher and Student Expectations with Regards to the Logical Structure of Academic Writing Activities

A background for the analysis of the similarities and differences in the rhetorical styles of Japanese students' academic writing in their first language compared to English

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ABSTRACT

Academic writing is a central component of many English language courses in Japan. However, in order to write well academically students need to know how to construct a good argument. Traditionally the field of contrastive rhetoric has suggested that students from Japanese, and other Asian, discourse communities may find themselves at a distinct disadvantage when it comes to writing in English because the rhetorical structure of their native language is so different from English. However, recent studies have shown that there are two significant problems with this view of language transfer. The first is that negative transfer between a student's first and second language may not be as statistically significant as it was previously thought. The other is that in our global community the rhetorical structures taught to Japanese students may not, in fact, be so different from the style of deductive argumentation that is taught to students in academic writing classes in Europe and North America. In fact, studies have suggested that it is often the case that the rhetorical form of what constitutes a good essay in a Japanese university class is very similar to how professors would like their students to write in the West. This paper looks at the current state of research in comparative rhetoric with a focus on its relation to academic writing in ESL classes at Japanese universities in order to provide some background for a study that examines the similarities and differences between the structure of Language 1 (L1) and Language 2 (L2) compositions done by first year university students studying English at a Japanese university in Kyoto.

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Abstract

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Introduction

Having taught academic writing to students in four different countries and from three distinct first languages, I am surprised to find that one of the most common complaints by English teachers of academic writing classes, regardless of the student's first language, is that speakers of that language do not understand what constitutes a good argument in English. This is especially true in Japan where a large percentage of researchers in the field of ESL and English teachers working at Japanese universities uncritically accept the fact that there exists a "vast cultural gap" between Japanese and English (Guest, 2002), a gap which has a negative effect on their students academic writing abilities.

Rhetoric is a complex phenomena that varies with the academic and social backgrounds of the writer (Berlin, 1987, p. 15 - 19). It is therefore important for language instructors to try to understand their students' academic writing backgrounds. However, it seems that there is often a disconnect between the preconceptions of native English teachers working at universities in Japan and their students' actual beliefs with regards to what constitutes a good argument. Such preconceptions are partly based on the traditional view that Japanese writing tends to follow an "inductive, bottom heavy" approach to presenting arguments (Hirose, 2003, p. 182). A number of early studies done in the field of contrastive rhetoric focused on differences between the rhetorical styles of Japanese and English. Kaplan undertook one of the earliest of these studies in this field in 1966 (Leki, 1991, p. 123). In this study the author analyzed the organizational patterns found in samples of academic writing taken from ESL

students from a variety of different cultural backgrounds. His conclusion was that students from different cultural backgrounds typically exhibit very different rhetorical patterns in their L2 writing. As you can see in Figure 1, he described the rhetorical structure of native English writers as being direct while Asian writers, including Japanese writers, were shown to exhibit an indirect rhetorical style. (Connor, 1996, pg 15 - 17) This view of the indirect nature of Japanese rhetoric gained more support from an influential study, done by Hinds (1983, 1987), which analyzed a collection of articles found in a major Japanese newspaper. Hinds found the rhetorical structure of these articles to exhibit an indirect rhetorical pattern and went on to claim that most Western readers would find “Japanese writing and logical development ... rather incoherent from a logical and rhetorical standpoint.” (Takashi & Wilkerson, 2007, p. 27).

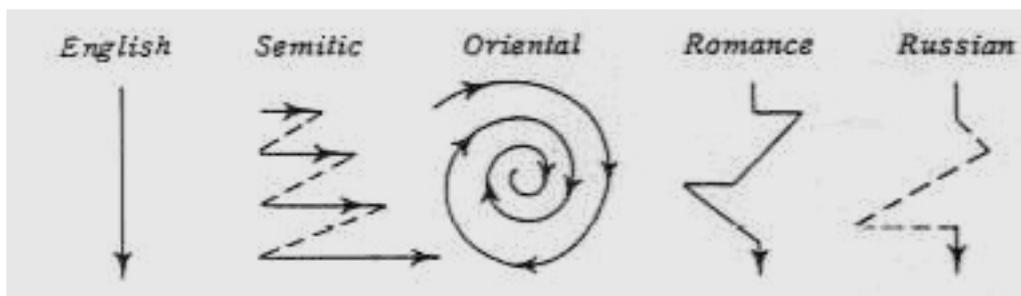


Figure 1

More recent studies have shown that these early studies in the field of comparative rhetoric fail to take into account the dynamic nature of second language writing. (Wang & Wey, 2002; Wang, 2003; Mu & Carrington, 2007) Contrastive, or comparative, rhetoric is a relatively new field of research that tries to explain the rhetorical problems students often experience when writing in a second language by examining the differences that exist between the students L1 and the L2 (Jun, 2008, p. 109 - 112). Recent studies (Wang and Wen, 2002; Liu, 2005) show that more often than not students of various cultural backgrounds are being taught to use the same types of rhetorical patterns in their academic writing, patterns that will be accepted by the international community of academics. Other studies that focus specifically on L1 transfer with respect to Japanese English language learners have also begun to call into question the “static, exotic and monolithic image of Japanese written language divorced completely from English” (Kubota, 1998, p. 476) that many language teachers take for granted. Such contrastive studies show that the actual ideas held by Japanese university students with regards to what constitutes a good argument are much closer to the accepted rhetorical structures of English than most instructors are aware of. Furthermore, the problem that Japanese students face with regards to academic writing more likely stems from a lack of experience with academic writing, both in English and in their native language, than from the difference between Japanese and English rhetorical patterns. (Kobayashi & Rinnert, 2002, p. 104) As a result the pedagogical approach taken by many English language teachers that focuses on the differences between Japanese and English can actually make it more difficult to teach students good academic writing skills as this approach often leads “to a deterministic stance and deficit orientation as to what students can accomplish in English and what their writing instruction should be.” (Zamel, 2005)

While there have been a number of studies that have examined the effects of L1 use in the L2 writing of Japanese students to date there have been no studies that I am aware of that have specifically focused on the type of student that most English language instructors working in Japan are likely to encounter - first year students enrolled in introductory English language classes.

This paper will provide the background for a study that will examine the rhetorical structures found in two argumentative essays collected from two different first year English language classes with similar English language abilities. The proposed study will analyze a sample of argumentative essays written by first year Japanese university students to see what similarities and differences exist between the students L1 and L2 rhetorical styles.

A Traditional View of Japanese Rhetorical Structure

Since the rhetorical structure of Japanese is likely to be unfamiliar to many of the readers, a slight digression into the specific features of this rhetorical structure is necessary before moving onto a discussion of recent studies in the field. As we have seen, Kaplan and others viewed Japanese rhetoric as having an inductive style in which the main idea is presented at the end of the composition or argument. Subsequent researchers such as Hinds (1987) further elaborated on this view describing the Japanese rhetorical style as having a paradigmatic four-unit pattern derived from traditional Chinese poetry called *ki-sho-ten-ketsu*. Takashi and Wilkerson (2007) describe the organization found in *ki-sho-ten-ketsu* as such; “According to this pattern, the writer introduces the topic in *ki*, develops the topic in *sho*, then makes a transition in *ten*, and finally concludes the topic in *ketsu*.” Of the 4 unique sections found in this pattern, studies in the field of contrastive rhetoric tend to focus on the penultimate ‘*ten*’ section as it is that part of the pattern which is deemed to be the most foreign to English language speakers. Hinds (1987) described the abrupt change in the flow of the argument found in the *ten* section as being counter intuitive to Western speakers. Using the work of Hinds and other researchers who supported his view of Japanese rhetoric, Rinnert and Kobayashi describe 8 discourse level feature found in the traditional view of Japanese writing such as: ‘overall organization moving from specific to general’ ... ‘no strong specific position taken by the writer, thus leaving more up to the reader’, and ‘presentation of the topic in the introduction without indicating a specific point of view about it’ (Rinnert and Kobayash, 2001, p. 192).

The problem with this description of Japanese rhetoric is that it does not correspond to the rhetorical style that most Japanese students of a university age have been taught to use in their academic writing. In fact, most students have learned the *ki-sho-ten-ketsu* style in Elementary school students, not as a way to structure their arguments, but rather as a way of organizing narrative writing (Takashi & Wilkerson, 2007, p. 32 - 34). Furthermore, since the introduction of new guidelines by the Ministry of Education in 1947, Japanese schools have begun to teach high school students the linear rhetorical styles, that are more familiar to western readers, as an attempt to ‘refine the techniques and skills to enable (Japanese students) to write with originality so as to order their thought and make them appeal to others clearly, correctly, and in an easily comprehensible manner’ (Saito, as cited in Takashi and Wilkerson, 1987, p. 36 - 37). A study by Rinnert and Kobayashi (2002) showed that commercially available reference books in Japan, designed to teach high school students how to write a good essay, almost always encourage students to use a deductive style, i.e. to present their opinions logically, using reasons and examples to support their assertions; and to begin with a strong thesis statement that presents their opinion at the start of their essay. One such text written to teach high school students how to write a good essay for university admission was aptly titled, ‘How to Write Successful Short Essays: Yes or No, Decide Your Position First’ (Higuchi, as cited in Rinnert and Kobayashi, 2002, p. 105). Kubota (1998) found that a preference for deductive writing can also be found at the university level and that Japanese-speaking professors were just as likely to prefer deductive writing to inductive writing as their English-speaking counterparts.

Studies on L1 Transfer in L2 Academic Writing

Building on this brief review of two different perspectives regarding Japanese rhetoric, I will next review current literature that examines the effects of certain features of a student's L1 rhetoric on their L2 writing. Traditionally English language instructors have tried to limit the amount of work students do in their first language because they believed that there would be a negative transfer from this language that would have a detrimental effect of the student's ability to generate good L2 structures. However, more recent studies have shown that L2 writing almost always involves the process of language switching, even if the students have been explicitly instructed not to do so (Friedlander, 1990; Woodall, 2002; van Weijen et. al, 2009). This is because even the most proficient L2 speaker has a tendency to use their L1 as a tool to control or regulate their mental operations as part of the process that Vygotsky referred to as "private speech". Therefore, even if one discounts the potential benefits that could result from the student's use of their L1 in their English academic writing, an understanding of how and why this transfer occurs is necessary for ESL teachers. This is because L2 writers, regardless of their level of proficiency, are likely to rely on their L1 to help them manage the L2 writing process.

Xiao-xia (2008) classifies the theoretical development of the effects of L1 rhetoric on a student's L2 writing into three streams. The first of these streams is based upon the idea of contrastive analysis and focuses on the negative influences of the student's L1 on their L2 writing. Proponents of this view of language transfer are apt to encourage language instructors to try to limit the amount of influence a student's L1 has on their L2 writing. Many of these studies were done as a means of identifying and helping students overcome real or perceived negative transfer from their L1. Yin (1999 as cited in Jun, 2008, p. 111) showed that first year Chinese students were often unable to use the linear style of academic writing preferred by native speakers. This was a problem he attributed to the differences in the structure of Chinese and English writing. However, this view of language transfer has fallen into disfavor in the academic community as more studies are beginning to show that the process of language transfer is much more complex than contrastive analysis theory allows for.

The second view of language transfer that Xiao-xia describes is based on the creative construction hypothesis. According to this view, the effects of the language transfer process vary depending on the cultural background the student is from. If the student's L1 and L2 are marked by similar patterns then the effect of language transfer tends to be a positive one or can be ignored entirely. However, students who come from a very different language background tend to have many more problems when learning how to write in a L2. Evidence for this view of language transfer can be seen in both large and small-scale studies. For example, Woodall's 2002 study looked at the difference between language transfer with regards to cognate and non-cognate languages. He collected 56 L2 compositions from 28 students whose first language was English, Spanish or Japanese and used a think aloud protocol to determine the amount of language switching the students used while writing in their second language. What he found was that language switching had a positive effect on the quality of the students' essays, but only in the case of advanced learners of a cognate language. In almost all instances the writing quality for learners of a non-cognate language was not affected in a statistically relevant way by the act of language switching. (Woodall, 2002, p. 15- 19) Again this view of language transfer is held back due to the fact it often fails to recognize that the proficiency of L2 writers are influenced by more than just the writer's language, culture. Most researchers in the field now accept that there are a number of other variables such as the writer's educational and social backgrounds; the past experiences the writer may have had with writing in both their L1 and L2; his or her knowledge of the subject

being written about; and the various L1 and L2 discourse communities that the writer may be a member of.

The final view of language transfer tries to take into account as many factors as possible by looking at each individual's L2 writing ability as a unique product with multiple variables. This view of language transfer is based on the theory of Common Underlying Proficiency (CUP). Cummins (1983, as cited in Hui, 2010, p. 99) used the analogy of dual icebergs (see Figure 2) to try to explain the transfer process that exists between a learner's first and second languages. This model suggests that there is an underlying understanding of both languages in general, as well as higher-level cognitive skills such as reading and writing strategies that are shared across the languages. Because these skills are shared between the student's two languages "higher-order thinking skills, reading, strategies, writing composition skills and so on, develop through the medium of L1 transfer or become available to L2 given sufficient exposure and motivation" (Hui, 2010, p. 99). In this model a student's L2 compositional and rhetorical skills are seen as constantly evolving as the learner gains exposure to discourse communities within both their L1 and the L2. Proponents of the CUP theory of language transfer maintain that any knowledge that the student is exposed to with regards to the accepted logical structure of an academic argument will have a positive effect on their academic writing in both their L1 and their L2, regardless of the language this exposure occurs in.

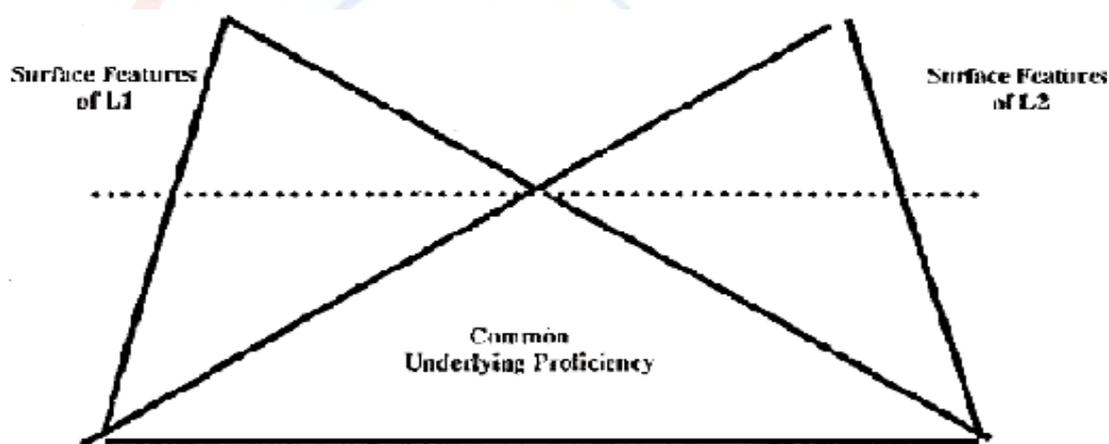


Figure 2

CUP view of language transfer is supported by a number of recent studies. Some studies have tried to examine the relationship between a student's writing proficiency and the level of language they pay attention to while engaged in writing tasks. Studies on English as a second language have found that unskilled students tend to spend much more time on mechanics and sentence level structure than skilled students (Flower & Hayes, 1980). These results are similar to those found in studies of students writing in their L1 that also noted that unskilled students often spend much more time focusing on the sentence level while skilled students pay more attention to textual organization and the discourse-level structure of their writing (Uzawa, 1996). Other studies have compared the L1 and L2 writing processes of skilled and unskilled writers and found that the good and bad habits found in a writer's L2 are very often the same habits one can see in the same writer's L1 writing. For example, both Kubota (1998) and Hirose (2003) found that skilled Japanese writers tend to organize both their L1 and L2 writing following a deductive 'western' pattern and that unskilled writers also usually use the same organizational patterns in both their L1 and L2 essays. Kubota went on to speculate that the choices that Japanese students make with regards to L2 writing structure is more likely a product of their proficiency in both L1 and L2 writing than a result of

negative transfer from their L1 (Jun, 2008, p. 111). Taylor and Chen (1991 as cited in Liu, 2008, p. 12) also found that Chinese students' understanding of the writing task, including the genre of the piece they were writing, had a much greater effect on their language choices than the student's cultural background. Wang and Wen (2002) showed that Chinese students' were more likely to use their L1 as a means of controlling the writing process. However, despite the supposed differences between Chinese and English rhetoric, most of these students wrote their argumentative essays in a deductive style. Based on the theory of CUP language transfer, one possible reason for this use of "Western" deductive logic in these Chinese students' English language essays can be found in a study done by Liu (2005) that compared the differences in the content of English and Chinese online instructional materials that focused on teaching students how to write an argumentative essay. Liu found that, while there were some small differences in the suggested rhetorical styles given on the Chinese sites compared to the English ones, all of the sites focused on teaching students how to write an essay using a deductive 'tripartite structure, and the use of formal discourse'.

Implications and Proposed Research

There are several important implications from this research for Japanese language learners of English. First, it seems obvious that it is necessary for language instructors to be aware of students' background so that they can best prepare their students to write well in both English and in their first language, a requirement for many language and non-language classes. This is especially true for students who intend to study overseas. A recent study of the written skills test given at a University in the United States showed that the passing rate for Chinese, Japanese and Korean students was less than 15% compared to almost 60% for speakers of European languages (McFeely as cited in Rinnert and Kobayashi, 2002, p. 92). These statistics clearly illustrate that we need to re-examine how writing is being taught in English language classes in Japan. It is necessary for the teacher to have a clearer and wider understanding of the underlying problems in teaching writing to second language learners. Students who are considered to be good writers in their own language are often the same students who do well in academic writing tasks in English (Woodall, 2002). The processes that these students use to write an essay in English is usually the same, or very similar, to the process that they use in their first language. It is therefore very probable that low grades in English language writing tasks are indicative of similar problems with the students' L1 writing skills.

In 1998 Yeh carried out a study on 116 non-native middle school students in the US in order to discover how to improve their ability to form academic arguments in English. This study showed that students need to be explicitly guided in writing argumentative essays. This instructional process should be focused on improving the students' common underlying proficiency with regards to constructing an argument. As this common underlying proficiency is made up of both the student's first and second language experiences it is essential that the instructor uses and builds on this existing knowledge. The best way for an instructor to remedy shortcomings in the underlying knowledge is for the instructor to be aware of what these shortcomings are and the reasons that they exist. Furthermore, helping students to improve their rhetorical skills will also help to improve their English language proficiency, "since a strong argument superstructure will compensate for weaker argumentation at the microstructural level of text, which requires higher levels of English proficiency for successful implementation" (Gilbert, 2004, p. 70)

Proposed Study

By comparing the L1 and L2 written work of a group of first year university students I hope to be able to discover the similarities and differences between the rhetorical styles students use in their L1 compared to their L2 writing.

For the purpose of this study I will be collecting samples of academic writing from first year university students enrolled in an introductory English class in the Law department at a Japanese private university. Over the course of the semester each student will be asked to provide two samples of an argumentative essay, one in Japanese and one in English. The rhetorical structure of these essays will be examined using similar analytical tools as those found in Uysal (2008) study of the rhetorical patterns of Turkish writers and Wang & Wen (2002) study of 16 Chinese EFL writers. The students' short compositions will also be evaluated by a group of Japanese and English language instructors in order to determine similarities and differences with regards beliefs about what constitutes a good argumentative essay among readers of different language backgrounds. This evaluation will be conducted using the holistic scoring scale found in Uzawa, 1996. Finally, a small group of students will be randomly selected based on the scores their compositions were given by the Japanese and English language instructors. These students will be interviewed as a way of gaining further insight into the reasons behind the rhetorical choices made while writing their composition and to see if there were any significant differences in the choices made by the students with regards to how their compositions were scored.

This study will begin to examine the structure and scope of first year university students' knowledge of rhetorical structures. By providing instructors with a greater understanding of first year Japanese students' abilities, and shortcomings, with regards to constructing written arguments in both English and Japanese it is hoped that this research will help instructors of similar classes to design a curriculum that better allows the students to find their voice, begin to enjoy the process of writing in both English and their L1 and improve themselves as writers by contributing something meaningful to the English language discourse community.

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Considering Divergent Approaches to Class Participation

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Abstract

The authors investigated Korean students' class participation style. One hundred and seventy-five college students completed a survey used to assess participants' perceptions and beliefs towards class participation style. The study demonstrated a range of preferences and patterns in the way Korean college students use silence and verbal participation in class discussion. Overall, male students were more active in regulating their thoughts and ideas than female students. Female students were also more reluctant to mandating active participation as part of completing course requirements than male students. Older students were more cautious about jumping into class discussion.



Considering Divergent Approaches to Class Participation

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It is a common belief that the more actively and verbally students participate in class discussion, the better their learning outcomes are (Boniecki & Moore, 2003). Verbal expression, however, as part of questioning and debating is prototypical of Western and European American education (Kim, 2002; Kim & Markus, 2002). Classroom silence is often associated with, if not, misinterpreted as shyness (Crozier, 2004; Sommer & Sommer, 2007) or not engaging in the learning material (Boniecki & Moore, 2003). Emerging evidence, however, points to the cultural differences in the classroom discussion style. For example, East Asian students frequently rely on silence to reflect upon the subject matter that is being discussed (Kim, 2002; Kim & Markus, 2002; Volet & Renshaw, 1996). Exploring class participation style among Korean college students has been notably absent. Thus, this study examines Korean students' perceptions and beliefs toward class participation and their modes of learning to engage in class discussion.

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Method

The present paper is based on a follow-up study on students' needs assessment conducted in another public university as part of preliminary investigation to Instructors' Roles in Students' Academic Achievement Program. The current Data were collected on 175 students (78 male, 97 female) enrolled in a public university in southern state of South Korea. Participants were students enrolled in introductory psychology classes, signed the consent forms, and agreed to participate in the study. The participants majored in education (22.44%), engineering (23.23%), humanities (21.31%), natural and applied sciences

(19.53%), social sciences (8.17%), and arts and music (5.32%). The Survey consisted of demographic variables and 17 items measuring beliefs and perceptions toward class participation style. Each item is scored on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Results

Descriptive statistical analyses were run on the items. The mean scores of the responded items ranged from 1.75 to 3.82. The items with two highest mean scores were “Just because one is articulate, it doesn't mean that he or she is smart” (*Item 2*), “There is nothing wrong if students need to be silent to reflect on the subject matter or the learning material being discussed” (*Item 4*). The items with two lowest mean scores were “When the opportunity is given to students, they must be able to share their viewpoints in class” (*Item 11*), “The more freely I express my thoughts and views in class, the better it is for my intellectual development” (*Item 7*). The results of the analyses are presented in the virtual presentation.

There were gender differences in Item 13 (M (*male*)=3.28 SD =1.25, M (*female*)=3.77, SD =.94), t =-2.62, p <.05 and Item 6 (M (*male*)=4.21, SD =.93, M (*female*)= 3.68, SD =.87) t =2.82, p <.012). Although male students demonstrated more interest than female students did in participating in class as part of completing course requirements, male students were also active in regulating their thoughts and ideas than are female students.

Correlation coefficients were computed between age and each item. Items 6, 8, and 14 were positively correlated with age r (*Item 6*) = .311, p =.016 r (*Item 8*) = .292, p =.021; r (*Item 14*) =.314, p =.015. Item 9 was negatively correlated with age r (*Item 9*) = -.328, p =.006). The results showed that older students were also more cautious about jumping into class discussion than younger students.

Table 1
Means and standard deviations of beliefs and perceptions toward class participation style

Items
1. I believe that good thinkers are those who can articulate their thoughts and opinions.
2. Just because one is articulate, it doesn't mean that he or she is smart.
3. One must be able to express his thoughts clearly as part of refining and articulating process.
4. There is nothing wrong if students need to be silent to reflect on the subject matter or the learning material being discussed.
5. Even if instructors encourage students to participate in class discussion, the presence of instructors can be burdensome to students at times.
6. The more opportunities I am given to participate in class discussions, the more cautious I should be in expressing my ideas and opinions.
7. The more freely I express my thoughts and views in class, the better it is for my intellectual development.
8. Just because I am given to speak up, it doesn't mean I should jump into class discussion.
9. The opportunities to participate in class discussion should be given to students in class.
10. The less you talk, the better it is for me in class.
11. When the opportunity is given to students, they must be able to share their viewpoints in class.
12. In order to refine and articulate my views, it is better to do it silently without relying on verbalization.
13. I don't believe that students need to be graded based on their verbal participation.
14. I often take time and think carefully before answering questions immediately when instructors ask students some questions.
15. I am ready to verbally participate in class discussions whenever it is necessary.
16. I believe students who use thinking-aloud method tend to cause distractions to other students while they think about the subject matter.
17. I can freely disagree with others' points of views during class discussion whenever it is necessary.

Limitation and Conclusion

A primary objective of the present study was to explore Korean students' perceptions and beliefs about class participation. The study demonstrated that there is a range of preferences and patterns in the way Korean college students use silence and verbal participation in class discussion.

The present study has some limitations. The implications are further discussed to explore future directions for research and to understand divergent ways that students engage in class discussion.

Future studies should be extended to capture students' perceptions toward instructors' strategies in intercultural settings. Instructors teaching classes that consist of students with diverse intercultural backgrounds may need to be mindful that inherently classroom silence, to some extent, means silently reflecting on what is being discussed in classes. That is, instructors need to be aware that active participation should not be measured solely by utterance or verbalization (Kim & Markus, 2002).

It may be also worth investigating whether verbally active students are perceived as verbally dominant or distracting by those who primarily rely on silence during class discussion. Instructors could ask students to observe their verbal and nonverbal participation patterns (Zaremba & Dunn, 2004).

More items should be included to create factors of class participation style to establish construct validity, such as silent disengagement, silent participation, verbalization as articulation, and verbalization as part of experientially expressing on mental scratch paper.

Class participation should be done voluntarily, but many instructors often exert their instructional leadership to encourage students to speak up (Kovalainen, Kumpulainen, & Vasama, 2001). Although participating in class is supposed to be spontaneous, many Asian students may often feel pressured to participate. In exploring teacher's modes of leading the class, Kovalainen et al. suggested that teachers need to regulate the instructional pace. This is particularly imperative in intercultural settings because individuals' values of thinking and speaking are inherently culturally rooted and sometimes the differences in values could affect or imbalance the flow of class participation.

Although considering divergence (i.e., taking silence and verbalization equally into consideration) in class participation research has been a neglected area, emerging evidence suggests the potential effects of silence and verbalization on students' learning processes. Despite the limitations of the present study the results of the study could be considered in designing teaching and learning programs. Findings in this study points to the importance of considering students' perceptions and beliefs of their class participation style.

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MULTI-MODAL REPRESENTATION APPROACH IN TEACHING GENETICS TO NON-SCIENCE COLLEGE STUDENTS

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ABSTRACT

This study investigated on the effects of the multi-modal representations approach in teaching college biology on students' conceptual understanding, science process skills and science attitude.

An instructional material based from a standard tertiary level general biology course employing multi-modal representations of scientific concepts and processes was designed and compared against the traditional approach to teaching. The instruments developed and used were the, Genetics Achievement Test, Science Process Skills Rubrics, Science Literacy Test, Science Attitude Scale and Focus Group Discussion Guide.

This research employed a quasi experimental design where data was gathered from two intact classes of college non-science freshmen from a local university.

Both qualitative and quantitative research methods were utilized. On the other hand, qualitative data were obtained via analysis of students' focus group discussion. Results were subjected to statistical analysis and reported as means, standard deviation and variance. The *t* - test was done to compare significant difference in the observed means in test scores at $\alpha = 0.05$ level of significance.

Results showed significantly higher scores in the genetics achievement test and science process skills of students exposed to the multi-modal representation approach.

The role of repeating representations was acknowledged as contributory factors in the learning of difficult concepts and processes in genetics.

Difficulties and problems encountered by the students in the use of multi-modal representation approach included the need for active participation in the class, more classroom-based activities, and absence of technological support.

Keywords: *multi-modal representation approach, traditional method, conceptual understanding, science process skills, science attitude,*

INTRODUCTION

Educators are in constant search for more efficient and effective ways to advance student learning. In the area of science education, enhancement of the students' conceptual understanding of scientific facts and processes has long been the central goal. This is upon the recognition that most science programs fail to deliver the expected development of basic competencies and science literacy among its students.

Meaningful learning of scientific concepts and processes also entails understanding and conceptually linking the purpose-built multiple and multi-modal representations of this domain. In order to achieve this goal, learners must be given opportunities to be actively engage in various activities that tap on differential abilities and varied sense experiences, relate new concepts to prior knowledge, use their newly built conceptual understanding to explain and comprehend phenomena they

encounter, and confidently arrive at sensible decisions and choices they have to make in their everyday life.

The use of multi-modal representation approach is viewed as a possible answer to deal with this educational need. "Multi" here refers to the practice of representing the same concepts and processes through different forms (Waldrup *et al*, 2006). Multi-modal representation approach as defined by Jewitt (2008) goes beyond the use, and communication by language. It attends to a complex repertoire of semiotic resources and organizational means of meaning making through image, speech, gesture, writing, models, 3-dimensional forms, and so on.

The multi-modal representation approach to teaching biology is expected to provide a unique learning climate that would improve the students' conceptual understanding of genetics concepts and processes. It is viewed as a means to enhance the students' skills in the processes of science as well as improve their attitude toward science, genetics in particular, being highly complex, abstract, and an interdisciplinary area of biological science.

The development of an effective alternative and availability of instructional techniques that could facilitate conceptual comprehensions in science, genetics in particular, raise the level of students' science process skills and develop a more positive attitude towards science are the challenges this study hopes to accomplish.

This research hopes to come up with an instructional material that is suitable and useful for non-science college freshmen who will take biology as one of the few natural science courses in their curriculum.

METHODS

This study determined the effect of multi-modal representation approach in teaching college genetics on the students' conceptual understanding, science process skills, and science attitude. It was a quasi-experimental research that utilized intact biology classes from a public higher learning institution in the province of Laguna. In particular, a pretest-posttest non-equivalent control group design was used.

Two approaches to instructions were employed in this study and served as the main independent variable: Expository or Traditional method and the Multi-modal representation approach. Equal amount of instructional time was however observed for each group in the delivery of the same topic content.

The instruments used in this study were prepared by the researcher taking into consideration the works of other science teachers and researchers.

The Science Literacy Test, Genetics Achievement Test and Science Attitude Scale were peer reviewed and presented to the Panel of Experts for clarity and content validity, and was reliability tested.

Both descriptive and inferential statistics were employed in the study. In descriptive statistics, data obtained in this research were organized by the numerical representation of each group in terms of mean and standard deviations.

RESULTS

Results showed that compared to the traditional or expository approach, the multi-modal representation approach was more effective in enhancing the students' conceptual understanding particularly on the higher order thinking dimension of genetics concepts and processes. This approach also resulted in better science process skills among students. Although there was no significant statistical evidence that science attitude was improved, students under the experimental group manifested positive attitude toward science education and better appreciation of scientific concepts

and activities when exposed to the multi-modal representation approach to teaching, based on the focus group discussions.

Research data showed that under the multi-modal representation approach, conceptual understanding can be predicted by the students' prior science knowledge. Male students were noted to demonstrate better science process skills over female students. Students coming from families with high income status were better in conceptual understanding compared to those coming from average and low income families.

Through the limited exposure to the multi-modal representation approach, the students also developed better interest and appreciation of the science discipline and had a higher level of awareness and concern on matters pertaining to health, reproduction and the value of the unique character of individuals. Problems encountered in the delivery of the lesson were the demands for students to have sustained participation in the activities, computer competence, and the need to take the social dimensions of learning.

CONCLUSIONS

Within the framework of this study, and the context of the study site of this research, the following conclusions are drawn:

1. The college freshmen students demonstrated statistically significant gain in conceptual understanding and science process skills when exposed to the multi-modal representation approach compared to those exposed to traditional or expository teaching approach.
2. College freshmen demonstrated comparable gain in lower order thinking skills irrespective of the approach to instruction used.
3. Students exposed to the multi-modal representation approach demonstrated significant gain in higher order thinking skills.
4. For students exposed to the multi-modal representation approach, conceptual understanding can be predicted by their prior science knowledge.
5. Students exposed to the multi-modal representation approach showed a significant difference in the science process skills in favor of the male students.
6. For students exposed to the multi-modal representation approach, there is significant difference in the conceptual understanding and science process skills of those belonging to high compared to low and those from high compared middle income status, but no significant difference is observed between the middle and low income students.
7. Students exposed to the multi-modal representation approach manifested developments of positive attitude to science as a discipline, genetics in particular, increased interest in the application of technology in the classroom and improved appreciation of the role of science in their everyday lives.

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Challenges of Private Higher Education in China

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Abstract

After approval by the Beijing government, private universities began appearing in almost every major province in China. If obtaining any education is seen as the main goal, it would seem fair to say that these private colleges are providing great opportunities—given that they are accepting students with lower Chinese University Examinations scores and filling the enormous need for higher and continuing education in China. However, a focus on the quality of education (including facilities, equipment, and teaching and administrative staff) raises concern that the private colleges are not nearly as effective as even second-tier Chinese public universities. Ruben (1995) says that higher education is a service industry: “The core of (our) service is generating, integrating, and communicating knowledge for a variety of audiences- academic, professional, student, and public” (p. 3). When looked from this perspective, China’s higher education is not necessarily qualifying for providing a “quality” education.

Successful examples of private universities do exist in China and are certainly providing high-quality education. However, these schools may be the exceptions, and today there are many more not-so-successful private universities in China. This article by no means intends to undermine the teaching and administration at effective institutions but attempts to provide a starting point for discussing the future of such private higher education institutions in China.

Introduction

After approval by the Beijing government, private universities began appearing in almost every major province in China. If obtaining any education is seen as the main goal, it would seem fair to say that these private colleges are providing great opportunities—given that they are accepting students with lower Chinese University Examinations scores and filling the enormous need for higher and continuing education in China. However, a focus on the quality of education (including facilities, equipment, and teaching and administrative staff) raises concern that the private colleges are not nearly as effective as even second-tier Chinese public universities.

Successful examples of private universities do exist in China (see Jing Lin and Ruth Hayhoe, “China's Private Universities: A Successful Case Study,” *International Higher Education*, no. 51) that are certainly providing high-quality education. However, these schools may be the exceptions, and today there are many more not-so-successful private universities in China. This article by no means intends to undermine the teaching and administration at effective institutions but attempts to provide a starting point for discussing the future of such private universities.

Private Higher Education in China

Mok (2009) explains that when the Chinese government realized that the state alone could not keep up with the increasing demand for higher education, it allowed non-governmental institutions to get involved. This occurred not only because of the demands of the rapidly globalizing economy and interdependency among nations, but also because the conventional governmental institutions' lacked the structural, political, and financial ability to provide the much needed education to the growing population. Also, with the PRC entering the world market, officials as part of their economic development plan placed emphasis on Human Capital.

Human Capital Theory explains that a large gradation in earning by level of education reflects to returns to individuals' investment in education (Becker, 1993; Mincer, 1974). The idea of education is a form of capital and the notion of education, a form of —human capital (Little, 2000, p. 287).

Though the transformation of its private higher education cannot be explained by a single scientific concept, China's move to allow the establishment of private universities, starting in the 1980's, confirms the country's objective to develop human capital through whatever means necessary.

Status of Private Higher Education in China

China is in a state of change. Its capital markets are changing; its labor markets are changing; and its people are changing. Education, that is, the investment in education, in this sense, is important because people with higher levels of education are better able to absorb new ideas. With China's entrance in world markets, the WTO being an example, it now has access to newer forms of technology and organizational arrangements. The need for a more skilled workforce has been increasing. The new technology brought into China by its investment in physical capital requires more skilled workers to operate it. It takes skilled workers to make the most efficient use of modern technologies (Heckman, 2003).

In the light of these developments, China's excitement about the revival of private education is not surprising. Private education (*Minban* or public-run) had long existed in China. Through the late Ming period, private learning academies have been in abundance (Ding & Lu, 1992; Yang & Peng, 1992). Chen (1981) reported that there were about twelve hundred private learning academies in the Ming era. From the end of the Opium Wars in the mid-1880s to the formation the People's Republic in the early 1950s, private higher learning institutions were a

integral part of society. Following the footsteps of the Soviet model, all private institutions of higher education were transformed into public ones by 1952, after the reorganization of universities and departments. With this, the long history of private education in China closes its first chapter (Borthwick, 1983; Zhu, 1994; Lin 1994; Mok, 1996).

Since then, Zhou and Xie (2007) report that in 1996 there were 1219 private higher education institutions (HEIs- including vocational colleges), most of them with an enrollment of hundreds of students and a few with over a thousand. Since the late 1990s, the number of private HEIs in China has increased steadily. Hua (2009) reports that “the total number of private schools of all levels and categories increased 52 percent, from 61,200 in 2002 to 93,200 in 2006, and the corresponding number of students in these schools also rose, from 11.16 million in 2002 to 23.13 million in 2006, a 107 percent increase” (p. 40).

Table 1 The number of private/*Minban* institutions in China

	1999	2000	2001	2002	2004
<i>Minban</i> Vocational Colleges	950	999	1040	1085	1633
<i>Minban</i> Higher Education Institutions	37	43	89	133	228

Adapted from Mok, K.H. (2009). The growing importance of the privateness in education: challenges for higher

education governance in China. *Compare*. 39(1), 35-49.

In order to respond to the needs of the public for more higher education accessibility, but to also limit the establishment of private educational institutions, the Ministry of Education in China found a more controlled alternative. Public universities were give permission to establish second-tier colleges that used their names and credentials. These second-tier affiliated colleges are self-funded institutions and are considered a more reputable substitute to the non-public-university-affiliated private universities.

Because of the speedy and somewhat unregulated establishment of China's private education system, there has been a lack of stability in this market. According to a 2001 survey conducted by Private Higher Education Committee of China nearly half of the 1134 private HEIs set up had shut down their operations. Overall, there were only forty private higher education institutions in the survey that were operating without major concerns. (Zhou & Xie, 2007).

This brings us to the main goal of this paper, which is to look at the quality within these private higher education institutions. With the fast expansion of the private higher education system, maintaining educational quality and integrity has not been a priority. Administrators have been lax in hiring qualified faculty and staff; have limited curriculum and program development; have not provided sufficient laboratory facilities and technological services; and have not created satisfactory living and learning conditions for students, to name a few.

Higher education can be viewed as a service industry, and as such, it needs to provide the same service quality as any other type of service provider (Ruben, 1995). In order to provide quality service, organizations must put customers first and evaluate how well the needs and expectations of their customers are being met. They must also identify what improvements are needed and make progress towards those goals. In the context of higher education in China, with the understanding that higher education is a service industry, there is a minimal concern in identifying and meeting the educational and service expectations/needs of the students, parents, faculty, administrators, and staff. This disregard paired with inefficiency and a strong cultural emphasis in bureaucracy that controls the public arena has fostered a private higher education system that is not necessarily promoting a "quality" Chinese education environment. As Mok (1997) put it:

The flourishing of private education on the mainland has challenged traditional approaches to education in terms of its quality, relevance and applicability to contemporary society. (p. 56)

Instructors and Administrators

The instructors at private universities are mainly younger faculty members with bachelor's degrees and limited teaching experiences. Xiao and Li (2005) explain that "A good proportion of the full-time teachers in private institutions are young" (p. 71) and they are "very mobile" and unstable (p. 72). They teach 16 to 20 hours a week, with the remaining time left for chatting with other instructors, given the absence of research or professional development opportunities. The instructors usually stay at these institutions for only one or two semesters before moving on to 'real' jobs at public universities. They are paid an average salary of 2,500 RMB (around \$US350) a month and are provided a studio apartment on campus. While they pay their instructors salaries similar to those of private universities, public universities also provide job security and prestige. Such private institutions rarely have professional development opportunities or research support mostly due to heavy teaching loads, lack of funding, and lack of policy support. Chen (2004) inserts that "crowded classes make students feel fretful, and over-loaded teachers have less time for their own professional development, leading to anxiety about instruction quality" (p. 26). Even though some private institutions have now started retirement programs for faculty and staff, it is still not yet as widespread.

The top management of the private institutions includes people largely from the business world with aggressive marketing experience. Vice presidents may change three or four times during an academic year as part of a continuous restructuring in an effort to improve the profitability of the organization. Lower-level managers also frequently undergo shifts of positions or are transferred to different departments.

Su (1999) points out that China is experiencing a dynamic reconstruction where disorder is an integral part of the society. This consists of —an absence or lack of effective laws, increasing problems of business ethics, bureaucracy, and the government’s ambiguous role in the economy with respect to enterprises (p. 1). Furthermore, to a certain degree, the human relationship network acts as the most important lever or strategy in operating management and administration in China (Sun, Vandenberghe & Creemers, 2003). Party representatives are given executive vice president positions, with other executive management positions being filled by employing relatives. These executives, with minimal or nonexistent educational experience, view these universities as highly profitable businesses. For example, at a relatively renowned private college in Southern China, a former party secretary was hired as the executive vice president; and brothers, sisters, children, and cousins were given highly responsible jobs. Zhou and Xie (2007) further confirm this:

Two kinds of management are adopted. One is the family management structure for the sake of the trust. The chairman of the board and his relatives take the important positions (i.e., the board, financing and personnel), and even his offspring hold the power after his retirement. The other is to invite celebrities to serve as the emeritus leaders so as to make the institutions widely known and gain higher social status.... In some private HEIs, the secretary general of the communist party of China works as president (p. 111)

Living and Learning Conditions

Physical facilities in China are simple and backward compared to the United States, but what constitutes adequate educational facilities is a matter of subjective definition. Expectations in China are low. Even in a public school, a chalkboard, a desk and a chair for each student, and a roof over their heads often have sufficed.

(Kwong, 1997, p. 250)

The sudden increase in student numbers has created constraints in resources and physical facilities that fall short in supporting the ever growing and more demanding student body. Even

though the economic outcomes of such optimization of resources are considerable for the beneficiaries of such institutions, quality is a significant concern (Li, 2000; Luo, 2001; Wu, 2002). Facilities provided for these students, who pay around 12,000 RMB (around US\$1,750) for the year, are similar to the facilities at public universities. It is important to note here that even though the students in coastal areas can afford to pay such large amounts of tuition and boarding fees, many Chinese citizens living in economically underdeveloped inner and/or western parts of China cannot (Mok, 2009). Students are offered mediocre living quarters in a six-student dormitory room, which includes no furniture other than a desk and stool for each student, two hours of hot water a day, no TV, and very slow (given a trend all around China) and time-limited Internet access. Student cafeterias, grocery stores, and bottled water services are usually owned and run by owners of the universities, leaving students with no other options regarding what they should eat and how much they should pay. Students may not be allowed to use cash on campus and forced instead to use school-issued debit cards, onto which they must first place a minimum of 50 RMB at a time. This initiative is of course a matter of convenience and security, among other benefits; but the lack of a refund policy for the money unspent is a rather aggressive business strategy. Moreover, students are charged extra for Internet access, hot water usage, and electricity—occasionally three or four times more than what the Electricity Bureau charges the school—even before they use it and, again, without a refund policy. Most of these universities are located outside city centers with little public transportation available; students are left with no choice but to stay on campus.

Humble and desperate Chinese students, socially outcast by lower national examination scores, are still willing to pay top dollar for living in mediocre quarters and being taught in classrooms without climate control (brutally hot during the summer and freezing cold during the

winter) by unmotivated and inexperienced faculty members. It should be noted that the students at these private universities receive the same living conditions offered at a public university, which charges students less than half as much as private institutions. Paying a higher tuition fee should certainly ensure better living and learning facilities, in addition to providing a global and competitive education. They deserve academic quality in instruction, research, and service. They deserve administrative quality in procedures, information flow, and the overall functioning of the system. They deserve service quality with their living and learning conditions.

Conclusion

Private higher education in China needs an overhaul. They are confronted with decisions related to academics, politics, and economics. Quality in all aspects of private higher education is the essential expectation of the government, students, parents, and the society. The relatively low ranking of private colleges and thus the rather negative public perception of the graduates of such schools cause students to be treated as helpless customers with nowhere else to go.

Recruiters make promises during recruitment fairs, focusing entirely on parental satisfaction but ignoring the needs of these students. Students go unheard, unable to complain due to the cultural barriers of losing face and disappointing their parents and relatives. Local chat rooms, while providing a platform to voice their opinions, are not significant tools to promote change in China's private universities.

These students are paying high prices and deserve better education and treatment. Instead of using the desperation of these students, China's private universities need to open their eyes to the reality of aggressive competition from foreign joint-venture universities or other private universities. These institutions should start offering more services with better training to make their students more marketable in the real world.

Again, if any education is better than no education, even these problematic private universities provide useful service to China. However, with the need for more colleges and universities in China, the low-end private universities should start focusing on providing quality education to include good living and learning environments on par with the high tuition fees students pay.



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Title: *Globalization and Internationalization of Adult Education: The Principles and Interactive Methods of TESL*

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Abstract

In globalization and internationalization, English plays a significant role for communication among educated people in different countries as it is the most widely used international language in business, politics and professional areas. Even since the economic crisis, the English (ESL) courses remain the most popular in adult continuing education in Hong Kong. This study is based on questionnaires with the purpose of collecting data from the students who participated in five English (ESL) classes in CUHK. It focuses on their feedback and comments on the teaching materials as well as interactive methods of teaching English as a second language (TESL). Thus, there is better understanding of the benefits they received from the courses. The results indicate that most students provided positive feedback and high recommendation to the courses. It can be concluded that creative teaching materials and interactive methods fulfill the students' expectations and needs, and also support the principles of TESL in adult education suggested by the author of this paper: "Pragmatism, Practice, and Proficiency". The courses facilitated the learning, examination results and work of the students, and enhanced the critical thinking and proficiency of the adult learners. Consequently, the students would continue their English learning, self-development, and life-long learning. Therefore, teaching English as a second language (TESL) with interactive methods based upon the above principles should be beneficial to the processes of globalization and internationalization and have a huge market in global education fields.

TEXT (4,043 words excluding the tables)

1.0. Introduction

In globalization, whenever business, trade, travel or study has become internationalized, which language is the most widely used for communication and interaction among different peoples in different nations? The answer, of course, is English. Although there is the largest population of 13 billion Chinese speaking Mandarin, English, in fact, plays a significant role for communication among the educated people. That is especially true

in upper middle class including politicians, businessmen, professionals, intellectuals, and elites of different countries in the world. English as an international language is still prominent in various professions in Hong Kong, an international city. So the English as second language (ESL) courses have a big market. Even since the economic crisis, ESL courses have still been the most popular in adult continuing education in Hong Kong. On the other hand, the courses in finance, economics, and business, which were very popular, have cooled down.

Comparatively speaking, the main difference between adult continuing education and formal college education in higher institutes is that the former one is much more flexible than the latter one by providing a large variety of short courses, which are practical courses with relatively less theoretical concerns. Thus, an ESL course in continuing education is a separate or dependent on a group of courses to achieve a diploma or a degree, the participants are mainly adults or those with jobs. Therefore, the author suggests that **“Pragmatism, Practice, and Proficiency”** should be the principles of adult continuing education.

The term **“Interactive Method”** means the design of a curriculum should meet the expectations and needs of the students. So the content is mainly **“pragmatic”**. Besides the traditional teaching of knowledge, at least one-fourth to half of the courses belongs to interaction or activities. Consequently, the students must participate in group discussion or individual activities. Through these activities, they can apply what they have previously learned in real settings in **“practice”**. From the evaluation and the results of the students, we can understand the benefits they have got from the courses and how **proficient** they are.

Thus, what are the reasons, expectations, and needs of the students participating in various ESL courses? Based upon the questionnaires, the reasons for taking the ESL courses in The Chinese University of Hong Kong (CUHK) are to upgrade the ability of the four skills including speaking, listening reading and writing in English. Secondly, it is to improve the communication and social techniques. Thirdly, it aims to enhance preparation and better performance for the international English public examinations through learning the examination testing methods, strategies and techniques for further study and new jobs. For the sake of their day-time jobs, some learners wanted to improve their standard of written business correspondence which would be useful in their work. Some participants expected self development. A minority chose the courses because they had the confidence in the teaching quality of CUHK, while others took the courses might think the timetable and fees reasonable. Although there are various learning purposes and different kinds of courses, this paper focuses on the investigation, design, and evaluation of the creative and interactive teaching methods of ESL in continuing education for the facilitation of ESL adult students' learning. And also, it examines how these methods in TESL become beneficial to globalization and internationalization.

2.0. Research Methodology

The research method used in this study involves questionnaires and the subjects are 91 adult students from five different classes in School of Continuing Education in The Chinese University of Hong Kong (CUHK) including: **GMAT English Preparation Course, IELTS Preparation Course, Business Corresponding Writing, Practical Written Communication for Business, Social Talks**. The instructor and designer of the courses and questionnaires is the author of this paper.

The questionnaires were collected from five spring courses in 2009. Each course lasted 10 to 12 weeks with a total of 20 to 30 hours for each. That means each course has a 2-3 hour session each week. When the questionnaires were sent to the adult students, more than half of the curricula were completed. In other words, the results are more objective and reliable as the evaluation and comments of the courses were based on the students' learning experience rather than their imagination.

2.1. Objectives

The aim of these questionnaires is collecting the feedback and comments of the creative teaching materials and interactive methods from the five ESL classes. We are attempting to get a better understanding of whether the creative teaching materials and interactive methods fulfill the students' expectations and needs or not and whether the five different course designs support the principles of TESL in adult education suggested by the author: **"Pragmatism, Practice, and Proficiency"**. Besides, we wish to find out that these methods in TESL have positive effects on globalization and internationalization of adult education.

2.2. The questionnaires

All the questionnaires (Appendix 1) are conducted in written English. Each questionnaire consists of 30 questions which are divided into the following six categories.

- A. Course Details
- B. Personal Data
- C. Design of the Course
- D. Teaching Methods
- E. General Evaluation
- F. Overall Comments

Parts A and B consist of course and personal information, as Parts C to F, from questions 9 to 27, are the main contents with quantitative questions presenting in form of multiple choice. The participants have 5 choices in each question: 1.Strongly agree (5marks); 2.Agree (4 marks); 3. Neither agree nor disagree (3 marks); 4. Disagree (2 marks); 5.Strongly disagree (1 mark). Another type of questions, from questions 28 to 30, is qualitative by comparison and overall evaluation in essay form.

2.3. The Participants

The sample of the questionnaires consists of 62 females, 28 males with 1 unknown sex for a total of 91 adult students from the five ESL courses mentioned above. The ages of the subjects vary from 20 years of age to older than 50.

The majority of the participants are educated Chinese, who have finished high school or university education, using Cantonese as their first language and English as a second language. There was one exception -- a computer programmer who was educated in England until high school. There is a large variety of professions among the students: professionals including engineers, programmers, and pharmacists; civil servants, policemen and policewomen, bankers, bank managers, financial managers, credit analyst, sales and marketing managers, industry production managers, textile company bosses, and industrial designers. Others include secretaries, clerks, technicians, teachers and students in secondary and primary schools.

From the range of ages and variety of jobs of the participants, we can clearly find out that the students in continuing education vary from young to old adults without boundary for their jobs, income and academic levels. Comparatively speaking, adult continuing education is much more flexible and boundless than formal education in both university and graduate school.

3.0. Results and analysis

3.1. GMAT (English) Preparation Course

GMAT is an internationally recognized examination including two sections for English tests and one section for Mathematics. GMAT (English) is the basic requirement for the proof of English standard of the candidates applying MBA courses, some master courses in finance and commerce, or even some Ph. D. courses in the top three universities in Hong Kong and famous universities in the world. GMAT (English) Preparation Course aims to enhance the students' learning of the question types, strategies and practice for GMAT.

The sample consists of fourteen students including nine females and five males in a GMAT class. Their feedback on the course is in the following table (Table 1) and paragraphs.

	Number of participants	Minimum	Maximum	Mean	Standard Deviation	Variance
Design of the Course	14	2.40	4.80	3.9000	.52477	.275
Teaching Methods	14	2.17	4.67	3.7619	.62177	.387
Instructor's performance	14	1.00	5.00	3.6786	.95287	.908
Individual Activities	14	2.25	4.25	3.7500	.58835	.346
Group Activities	14	3.00	5.00	3.8571	.50682	.257
General Evaluation	14	1.50	4.50	3.6071	.69831	.488

Table 1: The Evaluation of the Curriculum and Teaching Methods from the GMAT class

In Table 1, the results for evaluation of course design: minimum 2.40, maximum 4.80, mean 3.9000, and SD .52477. The scores for teaching methods are minimum 2.17, maximum 4.67, mean 3.7619, and SD .62177. For the instructor's performance, the scores are minimum 1.00, maximum 5.00, mean 3.6786, and SD .95287. For individual activities, the scores are minimum 2.25, maximum 4.25, mean 3.7500, SD .58835. Furthermore, the scores for group activities are minimum 3.00, maximum 5.00, mean 3.8571, SD .50682. Lastly, the scores for the general evaluation are minimum 1.50, maximum 4.50, mean 3.6071, SD .69831. Comparing the means, which vary from 3.6071 to 3.9000 with an average above 72%, we report that the students had a positive evaluation of this course. Meanwhile, the Standard Deviation (SD) is between 50682 and .95287 which indicates that the results are reliable and accurate.

From the questions 28 to 30, which are conventional questions, the learners offered answers about the uniqueness of this course: it is clear and practical with simple and direct methods. And also the participants learned various skills and strategies as well as applied them through a number of group discussions and tests. The differences between these courses and the traditional teaching formats were the former provided students useful techniques and activities, which facilitated learning, to solve the problems in GMAT. The latter ones focused on teaching grammar rules only. This course emphasized on time control, the effective skills to answer the questions, application of the knowledge in practice through interaction, group discussion and writing assignments. To most of the students, this course was clear and excellent. They learned the examination skills, became familiar with the materials relevant to GMAT, and were encouraged to further their English learning and continuing education. After group discussion, the skills and strategies for the examination were learned better, the students were stimulated and motivated, and English learning was inspired.

3.2. IELTS Preparation Course

Similar to GMAT, IELTS is another world-wide recognized English public examination to prove the candidates' English standard. Thus, IELTS Preparation Course caters to those who want to study abroad or emigrate to English speaking countries including Britain, Australia, New Zealand and Canada. Due to the decline of English standard, the Hong Kong local graduates have to reach at a certain level of IELTS in order to prove their English is up to standard. Meanwhile, IELTS results are the "tickets" for finding new jobs and the "blessing" for maintaining jobs for secretaries and administrators and teachers in schools and higher institutes.

In IELTS Preparation Class, 18 females and 2 males with a total of 20 students answered the questionnaires.

	Number of participants	Minimum	Maximum	Mean	Standard Deviation	Variance
Design of the Course	20	2.40	5.00	3.7500	.67395	.454
Teaching Methods	20	2.25	4.58	3.5500	.55633	.310
Instructor's performance	20	2.00	4.50	3.5500	.66689	.445
Individual Activities	20	2.50	5.00	3.6375	.76294	.582
Group Activities	20	2.25	4.75	3.4625	.58644	.344
General Evaluation	20	2.25	4.25	3.4875	.57626	.332

Table 2: IELTS Preparation Course Students' Evaluation of the Curriculum and Teaching Method

Based upon the data in Table 2, we have the following results for course design: minimum 2.40, maximum 5.00, mean 3.7500, and SD .67395. For teaching methods, it is reported that minimum 2.25, maximum 4.58, mean 3.5500, and SD .55633. The scores for the instructor's performance are minimum 2.00, maximum 4.50, mean 3.5500, and SD .66689. For individual activities, the scores are minimum 2.50, maximum 5.00, mean 3.6375, SD .76294. Furthermore, the scores for group activities are minimum 2.25, maximum 4.75, mean 3.4625, SD .58644. Lastly, the scores for the general evaluation are minimum 2.25, maximum 4.25, mean 3.4875, SD .57626. In sum, the mean vary from 3.4875 to 3.7500 which means above 69%. In other words, the students had positive evaluation to this course. The Standard Deviation is between 55633 and .76294 which indicates that the results are reliable and accurate.

According to the students' opinions, the differences between IELTS Preparation Course and traditional teaching are that this course is more useful, funny and fresh. The teaching style is focused and pinpoints to the exam skill, but it is not spoon feeding teaching method.

In the overall comments, the uniqueness of this course is: The IELTS preparation course is practical, examination-centered, down to earth, easy to be understood, and useful in life and work. After a lot of the exam skills and strategies have been taught, the learners have to apply them in exercise and many tests which are good for learning. The instructor is well-prepared for the course as she knows the teaching materials well by providing sufficient notes. Also her presentation is clear and organized with good time management.

Concerning the inspiration of their learning from this course, the students have the following responses:

The students are taught in different levels by using different examples in different topics. They learned a number of new and useful skills, techniques and strategies to tackle problems in IELTS and to understand their weakness in English exams. When encouraged by the instructor, they would understand to practice more after the lesson. Only one student reported that the instructor sometimes cannot fully explain her problems in doing IELTS papers. A few students found that after taking the useful advice of the instructor of reading English newspaper everyday, their English has improved a lot.

3.3. Business Correspondence Writing & Practical Written Communication for Business

The number of students participated in “Business Correspondence Writing” is 16 including 11 females and 5 males, while 25 students including 16 females, 8 males and one whose sex is unknown participated in the questionnaires for “Practical Written Communication for Business”. Altogether there are 41 students in these two classes. According to statistics, the students of these two English business writing classes have the marks for evaluation of the six items about the course design and teaching methods in the following table (Table 5).

	Number of participants	Minimum	Maximum	Mean	Standard Deviation	Variance
Design of the Course	41	2.20	4.80	3.6293	.55599	.309
Teaching Methods	41	1.92	5.00	3.6850	.595257	.354
Instructor’s performance	41	1.00	5.00	3.6707	.81094	.658
Individual Activities	41	2.00	5.00	3.6707	.61856	.383
Group Activities	41	2.25	5.00	3.7134	.65087	.424
General Evaluation	41	1.50	5.00	3.5671	.73320	.538

Table 3: Evaluation of the Curricular Designs and Teaching Methods of Business Correspondence Writing & Practical Written Communication for Business Courses

In Table 5, the marks for course designs are: minimum 2.20, maximum 4.80, mean 3.6293, and SD .55599. The data for teaching methods are minimum 1.92, maximum 5.00, mean 3.6850, and SD .595257; those for instructor's performance are minimum 1.00, maximum 5.00, mean 3.6707, and SD .81094. Meanwhile, the scores for individual activities are minimum 2.00, maximum 5.00, mean 3.6707, and SD .61856. For group activities, the marks are minimum 2.25, maximum 5.00, mean 3.7134, and SD .65087. The data for the last item, general evaluation, are minimum 1.50, maximum 5.00, mean 3.5671, and SD .73320. The Standard Deviation (SD) of the above six items (between .55599 and .81094) is small with relatively less error which indicates that the results are accurate and reliable. At the same time, the mean of six items varied from 3.5671 to 3.7134, which is above 70%. This shows that the students provided positive feedback on the curricula, teaching methods, and activities of these two business writing courses.

Compared to the traditional teaching formats, which are used to be very boring, most of the students reported that the teaching styles of these courses are creative and innovative with vivid thought and good presentation providing different kinds of updated English business and writing information. Also the teaching method can be easily understood. On the other hand, some found that group discussion could not help to improve their English writing skills.

3.4. Social Talks

There are 16 students including 8 males and 8 females in this class involved in answering the questionnaires.

	Number of participants	Minimum	Maximum	Mean	Standard Deviation	Variance
Design of the Course	16	3.80	5.00	4.2250	.39243	.154
Teaching Methods	16	3.67	5.00	4.3073	.37357	.140
Instructor's performance	16	3.50	5.00	4.4375	.51235	.263
Individual Activities	16	3.00	5.00	4.1562	.48197	.232
Group Activities	16	3.50	5.00	4.3281	.48921	.239
General Evaluation	16	3.75	5.00	4.2656	.41300	.171

Table 4: The Students' Evaluation of the Curriculum and Teaching Method of Social Talks

The marks of the students for each item in Table 6 are listed as follows:

First, for design of the course are minimum 3.80, maximum 5.00, mean 4.2250, and SD .39243; second, for teaching methods minimum 3.67, maximum 5.00, mean 4.3073, and SD .37357. Next, for instructor's performance minimum 3.50, maximum 5.00, mean 4.4375, and SD .51235; for individual activities minimum 3.00, maximum 5.00, mean 4.1562, and SD .48197. Lastly, for group activities minimum 3.50, maximum 5.00, mean 4.3281, and SD .48921; for general comments minimum 3.75, maximum 5.00, mean 4.2656, and SD .41300. The Standard Deviation of the above six items is between .37357 and .51235. In other words, the SD is relatively small with less error which indicates that it is very accurate and reliable. Meanwhile, the mean varied from 4.1562 to 4.4375, which is above 80%, demonstrates that the students have very high recommendation and evaluation to this course.

Unlike traditional teaching methods, there is no writing, as the learners in this course participated in group discussion with much more interactions with the group members. Instead of an exam, the learners held their presentation after group discussion. In order to score higher marks, the students should use the active and interesting presentation skills. Traditional teaching formats have either teaching or oral activities, but this class has both. After the presentations, the instructor gives feedback to the class.

Moreover, this course focuses on group discussion and presentation, which provide all students chances to speak in front of the audience and express their opinions. Role playing, which is a very good method for self-development, is another important component. The students learn not only English, but also co-operation, teamwork and organization skill. The instructor is entirely dedicated to teach the course and always gives the students the most updated topics for discussion, such as "global warming", "organic food" and "legislation election" etc.

For the overall comments, the participants found that the unique things in this course as follows:

This is a useful and practical course as it helps the learners to improve their oral English skills and strengthen my presentations and communication skills. There are group discussions and presentations every lesson, which enhance the oral English presentation skills, are different from traditional teaching methods,

However, the instructor is the most unique one because her English is fluent and good enough to help her students learn effectively with some techniques for social talks. Theories of each lesson can be applied in the role playing and presentations, as the students have more chances to present in front of the class and the instructor gives comments after the presentations. The adult participants discuss many topics closely related to daily life and international social, economic, and political issues. It encourages the classmates to get involved by using simple and easy English for understanding which develops their critical thinking.

The majority of the class found that this course have inspired them and their learning to a great extent. The students learned that speaking is not just about grammar and pronunciation. There are many other aspects. They need to pay attention to as the course

provides students brain-storming to generate new ideas for a topic. The course shows the students that there are many different ways to give lectures and presentations. They learn from others and improve a lot through the presentation. It also enhances the learners' confidence to speak in front of the public.

On the other hand, the students understand that they need to read information in daily life in order to expand their knowledge, vocabulary, and common sense with background information which is necessary for communication in social events. They are encouraged to read more news and social topics and allowed to be smarter and be aware of social and political sensitivity, not only locally, but also world wide. In the course, there are topics in many aspects that they can explore more by self-learning via the internet or newspapers. Consequently, they become more active by talking more than just listening passively. They practice more after the lesson, think more, and learn better English as well as build more confidence and self-development. It is excellent!

3.5. Results of Analysis of the five ESL classes

The results and analysis of merging five ESL classes including GMAT English Preparation Course, IELTS Preparation Course, Business Corresponding Writing, Practical Written Communication for Business, Social Talks are presented in the following table (Table 7) and paragraph.

	Number of participants	Minimum	Maximum	Mean	Standard Deviation	Variance
Design of the Courses	91	2.20	5.00	3.8022	.58840	.346
Teaching Methods	91	1.92	5.00	3.7766	.60602	.367
Instructor's performance	91	1.00	5.00	3.7802	.81038	.657
Individual Activities	91	2.00	5.00	3.7610	.64540	.417
Group Activities	91	2.25	5.00	3.7885	.64541	.417
General Evaluation	91	1.50	5.00	3.6786	.69551	.484

Table 5: The evaluation of five ESL classes on the curricula and teaching methods

Based upon the data of the five ESL classes in Table 7, the marks for the design of the courses are: minimum 2.20, maximum 5.00, mean 3.8022, and SD.58840. Second, for teaching methods, the marks are minimum 1.92, maximum 5.00, mean 3.7766, and SD .60602. Furthermore, for the instructor's performance, the scores are minimum 1.00, maximum 5.00, mean 3.7802, and SD .81038. Thus the data for individual activities are minimum 2.00, maximum 5.00, mean 3.7610, and SD .64540. Moreover, those for group activities are minimum 2.25, maximum 5.00, mean 3.7885, and SD .64541. Lastly, the results for general evaluation are minimum 1.50, maximum 5.00, mean 3.6786, and SD .69551. In sum, the Standard Deviation (SD) of the above six items is between .58840

and .81038, which shows that the gap among the SD is relatively small, therefore, the results are reliable and accurate. Meanwhile, the mean of the above items is 3.6786 and 3.8022, which indicates that there is less error. The mean is above 70%, which demonstrates that the five ESL classes have high recommendation on the design of the courses, teaching methods, instructor's performance, individual activities, group activities and general evaluation.

4.0 Conclusion

In sum, the students in the five different ESL classes including GMAT English Preparation Course, IELTS Preparation Course, Business Corresponding Writing, Practical Written Communication for Business, Social Talks provide positive feedback and high recommendation on the courses from six aspects: the design of the courses, teaching methods, instructor's performance, individual activities, group activities and general evaluation.

From the learners' point of view, the major differences from traditional teaching formats are: these courses are practical, interesting with creative styles, attractive topics and concepts, creative and interactive group discussion as well as simple and direct teaching methods, whereas the traditional ones are boring. The participants of the two business writing classes found that the courses are interesting and benefit their work a lot by writing good English business letters through individual exercises and group activities. They learnt better and faster, became more familiar with relative knowledge in business, and had self reflection of being more serious and useful. For the two English exams preparation courses, the students found that the curricula are clear and practical, and they learnt a number of strategies tackling the questions effectively through many group discussion and tests. As the teaching is not spoon feeding, it facilitates their learning and exams with better results. In contrast, "Social Talks" emphasized on only group discussion and presentation, but without any writing or exam. The students have more interaction with the classmates than other courses along with the immediate feedback from the instructor. The English communicative skills including speaking, presentation, communication and interaction of the participants are strengthened through group discussion and presentation in each lesson as it is interesting and practical.

As the courses are excellent and inspiring, they stimulate the students' motivation of learning. By learning and applying the exam skills and strategies through many practices, and as a result, the learners understood their weakness in the English exams. The instructor enhanced the students' understanding of the teaching materials; encouraged their learning and continuing education. After taking her advice of reading English newspaper daily, some students found that their English had improved a lot. Through the discussion, they understand the topics more fully, become more motivated, and become inspired of self-learning and self development. After they had discussed many interesting topics, which are closely related the daily life and international issues, their sense of participation and critical thinking are developed. The learners pay attention to and listen to other classmates, upgrade themselves and have more confidence to speak in the public through presentation. They understand the speaking power is not limited to grammar or

the language, but there are still many aspects they have to focus on. They become more active, speak and express more to others, but not only listen passively. As the learners' critical thinking are enhanced, they expect to continue their learning of English and have further self development.

We can conclude that the five ESL classes appreciated the courses design, the creative teaching materials and the interactive teaching methods of the author through positive feedback and high recommendation. The participants found that the difference between these courses and traditional teaching formats is the uniqueness of these courses, which consist of interesting, *pragmatic*, and creative teaching materials and group discussion. Though *practice*, which is a variety of activities including individual exercise and tests, group discussion, writing of business letters and oral presentations, they learnt the exam skills and strategies, the writing formats and the oral expressions and communicative techniques in English. Furthermore, the learners have become more *proficient* in English learning, exams and work, as the courses enhanced their critical thinking, English expressive ability. Plus, it stimulated them for continuing education, self development and life long learning. Finally, these ESL courses fulfill the students' learning goals, expectations and needs, and also support the principles for adult continuing education suggested by the author ---- “*Pragmatism, Practice, and Proficiency*”.

In globalization, English is the most popular international language used in the global village, e-commerce and internet, and business. So it has a huge TESL market in education in the world. Therefore, teaching English as a second language (TESL) with interactive methods based upon the above principles should be beneficial to not only the adult education in Hong Kong, but also to the processes of globalization and internationalization.

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**THE MORALS OF PROFESSION OF
THE EDUCATIONAL MEMBER
IN THE UNIVERSITIES**

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2010

In the Name of Allah, Most gracious, Most Merciful

INTRODUCTION

The Islamic Message is considered moralistic in the content of its Godly instructions whether private or common, and the reward of it in our world and in the Hereafter.

Imam Bin Al-Qayyim says, "Religion is wholly moralistic. He, who surpasses you in morals, surpasses you in religion."

Owing to the great change in social patterns in the world international culture and its moral effect, the modern educational systems have made a prominent role in stabilizing the good values and the moralistic behaviors in society. Therefore, the Ministry of Higher Education, represented by universities, and the educational societies and the laboring committees play an initiative and great role in the structure of these values and behaviors through what is carried to it by those who are related to it and through the teaching staff. What is carried to it is the moralistic message that is spread by them in the moralistic structure of the personal constituents, the moralistic reaction during the professional performance and the moralistic commitment when performing the various possibilities.

Owing to this important part, many international universities have cared for calling to limit the personal and professional constituents of the university teachers. This is because of the numerous roles that are related to them, the importance of the teacher inside and out side the university and the power of his influence in society. Therefore, they put the moralistic pacts in the regular lists of the teaching staff member and appointed the regular councils to examine these morals. They have paid a great importance to this part on all levels.

As a result of the different views of the teaching staff about the required morals of the teaching staff member, it was very important to put a conception for a research project for "The Morals of the Profession of the Teaching Staff Member". The view of the morals of the profession of the teaching staff member should be built on a group of scientific criteria and the personal conventions of the teaching staff member together with the professional behaviors that are necessary for the advancing of the teaching method in higher education especially with the importance of the radical treatment of some patterns that lack behavioral manners concerning some of the teaching staff members.

The Causes of Choosing This Subject:

The good morals are required from every individual. It is more required from the scientist and the teacher and it is more influential. Moreover, it is necessary for a call for the moralistic commitment by the planters of pure nature and good morals in all heavenly religions, in the human cultures and in all the practical and scientific specializations.

- Spreading the culture of the morals of profession of the teaching staff member in the universities according to the available scientific media and advancing the level of the moralistic treatment in university society.
- The treatment of some lacks of morals during the professional building of the teaching staff member under the shadow of the great development and the numerical width that the universities see.

The Research Plan:

- An Introduction.
- The First Chapter: The Practices of the Morals of the of the Profession of the Teaching Staff Member. This includes:
 - First, The Personal Conventions.
 - Second, The Scientific Trust.
 - Third, The Scientific Responsibility.

The Second Chapter: The Suitable Media for Reforming the Morals of the Profession of the Teaching Member. This includes:

- The First Research: Spreading the Culture of the Morals of the Profession.
 - The Second Research: Activating the Scientific participation of the Teaching Staff Member.
 - The Conclusion: It includes the important results and recommendations.
- We ask the Generous God to supply us with His Great Favor.

Chapter One**The Practices of the Teaching Staff Member of the Morals of Profession****The First Research: The Personal Constituents:**

The present time inquiries impose numerous challenges on the universities, some of which are scientific, technical or professional. More of these stress the professional growth of the teaching staff member in them. This is what the two researchers Dr. Patricia A. Lolar and Dr. Cathline B. King stressed about the professional growth of the teaching staff member. They mentioned, in the introduction of the study, “In the last decade of the twentieth century, we observed the increasing important range of the professional growth of the teaching staff member as he is considered the first support of the development of the university education.” (1) The regulations and schedules of the higher education in all countries have asserted the moralistic constituents of the teaching staff members. I give an example from the Kingdom of Saudi Arabia where the regulations have mentioned, “The teaching staff member should be qualified with trust and right behavior, and he should commit himself to the applied systems, the instructions and rules of behavior and politeness. He must be always above every thing that is against the honor of the profession.” (2) The important constituent that is necessary in building the teaching staff member is the trust in the personal capabilities and witness that is built on straightforwardness. The studies that have included religion, philosophy, literature, psychology and the morals of commerce and ruling, defined the central behaviors of the straightforwardness of the teaching staff member and the correctness of his rulings. This includes the following: “Concern in the common benefit, the trust, fulfilling the commitments, justice, accepting to bear the responsibility, respecting others, congratulating others for their success, facing the unjust conducts and actions, forgiveness and helping others.” (1)

1: A summary of the book: *Towards Active Professional Development of the Teaching Staff Member*; p. 165.

2: The Regulations and Schedules of the Higher Education Counsel in the Kingdom of Saudi Arabia, Item 38, p. 292.

3: Richard L. Hughs, Cathrine Kola Rilly Bitty, *How to Become a Strategic Leader*, (little change), p. 193.

The Second Research: Scientific Trust:

One of the moral values on which Islamic Law (Shari'a) is built is trust. Trust is of great importance, and violating it, is a dangerous crime.

The trust of the teaching staff member is to offer the science which Allah has honored him with and has raised his rank, and to apply this science in the field of the university education. The staff member should be careful for the scientific trust in all his scientific and practical work.

Shaikh Muhammad Al-Khadir Hussain says, "The success of a nation is in the goodness of its work. The goodness of its work is in the goodness of its sciences. The goodness of its sciences is when its men are trustful in what they relate or describe. Trust is the ornament of science and its soul which the delicious fruit can make of delicious taste. If you review the biography of scientists, you will see a great difference between the trustful scientist and the un-trustful one. You will see that the first is in a rank which is enveloped with respect, and the benefit from him by people increases. But you will see that the second is in a little rank and the selves of the scientific students will be far from taking from him or they are slow in taking from him." (1)

Scientific trust is praised by writers and researchers with their different religions and ideas. Wise men agree about its importance in every place and time. (2)

Many researchers see that there is unanimity in saying that the main employments of the teaching staff member in university are limited in three main fields. These are:

Teaching to Prepare the Human Powers: The professional activity of the teaching staff member includes many duties, knowing that the building of the society is based on them. The most important of these duties is the process of teaching students. It is in this sense that Hambred and Itkins define the most important qualities of the modern sample of the teaching staff member. They say, "The criteria of establishing professional efficiency of the teaching staff members are centered on the range of the professional understanding of the teaching process and the

1: *Rassa'il Al-Islah*, pp. 70-71.

2: See Al-Hussain's *Al-Amana in Islam*, p. 54 and the following pages.

widening of the circle of consciousness in them. This is achieved through a group of modern information and developing knowledge. The understanding of the process of teaching students is to have the priority in achieving the professional development of the teaching staff members despite their non-agreement on this." (1)

The Scientific Research: Muslims cared for scientific research, wishing it, writing in its fields and encouraging those who worked in it. The fields of the scientific research differed: interpretation, jurisprudence, behavior, astronomy, engineering, medicine, surgery and other sciences. Previous Muslims innovated in developing these sciences, the conditions of the research media (the sciences of media and machines) and the linguistic understanding and applications that a scientist should have in order to be able to work in the scientific research. Unfortunately, in general, the problem of scientific research in the Arab countries did not take a proper place that suits the need for research in the present situation. (2) The performance of scientific researches is an essential employment of the teaching staff member for advancing knowledge. It is necessary for acquiring new information and developing new applications that contribute in pushing the process of the international scientific research in all the fields of the human knowledge.

participation of community:

There is no doubt that the teaching staff member plays a prominent and basic role in the material and valuable development of the whole society. This results in the limitation of the civilized level of the society through discovering and exposing the creative capabilities of the person who leads the processes of the comprehensive development. This strengthens the

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- 1: Dr. Patricia a. Lolar, Dr. Cathline B. King *Towards Active Professional Development of the Teaching Staff Member*, p. 168.
 - 2: See Malakawi *Islamization of Knowledge Magazine*, p. 106.

role of the teaching staff member in discovering the situation that he lives in and in working in serving the society in a cultivated manner and higher level from the human and social sides. (1)

The new direction of tying the role of the universities with the private and national sectors represents a great support for scientific projects, the research chairs and the corporeal and material donations to strengthen the role of the universities. (2) This strategy burdens the teaching staff member with a double responsibility to serve the society, to care for its development and to prepare the suitable plans to develop it, to meet its needs and to solve its suspended problems.

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- 1: See Nu'aimi's article in the Internet entitled, "Towards a Strategy to Reform the Higher Education in Iraq".
 - 2: The President of King Saud University declared an establishment of more than fifty six research chairs in various scientific fields in the last two years, 2007 – 2008. This is taken from the lecture of his highness, the President of King Saud University, Abdullah Al-Uthman, in the opening of the symposium of the Arab Universities about Higher Classification and Academic Adoption, Sunday 23 / 5 / 1429 H, Riyadh.

Third Research: Practical Responsibilities:

One of the qualities of the human self is that it is built on imperfection. Therefore, the reaching of perfection is dear. One should exert all his efforts to perform the responsibilities that he is responsible for. The Islamic Shari'a, which is the last heavenly message, makes every one responsible and trusted. One should be asked about the responsibilities which are assigned to him. The Prophet (pbuh) says, "You are all guardians and you are all responsible for those whom you guarantee." (2) Therefore, the summit of the required morals of the teaching staff member in his honored job is to realize sincerity in order to be able to perform the duties and responsibilities in doing his job. "Sincerity is a psychological operation that activates ideas, the sincere feelings in doing the job, the interest in doing the job and accepting the job. This operation pushes towards accuracy and excellence." (3)

The profession of the teaching staff member in a university is the most important of jobs. This is because this job bears the trust in science and work and the sincerity in them in addition to the preserved guardianship to build the society members and the development of the scientific, the practical and the human sources. The responsibility of the teaching staff member increases by the heaviness of the responsibilities that are assigned to him. "A job is a trust about which the person who is responsible for will be asked. From this beginning, the person, who is responsible for the burdens of a job and its responsibilities, should observe the accuracy in executing what the information orders and the systems that direct them. He has no right to protest against that. One of the duties of the job is that he who executes it should do nothing beside the duties of this job. He has no right to make it less by fixing his efforts in other actions that influence its work." (4)

2: Narrated by Al-Bukhari, *Al-Jum'ah Book*, 'Al-Jum'ah Chapter', p. (893).

3: Musa, Kamal Ibrahim, *Development of the Psychological Health*, the Session about the Responsibility of the Individual in Islam and Psychology. Supervised by the Higher Institute of the Islamic Thought. Washington, p. (285)

4: Al-Mazyad, Saleh Bin Muhammad, *Employees' Earning and Its Effect on Their Behavior*, pp. 65 – 66.

The most important matters that should be looked at with an examining eye are the practical responsibilities that increase day after day in the universities, especially after the universal explosion of knowledge and the international classification of the universities. (1)

The advanced countries have worked on continuing the professional development of the teaching staff members in order to bear the successive burdens. “The British, the American, Japan and other European universities, in the middle of the last century, began considering the necessity of the professional development of the teaching staff member. Many under-developed countries also felt its need especially in our Arab country. This was in the stage of the 1970’s. Some Arab universities: Egypt, the Gulf Countries, Iraq, Jordan and Algeria, adopted it. The professional development of the teaching staff members was not only a response of personal intentions, but it sprang from a group of elements. The international concern in developing the efficiency of the teaching staff members in universities is related to the following elements:

- 1) _ Technological development and its reflections on the teaching process, from the point of view of employing the information technology, communication and the technologies of learning and teaching to increase the interest in the professional development of the teaching staff members in order to improve the activation of initiatives of teaching.
- 2) The change that happened in the roles of the teaching staff members. The development of the communication techniques, and the multiplicity of the learning sources, resulted in founding of essential changes in the requirements of the teaching situation from the point of view of the media of transporting of knowledge, and the roles of the teaching staff members that have been changed from the traditional roles that consider the teacher a mere transporter of knowledge to a simplifier, an explainer, a guide and director of his students. Studies have pointed out that most of the teaching staff members in the Western universities lack the training of practicing teaching. This situation also applies to the Arab universities. (2)

1: King Saud University got the rank of 380 among the best international universities according to Spanish classification of the best international universities, Webomatrix. It occupied the first rank in the Muslim World and in the Middle East. Imam Muhammad Bin Saud Islamic University also passed the 50% rank of the classification of 2007. See “Following the News”, an economic paper, No. 5406, Wednesday, 27 / 7 / 1429 H., p. (23), and “Algezira” paper No. 13089, Wednesday, 27 / 7 / 1429 H., and July 30, 2008, p. 35 and p 39.

2: See Shaheen, Muhammad Abdul Fattah *The Professional Development of the Teaching Staff Members as an Entrance to Realizing Good Quality in University Teaching*, Al-Quds Open University , (An Article in the Internet.)

Through noticing the research sample, we assure that some of the main causes in the weakness of interest in the morals of profession of the teaching staff member in our universities and colleges in Saudi Arabia are represented in many causes out of which are the following: the large number of students, the weakness in the experience of the teaching staff members, the length of the university day, the burden of the teaching process, and the committees that accompany the university work. These are all important causes. The more important than these is that the main comprehensive (in our view) is that the teaching staff members are never prepared for the university teaching. They have not got a previous preparation in the labor system and its procedures in the university society and its generous morals. This may be the most important cause behind the inefficiency in university teaching and the destruction of the teaching efforts.

It is from here that, lately, the care in the subject of goodness has come. It represents a moralistic co-operative labor in which the laborers in it engage gradually and regularly. They move their talents, their abilities and their creativities continuously. The management of the comprehensive goodness is based on three basic foundations to be successful: the co-operative management, the use of the laboring teams, the continuous response to improve and develop in the university operations, the certification of the knowledge processes and the academic experiments in perfect transparency. These principles are the most important of the professional morals to achieve an integral and just responsibility towards society.



Spreading the Culture of the Morals of Profession

The teaching staff member should be armed with personal efficiencies, cognitive efficiencies and performing efficiencies that enable him to perform this profession with activity. “The big importance lies on the modern university teacher. This importance has increased in this age. The university teacher is not only interested in the increase of knowledge, but also in the contribution in changing the educational system for realizing the suitable and professional education. The modern university teacher must be bound to make a society whose basis is justice and equality. Therefore, he should act to stabilize these values and to spread knowledge and skills in society.”

(1) “With the passing of time, a group of concepts, beliefs, stable values and creeds of denotation are created in the university establishment. It makes what can be called the culture of the profession. It expresses a style of common understanding of the aims and the policy of the profession and the suitable and unsuitable behavior in it. The culture of the profession performs many jobs out of which are: creating the feeling of identity in the laborers of what is more important and more lasting, supporting the stability of the establishment as a social system; it works as a reference frame for the laborers and a guide for the suitable conduct for the profession.”

(2)

Therefore, it is of great importance to spread the culture of the morals of the profession through an establishment work, and this will be by the agreement on the following matters:

-- Considering the teaching in the university a profession. It requires skills that are based on theoretical knowledge and it requires high training and education. Obtaining a Ph.D. degree will not be a hindrance for continuous education, training, qualifying and the need for continuous

1: Abu Nuwar, Lintah Wa Bo Btanah, Abdullah, “The Need for Professional Development of the Teaching Staff Members in the Arab Universities, *New Education* magazine No. 51, year 17, p. 121.

2: Nijim, Nijim Abbood, *Management Morals in a Changing World*, p. 90.

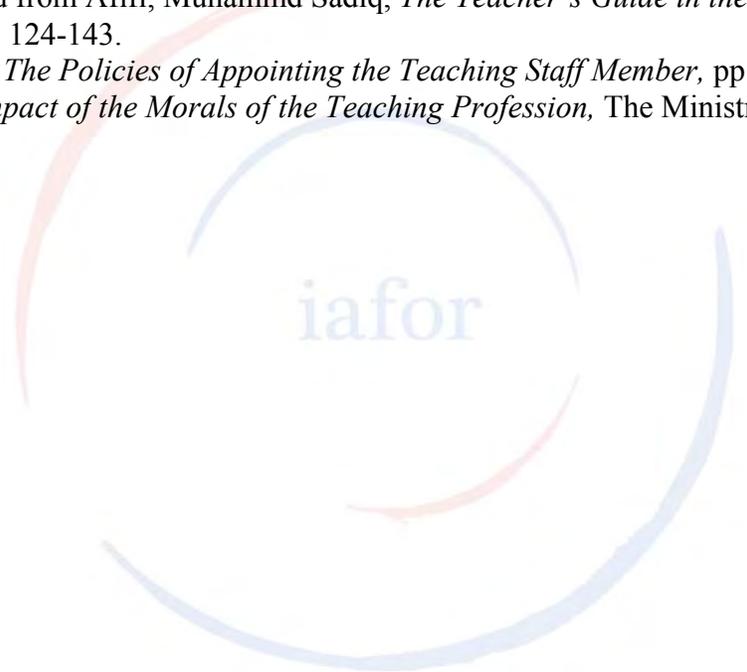
evaluation. “Some American universities evaluate the service on the basis of sincerity in work, the individual initiative and the fruitful effort that the teaching staff member exerts. They also consider the regular activity of the member in the committees that are interested in the students’ affairs and the fruitful range of participation in the establishments of the civil society.” (1)
-- Formulating a compact for the honor of the profession in which the necessary professional morals of the teaching staff member are defined. The teaching staff member is based on them. (2)
In the present modern age, the modern establishments of the universities are to be warned to spread the culture of the morals of profession by reviewing and evaluating the yearly record of the teaching staff member. The importance of this was agreed upon by all the teaching staff members(3) (4)

1: Kati A. Trawar, *The Policies of Appointing the Teaching Staff Members*, p. 257.

2: See *The Compact of the Morals of the University Teacher in the Field of Teaching*. This book was issued by Brandon University, in the U. S. A. It contains nine rules and many paragraphs. This was copied from Afifi, Muhammd Sadiq, *The Teacher’s Guide in the Morals of the Profession*. pp. 124-143.

3: See Trawar, *The Policies of Appointing the Teaching Staff Member*, pp. 288-298.

4: See *The Compact of the Morals of the Teaching Profession*, The Ministry of Education, 1428 H.

The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by two large, overlapping circular arcs. The upper arc is light blue and the lower arc is light red, both appearing as thin, glowing lines.

Conclusion

- Assuring the necessity of providing a place for the morals of profession within the system and tables of higher education in the World.
 - The necessity of care in the strategic planning of higher education, pursuing the professional development of teaching staff member and providing him with all available entries for his commitment to the morals of the great profession.
 - Taking care of the scientific trust is an important moral basis that should be followed by the staff members of the university in their lives, and this will develop the scientific culture and the civilized status of the society.
 - Taking care of executing the practical responsibilities of the teaching staff member in addition to the necessity of accompaniment of the morals of profession of every role and work that the teaching staff member performs.
 - Participation in the international direction to support the morals of the teaching staff member and to benefit from what the others have of scientific distinct efforts for raising the academic level of the profession, such as holding conferences, establishing units and holding specialized sessions.
 - Preparing scientific programs for training on the morals of the profession of the teaching staff member and co-operating with the research centers to prepare scientific studies concerning the professional training for the teaching staff member.
- Finally, the two researchers assure the necessity of holding on the morals and their strong relation with the creed and worshipping. The perfect believer in belief and trust is he who has better labor and morals, most honest speech, the most guided by goodness and benevolence, the farthest from every evil and illness.

Praise be to Allah, The Lord of the Worlds.

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The Importance of Information Security in E-learning System

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Abstract: *Globalization; increased the alternatives in education as in economics and politics. E-learning System (ELS) appears to be one of the most endearing ones of these various alternatives. E-learning is a way of interactive and economic training which is carried out by taking the advantage of information technologies. The need of the renewal which was required by the modern society directed the individuals (who were separated from the education system in some ways) to try the E-learning method. Ensuring the security of the practice in this susceptible has become a very significant field as the prominence of the e-learning ascended. Information security is defined as an activity or every kind of endeavor which is prosecuted in order to maintain the security of the information. While securing the information – targets of confidentiality – collectivity – utilization are essential. In e-learning; it is obvious that having enterprise information*

security standards is efficient at providing a high degree security. The approaches increasing and reforming security in which the common security protocols taking the private security problems into consideration as well as being actual are essential. In ELS; the increase of the enterprise security proficient's is a primary fact with respect to the confident operation of the substructure. In this process, the forming of new security standards which meet the probable security risks in the ELS gain importance.

The purpose of this study is to accentuate the actual developments by emphasizing the significance of providing information security in ELS which is a recent education model.

Keywords: E-learning System, Distance Education System, Enterprise Information Security, Enterprise Security Proficiency.

Introduction

With the emergence of individual differences, characteristics and the increase in the number of individuals who will receive education and the need for flexible education independent of time and place, the use of new technological methods have become inevitable. In the beginning of the 21st Century, an educated person may feel protected only when his or her social status and rights are guaranteed. A person knowing his rights and standing up for them is able to react flexibly to changes in life. In this context, distance learning may be used for continuous education, thus contributing to the personal security. It allows to organize continuous education for almost all social groups. Besides, distance learning provides an opportunity to use different information sources. The current state of information technologies and their development allows us to consider international educational projects that will be able to establish a direct connection between a tutor and a learner and, thus, implement a genuine feature of traditional full-time tuition.

As a result of the growing spread of communication media and the exponential increase of the growth of storage and transmission of information electronically, the need for information security has elevated to high levels for both personal and institutional use. The important reasons of this growth can be classified as the increase in electronic applications becoming part of businesses as well as daily life, sharing information on

network systems, accessibility to information from many points, increasing threat of loss of information, and most importantly, the increases occurring in personal and corporate losses (Dodge, Carver & Ferguson, 2007).

E-learning environments must respect the privacy of both instructors and students alike, not only to reflect an organization's privacy policy, but also to meet legal privacy requirements in some jurisdictions. However, there is much work that must be addressed before fully security and privacy compliant systems can be realized. All of the applications given as examples here require modification and rework before the suggested security and privacy approaches can be added.

Enterprise Information Security

While information security carries importance, the more important one than this is enterprise information security directly affecting the security of DES. Every individual uses enterprise information entities directly or indirectly while taking or presenting services through information systems (Vural & Sagiroglu, 2008).

In a medium where continuous accessibility to information is provided, the process of providing information integrity during transmission, preventing eavesdropping, corrupting, changing, and theft of information, in short, transmitting information safely can be defined as information security. Information security in enterprises comprises of complicated processes affected by many factors such as human factor, education and technology which are obligatory to be managed in one framework. With the aim of managing these processes, structuring security systems following international standards and providing high level information security, standardization studies have been continued fast in the management of enterprise information security all around the world.

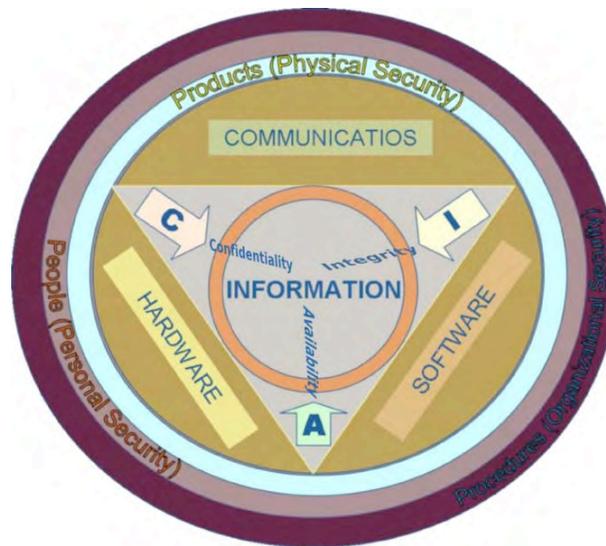


Figure1: Enterprise Information Security (Indorser Yilmaz, 2010)

Network security policies are formed by determining in general lines the rules concerning networks. Typical approach employed by enterprises is developing such policies using resources from the Internet and documenting these. The most important attribute of security policies is its being documented and its establishing the rules of the use of technology and information values of the enterprise by all employees from ordinary users to the managers in the whole enterprise (Barman, 2002). If possible, network security policies must be formed before establishing the system resolving possible security problem. This is also easier than forming the security policy of an established system. No secure computer network can be realized without a security policy.

Security and Privacy in E-learning

Fundamental information security threats of activities, including E-learning, are information leakage, integrity violation, denial of service and illegitimate use. Different threats are relevant for different actors in E-learning environments. Authors and learning resource providers are mainly concerned with unauthorized use and unauthorized modification of E-learning resources (Weippl, 2005).

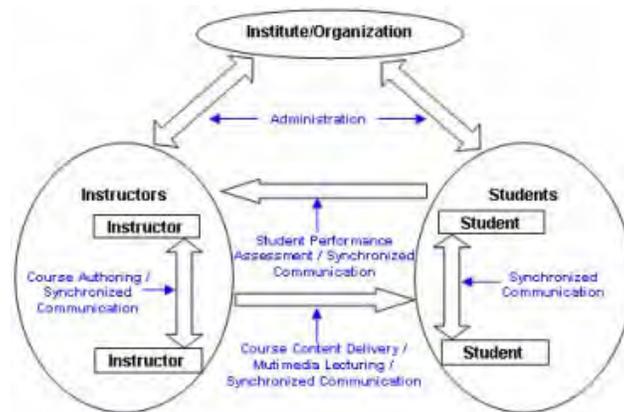


Figure 2: Functions Involved In E-learning Activities (Lin Et Al., 2004)

In the DE environment, some data is considered confidential and shouldn't be revealed to others. Therefore, there needs to be privacy protection for such data. Students' Privacy Protection Applications with the Student Performance Assessment function such as the Course Authoring and Student Assessment Application needs to collect students' learning performance information while they are browsing course content. The application requires this information for automatic generation of personal tutorials for the students based on their performance. However, this might be considered an infringement of the student's privacy. In this case, depending on privacy laws, the learning system operator may require student agreement to collect their learning performance information (See Figure 2).

The mapping between data that needs protection and the individual means of protection is given in Table 1. (Lin, et al., 2004).

Distance Functions	Possible Associated Data (Within Functions)	Security and Privacy Protection				
		A	PP	I	CP	FCS
<i>Administration</i>	Identity Information	X	X	X		
	Personal Information	X	X	X		
<i>Courseware Authoring</i>	Learning Objects	X		X	X	
	Course Structures	X		X	X	
	Copyright Information	X		X		
<i>Course Content Delivery</i>	Course Content	X		X	X	
	Tutorials	X		X	X	
	Exams	X		X	X	
<i>Synchronized Communication</i>	Lecturing Content	X		X	X	
	Floor Control Right	X		X		X
	Communication Data	X	X	X		
<i>Multimedia Lecturing</i>	Multimedia Lecturing Materials	X		X	X	
<i>Student Performance Assessment</i>	Quiz and Exam Results	X	X	X		
	Course Navigation Records	X	X	X		
	Mouse Movement Data	X	X	X		

A: Authentication
PP: Privacy Protection
I: Integrity
CP: Copyright Protection
FCS: Floor Control Security

Table 1: Correlation Between Data and Protection

A student should be able to ask the instructor a question in private. The ensuing discussion should also remain private. Data Integrity to make the outcome of online exams or quizzes more trustable, the data integrity of the results must be preserved.

The E-learning Systems available nowadays provides only the user authentication engine: username/password. The use of this trivial authentication, in this kind of application, increases the susceptibility to fraud, when the authentication certainty level about the actual user, given for this mechanism, is practically null. The temptation to commit fraud in E-learning occurs when the user does not have anything to protect or hide and the intention to cheat in achievement tests and even during the classes could be beneficial for the student. So, identification and authentication play an important role as the main tools for the ELS security, with two main purposes: to ensure that only permitted users can access the system and that the person being assessed is actually the one who should be (Almeida, et al, 2005).

For both instructors and students, it is important to authenticate them before they can join activities of DE. The authentication is the basic requirement for the administration function of DE. Authentication of Students the identity of the student must be authenticated upon logon. We must make sure that the student accessing the system is who he/she claims to be (Yee, et al, 2005).

The creation of learning material will always need a substantial amount of human expertise and cannot be automated to a significant degree. So learning material will always represent a high amount of expertise and work and therefore the copyright holders of learning material have a strong interest in protecting their learning material from illicit use and distribution. If learning material is composed from existing learning material or other copyrighted material, e.g. includes material from other authors into new courses, secondary copyright becomes an issue. Here the problem arises as to who the copyright holder of the composition is (Graf, 2002).

DE courseware is deemed valuable property that belongs to the organization or the instructor. Digital material is easy to reproduce. Since all online courseware is digital material, the protection of courseware copyright must be in place. Some instructors may not want their presentation reproduced or shown to people who are not part of the discussion group. In addition, instructors may wish to make use of presentation content owned by other instructors. There is thus a need to allow some of this to occur without infringing on the rights of the content owners. For this reason training providers require a way to prevent other training providers from using their material in ways other than covered by the agreement.

In traditional education, exams are written in the classroom. Instructors are physically present to monitor the students during the exam. However, DE on-line exams must be handled differently. There will not be the physical presence of an instructor to monitor the students during the exam, leaving open, for example, the possibility of the student having someone else do the exam. Furthermore, attackers may see, steal, or even modify the students' answers during the transmission or storage of completed exams (Lin et al, 2004).

Protecting courseware copyright is an important issue in both traditional education and E-learning. In the digital world, protecting copyright is more difficult because it is easy to make copies of digital material. In some cases, the E-learning System must protect courseware from unauthorized copying during storage, transmission, or presentation (e.g. screen scraping). For instance, this may be true for some institutions where the courseware generated by the instructors is considered highly valued (Yee et al, 2005). However, another vital issue is tracking the use of copyrighted material from other

sources Educational organizations spend a great deal of time and effort tracking this material in the process of adhering to their copyright requirements. Any approach that would simplify copyright maintenance for third party materials would be extremely valuable.

Conclusion

In this study, important aspects of providing information security in DES are reviewed. To provide Information Security in DE, it is necessary to understand Enterprise Information Security Standards, Communication and Operation Management, Organizational Security, Personnel Security, Physical and Environmental Security, Access Control and System Development and Maintenance. According to the results of this research, that these parts relating to information security affected each other and that there was the same directional strong relation between them revealed.

To provide high level information security in DE, understanding and applying information security standards as well as knowing current threats is important. It is shown that, to provide high level information security, an approach managed in the triangle of technology-human-education should be taken into account.

While securing the information – targets of confidentiality – collectivity – utilization are essential. In DE; it is obvious that having enterprise information security standards is efficient at providing a high degree security. The approaches increasing and reforming security in which the common security protocols taking the private security problems into consideration as well as being actual are essential. In DES; the increase of the enterprise security proficient is a primary fact with respect to the confident operation of the substructure. In this process, the forming of new security standards which meet the probable security risks in the DES gains importance.

As a result of, the purpose of this study is to accentuate the actual developments by emphasizing the significance of providing information security in DES which is a recent education model.

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**Transforming Tacit Knowledge to Explicit Knowledge in Professional Education:
A Project and Problem Based Learning (PPBL) Approach in Architectural Studies**

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Transforming Tacit Knowledge to Explicit Knowledge in Professional Education: A Project and Problem Based Learning (PPBL) Approach in Architectural Studies

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Abstract

Belonging to the design disciplines, architectural problems are by nature “wicked problems” – a family of problems that cannot be easily formulated or even described to others. As a result, the design process is often viewed and approached as a “black box process”. Even the most experienced designers would find themselves having difficulty trying to express in words the precise knowledge behind the actions leading to their design, that is, this body of tacit knowledge often manifests itself only in action. To facilitate the transfer of this tacit knowledge into explicit knowledge that can be more readily internalized by students, an architectural studies curriculum adopts the Outcomes-Based Approach (OBA) and combines the traditional architectural education approaches based on design studio projects with the widely replicated McMaster Medical School problem-based learning model, which emphasizes small group cooperative learning and utilizes “real” situations to activate student learning. This paper examines the pedagogical and theoretical foundations behind Project and Problem Based Learning (PPBL) – the parallel integration of divergent problem cases and convergent studio design projects to maximize learning in architectural professional education to facilitate the completion of the knowledge spiral.

1. Introduction

Coupled with the development of the Outcomes-Based Approach (OBA), the focus shifts from “teaching” (teacher-centred) to “learning” (student-centred) in the development of modern educational approaches, the interrelationships has also changed from a more singular one-to-many to a pluralistic many-to-many. The teacher-centred instructional paradigm consists mainly of lecture-type discourses where an instructor transfers knowledge to the students in a predominantly rigid one-way process. The success of this approach is measured in terms of how effectively the pre-determined course content is being captured by the students – rote learning. On the contrary, the OBA learning paradigm free students from rigid teaching routines and make learning much more interactive and integrative through constructive alignment (Biggs, 1999) – the adoption of different teaching and learning activities to facilitate the achievement of learning outcomes. It involves not only two-way dialogues between the teacher and the students but also active inquiry and discussions among the students themselves. Thus, the teacher is no longer the only source of knowledge: students are not only taught by one but learning from many. By recognizing each individual student’s contribution to the collective, the paradigm empowers students to be more active in shaping the learning process.

The mechanism of knowledge dissemination in this kind of collective learning environment resembles in a number of ways how knowledge is created and transferred in a company.

Boreham and Morgan (2004) concluded that, “For an organisation to be able to as an organisation, there must be a common object of its collective activity, without which it would cease to be the kind of unitary entity that would be identified as a learning subject” (p.321). This “common object” is obvious to students in a school – to acquire useful and meaningful knowledge and skills that can help their future academic and career advancement as well as to contribute back to society.

As Nonaka and Takeuchi (1995) observed, transfer of personal knowledge into collective knowledge valuable to the whole business organization occurs continuously at various levels within a company. New knowledge can come from anyone within the organizational structure and can spread laterally among peers of the same rank or vertically across different rank in the company hierarchy. Regardless of rank and background, each individual worker within the company acts as an agent in the overall organization learning structure. Similarly, with the teacher’s role diminished in learning-centred approaches in education, the students all become active agents in determining *what* and *how* they want to learn – i.e. what kind of knowledge is needed and how can the knowledge be transferred.

Working in groups in the Problem-Based Learning (PBL) format, which utilizes “real” situations to initiate student learning activities, more readily resembles how workers behave collectively in an organisation not only in terms of content but also in operation, drawing closer the relationship between learning theory and practice. Plowright and Watkins (2004) argued such inquiry-based group work for learning “not only assists students to develop effective interpersonal skills but also prepares them for the co-operative teamwork essential to [] interdisciplinary work settings” (p.200). This paper explains the combination of the group-based PBL and the traditional individual-based design studio project in architectural education in a sub-degree architectural studies programme at the City University of Hong Kong and how this new pedagogical approach completes the knowledge transfer model of Nonaka and Takeuchi.

2. What is Problem-Based Learning (PBL)?

PBL emerges from the critique that traditional lecture-based education may not be adequate for developing functional knowledge required in the modern workplace. First developed in 1970s, the formulation of PBL has been based on “constructivist pedagogical designs that are based on the assumption that learning is the product of both cognitive and social interaction in problem-centred environments” (Hmelo & Evensen 2000, p1). Its inception as an innovative educational approach in a new medical school at McMaster University in Canada in the 1970s have since inspired many similar approaches focusing on problem cases first in medical schools and then in other disciplines (Barrows & Wee, 2007). In PBL, small group learning in a problem situation replaces large class lectures. Learning is achieved as a knowledge discovery process in a problem-centred context rather than a knowledge transmission process as in traditional classrooms.

PBL is an alternative approach to teaching and learning gaining broad acceptance in recent years in all levels of education. One of the major keys to PBL is that students assume the responsibility for their own learning and the focus of learning is switched from the teacher to the students (Barrows, 1988; Woods, 1994). This student-centred learning utilizes

multidisciplinary problem cases as the vehicle for students to acquire knowledge as well as develop problem-solving skills. Replacing traditional lecture-based teaching where the teacher becomes the major source of knowledge, PBL encourages the students to actively seek out and share appropriate learning resources and expand their information / knowledge base through various means.

As a contextualised approach to teaching and learning (Hmelo & Evensen 2000), PBL can assume many different forms. In general, students work in groups in PBL in order to engage with the scenarios presented and to determine the information they need to acquire so that propositions can be made as to how the problem might be addressed (Savin-Baden, 2000). Working in small groups, problem cases based on “real” situations are utilised to initiate student learning activities, drawing closer the relationship between learning theory and practice. PBL approaches can range from a highly structured model with considerable tutor input, such as *Authentic Problem-based Learning (aPBL)* (Barrows & Wee, 2007), to relatively unstructured approaches where the tutors’ influence is much diminished.

Bridges & Hallinger (1992) differentiate two types of PBL according to the degree of structure that is imposed on the problem case – the less-structured *student-centred* type and the more structured *problem-stimulated* type. The distinction between a student-centred PBL and a project-stimulated one is however not that clear-cut. The amount of prescribed information and directions given by the instructor in the latter type can vary significantly among different practices. Instead of focusing on the degree of structure, Savin-Baden (2000) takes an opposite position and stresses that it is problematic to limit PBL to that which is precisely definable. Instead, she argues that the specific characteristics of a PBL course should “stem from the discipline or professional knowledge base into which it is introduced” (Savin-Baden, 2000, p.16). In view of the disjunction in professional education between what one learns and what one is expected to do the basic premise of PBL is to reconnect education and practice through a holistic approach.

One of the major keys to PBL is that students assume the responsibility for their own learning and the focus of learning is switched from the teacher to the students. This student-centred learning utilizes multidisciplinary problem cases as the vehicle for students to acquire knowledge as well as develop problem-solving skills. Replacing traditional course-based teaching where the teacher becomes the major source of knowledge, PBL encourages the students to actively seek out and share appropriate learning resources and expand their information / knowledge base through various means. PBL group members worked cooperatively to work out a course of action in solving the given problem. The instructor, who is known as a *facilitator* in the problem case set-up, only give guidance and advise while generally refraining from imposing too much control over the students’ learning as in lecture situations.

3. Tacit Knowledge, Explicit Knowledge and the Knowledge Spiral

Belonging to the design disciplines, architectural problems are by nature “wicked problems” (Rittel & Webber, 1984) – a family of problems that cannot be easily formulated or even described to others. As a result, the design process is often viewed and approached as a “black box process” described by Jones (1992) as “which goes on inside the designer’s head

and partly out of reach of his conscious control” (p.49). When designers are *in the action of designing*, however, they are obviously guided by some kind of subjective and experience based knowledge that informs them on their decision-making. This body of knowledge manifests itself only *in action* and is therefore context specific. This knowledge is termed *tacit knowledge* by Michael Polanyi (1966), who observed, “we can know more than we can tell” (p.4).

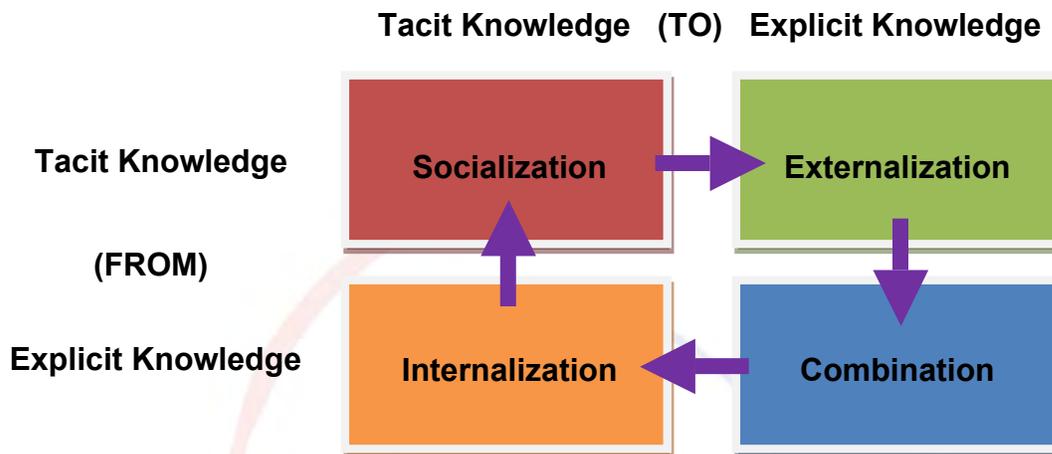


Figure 1: Nonaka and Takeuchi's knowledge spiral: the four modes of knowledge conversion

In Nonaka and Takeuchi's (1995) view, knowledge generation originates from the individual within the company – “new knowledge always begins with the individual” (p.95) – and spreads through the company before being transformed into organizational knowledge that can contribute to the collective. This process of knowledge flow from the individual to the collective is the key to the “knowledge-creating company” and takes place in four phases (Figure 1):

3.1 Socialization: From Tacit to Tacit

Since tacit knowledge cannot be expressed in words and be directly “taught” to another person, it can only be captured through direct interaction with the person who has the knowledge or by experiencing *in-action* what is embodied in the knowledge.

3.2 Externalization: From Tacit to Explicit

Externalization is the codification of tacit knowledge into explicit knowledge – the simplest form of externalization is sharing one's experience through face-to-face dialogue between individuals.

3.3 Combination: From Explicit to Explicit

Combination is a relatively straight-forward process that has two aspects: the simple dissemination of explicit knowledge among groups within and across organizations and the combination of discrete pieces of explicit knowledge to make them more usable.

3.4 Internalization: From Explicit to Tacit

Internalization is the last stage of the knowledge spiral and involves the transfer and assimilation of explicit knowledge shared by the organization or group to the individual into one's own tacit knowledge.

One of the main criticisms of this model is that without strong incentives individuals within a larger group will not voluntarily share knowledge because knowledge is a highly competitive personal resource (Stenmark, 2002). As a general model for collective learning, Nonaka and Takeuchi's knowledge conversion and creation model therefore works best in learning situations where there is adequate motivation for the individual to share knowledge with the larger group. The transfer processes for tacit and explicit knowledge form the backbone of learning whenever experiential knowledge is generated from the activities of individuals who belong to a larger group.

4. The Traditional Architectural Design Studio Project

Architectural education encompasses many learning disciplines apart from architectural design – structures, construction, materials, environmental science, etc. At present, the majority of architectural curricula comprise two components: subject area courses and integrated design studios, with the latter acting as the main focus of learning. Despite the assumption that students acquire essential knowledge on various disciplines in individual subject area courses and apply them to tackle projects assigned in studios, the two components primarily run in parallel and are independent of one another. Under this system, the objectives of the studio projects and each subject area are set by individual course coordinators often without knowledge of what the other coordinators intend to incorporate into their respective courses.

In a comprehensive study of architecture design studios commissioned by the Royal Institute of British Architects, Schön's (1995) referred to the traditional studio as an exemplary example of a setting for "learning-by-doing". He termed it a "reflective practicum", which "would organize itself around projects of simulated practice and would ask students to plunge into these before they know what they need to be doing and learning" (p.92). His analysis revealed that there is a lack of structured courses of action and both the instructor and the individual student(s) adopt significantly different methods in working to arrive at a solution.

Typically, at the beginning of the term the studio instructor would give all students a "design brief" (a set of requirements) for a building type and information on the site on which the project would hypothetically be located. Students would then commence on working on the design of the project based on his background knowledge, knowledge gained formally from subject courses and informally through books and other sources. The student is thus

acquiring explicit knowledge and transforming them into tacit knowledge through applying them *in action* on the design project. In this case, knowledge is transferred through *internalization* in the Nonaka and Takeuchi's model of knowledge transfer.

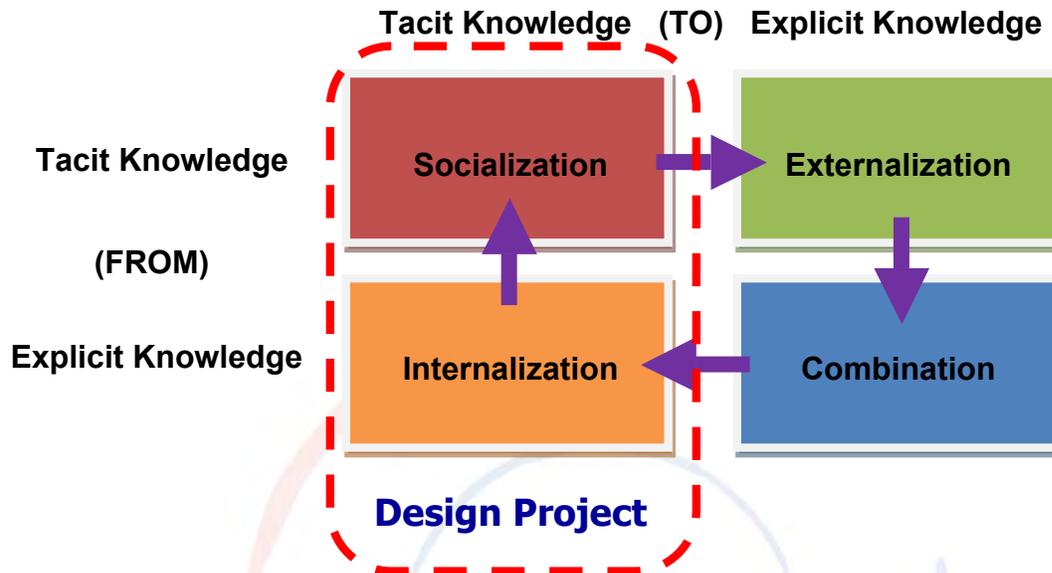


Figure 2: Nonaka and Takeuchi's knowledge spiral and the design studio project

The encounter between the studio master and the architecture student is a two-way process. The backbone of the design studio consists of periodic individual reviews known as “desk-crits” during which instructor and student interact on a one-on-one basis. During desk-crits students will show the progress of their designs to the studio master, who will comment on each individual project and start to build up a dialogue with the student. The studio master would begin the process by commenting on or questioning certain areas of the student's design and, with the aid of diagrams and sketches, may sometimes suggest options for the student to respond to. This is clearly a transfer of knowledge from the studio master to the student through *socialization* in the Nonaka and Takeuchi's model of knowledge transfer. The design studio project thus covers only the *internalization* and *socialization* phases of the knowledge spiral (Figure 2).

5. PPBL: Project- and Problem- Based Learning

In the adopted Project- and Problem- Based Learning (PPBL) curriculum, all subject area courses except the general university/college requirements, an introductory course and an architectural elective will be absorbed into the studio component, which takes the form of a combination of design projects and problem cases (Figure 3). Instead of achieving all the objectives of a subject area under an isolated course, these objectives are now distributed strategically over the problem cases of the studios and design project. Students will learn

about a subject area, e.g. structures, in the context of a building project. They will no longer be memorizing formulas and calculations that are difficult for them to relate to the design of a building. Students cover in the new PPBL curriculum the same objectives they would have covered in the old curriculum. The main difference is that under the new system they will not only be acquiring knowledge of the various disciplines but they will also understand the relationship between the many disciplines as well as within the field of building in general.

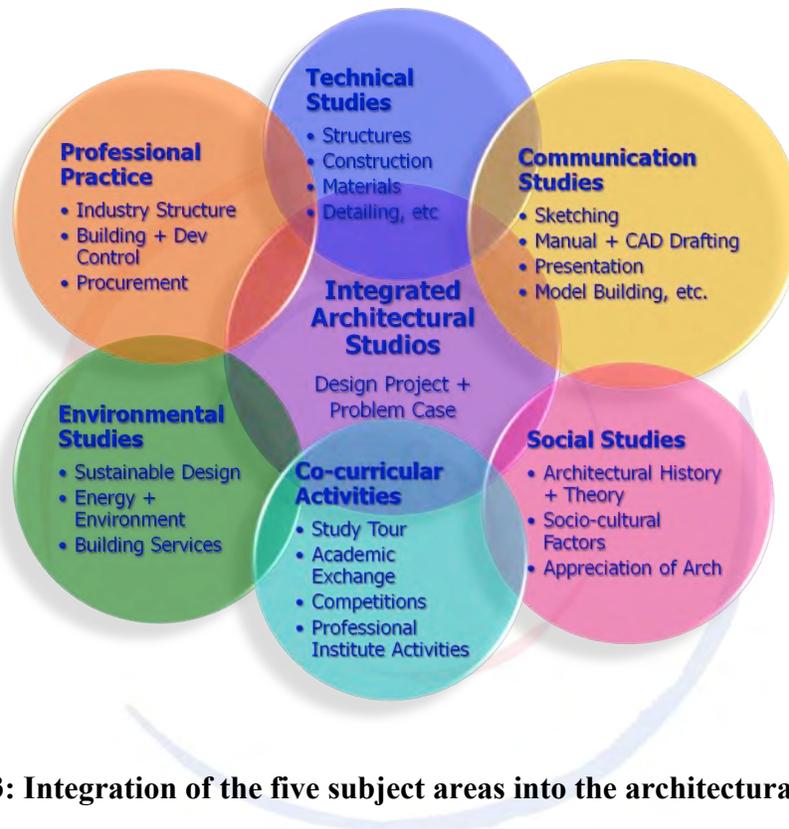


Figure 3: Integration of the five subject areas into the architectural studios

The studios are organised primarily into *tutor groups* (20-24 students), each led by one tutor, which are further sub-divided into four collaborative learning *teams* (5-6 students). Students are simultaneously working on a group-based problem case and an individual-based design project. The problem cases are designed to contribute directly to the design projects and the problem discussion sections have replaced conventional lectures as the main mode of learning and teaching. Moreover, lectures are not eliminated entirely. Instead of mechanically offering weekly lectures for every course, two lecture sessions are offered per week with rotating topics to allow students to learn the knowledge and skills required for the studios *when they are needed* – a kind of “just-in-time” learning (Figure 4). In this arrangement, students will take lectures on structural systems one week because they are required to work out the structure of their studio projects and building services the next when they need to work out the mechanical spaces layout.

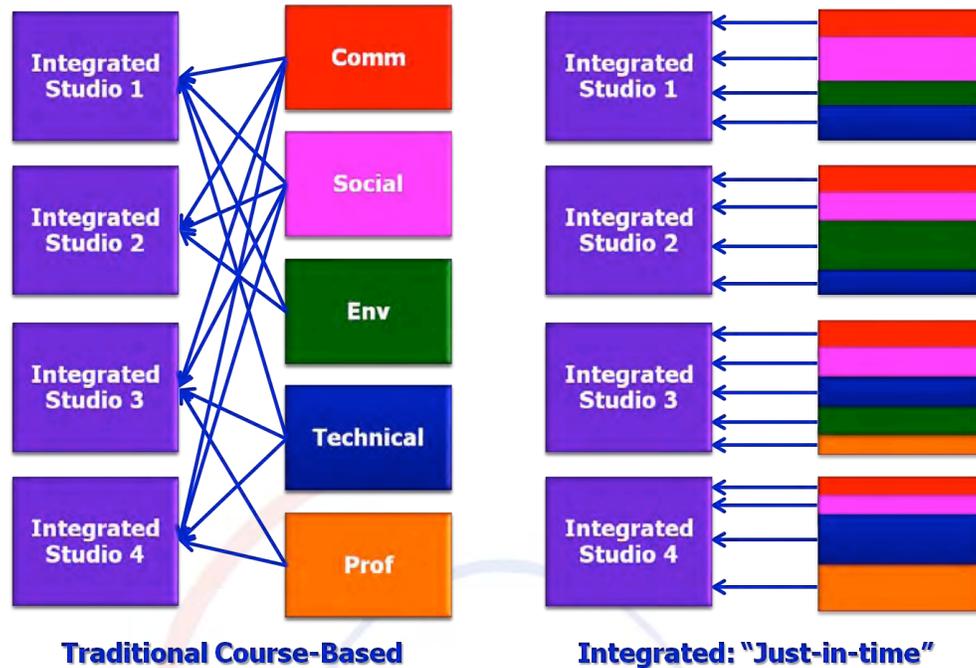


Figure 4: “Just-in-time” lecture

In a problem case session, students work in groups to solve problems that are set to resemble real-life problems in architecture as oppose to a design project on architecture. The major difference between the design project and problem case discussion is that the former is convergent in nature while the latter is divergent. A design project begins with a general building type (e.g. a house or a kindergarten) and basic parameters (e.g. site, space requirements, social background, etc.). Student will develop each of their unique design solutions based on this set of general information. On the contrary, the problem case discussion begins with a very particular problem scenario and through dissecting the problem into a multitude of interrelated issues students acquire knowledge from various topics concerning these issues.

The problem case discussions are intense sessions where students actively share views and knowledge with their group members in solving the given problems. During the process, two kinds of knowledge are communicated and shared: the students’ own tacit knowledge from past experiences and explicit knowledge acquired when researching for materials for solving the problem case. Each student must learn how to describe their own knowledge-in-action by codifying them into communicable information in order to allow the other students to receive them. This means that throughout the process, each student is constantly attempting to *externalize* his tacit knowledge so that they can be communicated to the others as explicit knowledge. This may take several rounds of *externalization* and further self-

reflection before the student can adequately capture his own tacit knowledge, which is notoriously illusive to codification.

By combining problem-based and project-based approaches in PBL, the curriculum approaches the one of the highest level of PBL models, which Savin-Baden (2000) defines as, “one that seeks to provide for the students a kind of higher education which offers, within the curriculum, multiple models of action, knowledge, reasoning and reflection, along with opportunities for students to challenge, evaluate and interrogate them” (p.134). Introduction of a problem-based component to compliment the traditional project-based foundation in architectural education brings this additional dimension of critical reflection that enables what Argyris (1992) termed “double-loop learning.” As Broadbent (1995) argues, “Architectural design is not simply a matter of solving problems. It is a question, first of all, of finding what the problems actually are.” (p.23).

Furthermore, the discussion promulgates explicit knowledge contributed by each group member, which will be further analyzed to determine whether the shared knowledge is helpful to solving the problem. This is where students combine the newly acquired explicit knowledge from various sources and assimilate them to make them more useful for the task at hand. Through this *combination* of bits and pieces of explicit knowledge and the *externalization* of their tacit knowledge into explicit knowledge, the students complete the other two stages of Nonaka and Takeuchi’s model of knowledge transfer. The coupling of the relatively new PBL problem case discussion and the more traditional architectural design studio project thus provides a curriculum that covers all four stages of the knowledge spiral (Figure 5).

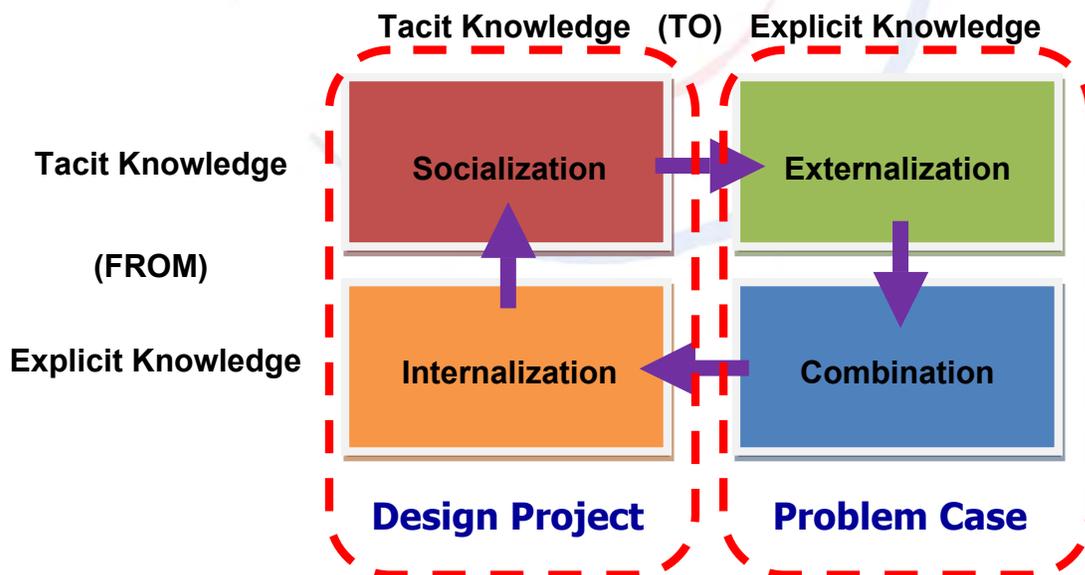


Figure 5: Nonaka and Takeuchi’s knowledge spiral and its relationship with the design studio project and problem-based learning

6. Outcomes-Based Teaching and Learning (OBTL) – Constructive Alignment

Since 2005, the Hong Kong University Grants Committee (UGC) – the authority responsible for the development and funding of higher education in Hong Kong – has been encouraging all government-funded universities to adopt an Outcomes-Based Approach (OBA). A UGC-funded institute, CityU has actively promoted Outcomes-Based Teaching and Learning (OBTL) since 2006 with a comprehensive series of programmes and activities. The AScAS programme had taken this as a good opportunity to review the curriculum and updated all courses the principles of OBTL, which was implemented in 2008.

Fundamental to OBTL is the concept of *constructive alignment* – the alignment of course intended learning outcomes (CILOs), teaching and learning activities (TLAs) and assessment tasks (ATs) (Biggs, 1999). Constructive alignment for the AScAS programme is not limited to an intra-course process and extends to a number of levels: 1) Intra-course teaching and learning elements (CILO-TLA-AT) alignment for individual courses, 2) Horizontal inter-course/intra-semester alignment across the subject area courses and integrated architectural studio within the same semester, and 3) Vertical inter-semester alignment across the increasingly complex integrated architectural studios and their associated subject area courses.

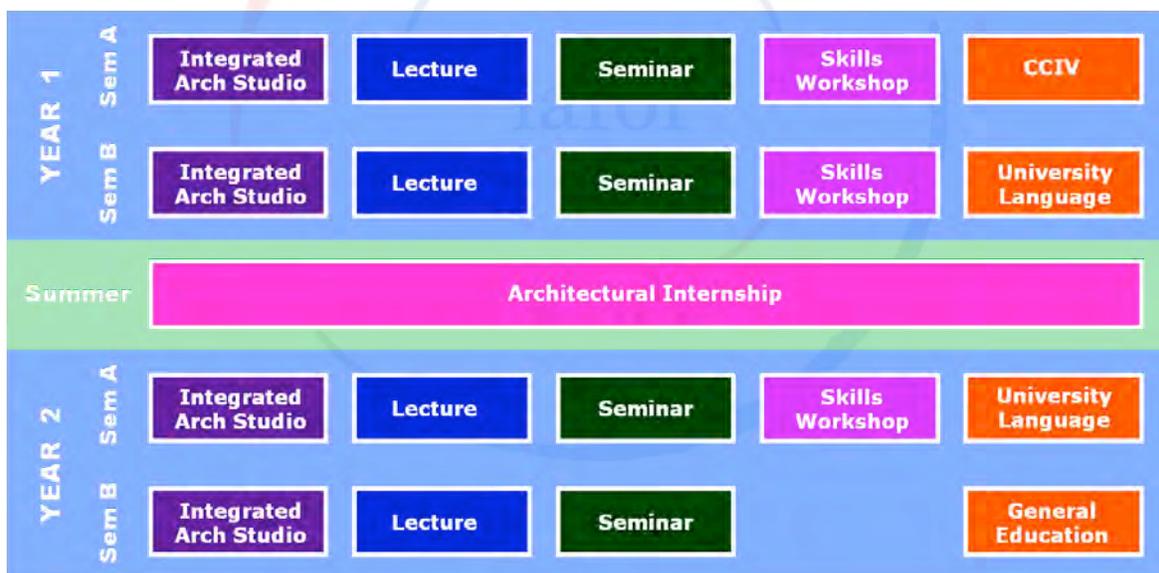


Figure 6: The teaching and learning activity based (TLA-based) curriculum

To maximise student learning and CILO achievement, the AScAS programme has adopted a TLA-based structure to further reinforce the “just-in-time” lecture approach introduced with the PPBL curriculum in 2003. Instead of organising the curriculum (and students’ weekly time-table) around individual courses, the AScAS curriculum is structured by TLA cycles to enhance the achievement of the CILOs. The different kinds of TLAs for the students are:

Design Project, Problem Case, Individual Supervision, Lecture, Tutorial, Seminar, Workshop, Laboratory and Internship (Figure 6). Besides the lectures, the tutorials, workshops and seminars are all organised to provide “just-in-time” learning for the students to apply in their design projects and problem cases.

Understanding that different learning approaches are most effectively and efficiently run with different number of students, various learning units (class sizes) are employed to maximise the impact of each of the TLAs: Large-class at 80-96 students (Lecture, Seminar), Small-class or group at 20-24 students (Tutorial, Workshop, Project), Team at 5-6 students (Problem Case, Laboratory), and Individual (Project, Individual Supervision). As a result, a multiple learning unit approach is used to match each TLA to the optimum learning unit / class size based on its nature (Figure 7).

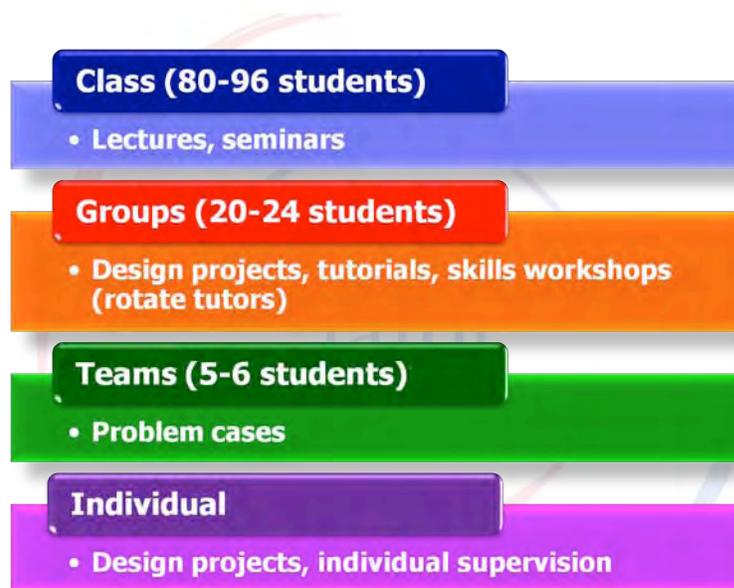


Figure 7: The different learning units (class sizes) adopted for different teaching and learning activities (TLAs)

Besides refinement to the TLAs, the assessment methods are also revised to improve the overall alignment. There are two major types of assignments: *specific assignments* and *integrated assignments*. Specific assignments are assessment tasks (ATs) that are specifically designed to evaluate one subject area CILO only. They are directly associated with the studio but do not contribute to any part of studio assessment. An example is a shadow analysis of the design project to demonstrate the achievement of a CILO on passive solar design. Integrated assignments, on the other hands, are designed to satisfy multiple CILOs from separate courses. For example, a set of drawings for a kiosk design satisfies the learning outcomes of three separate courses: design skills for the studio, quality of drawing

for communication studies, as well as material and construction for technical studies. Therefore, instead of being overloaded with assignments from a design studio plus five to six other classes with separate coursework, the students only have to complete “integrated assignments” under the studios for all courses.

7. Differences Between Project-Based and Problem-Based Approaches

PBL is different from the kind of project-based teaching we are used to in architectural design studios – the former is case-based and student-centred while the latter is solution based and teacher-led. Also, in project-based teaching, the beliefs and inclination of the teacher can easily affect and mould the learning of the students. PBL is a form of student-centred learning. On the one hand, it encourages students to take more responsibility for their own learning, while on the other, it equips students not only with the skills to solve problems they may face in their practice but also stress the importance of critical enquiry.

The difference in approach is apparent in the differences in the nature of discussions and reviews in problem-based learning and project-based teaching. In the conventional design studio setting, feedback and reviews revolves around students’ proposals, i.e. their solutions, whether in a group (jury reviews, pin-ups) or in one-on-ones between student and tutor (desk-crits). Discussions primarily focus on the merits or shortcomings of the students’ proposals and students learn from comments given by their tutors, the review jury and each other. Despite claims otherwise, the emphasis of project-based teaching in this situation is clearly on the solution and not the problem, on result and not process.

In PBL, students are assigned case problems based on practice situations and work together in collaborative small learning groups. Rather than going over pre-set readings and reference materials working to prescribed methodology and tasks, students analyze the case presented to them and to try to understand on their own as much as they can about the particular case problem: identifying useful resources and means of obtaining more relevant information, setting strategies for approaching the problem, dividing and distributing the workload among the groups, agreeing on an agenda and course(s) of action and setting short-term and long-term goals and deliverables. As Narváez (2000) puts it, “Solving questions and, principally, asking them – even when lacking an answer – is significant. The importance lies in inquiring and allowing time for reflection.” Learning predominantly takes place not in preparing for final submissions individually but in the tutorial sessions during critical examination of the problem and active discussion/debate between group members of various issues.

Hence, the major difference between the design project and problem case discussion is that the former is convergent in nature while the latter is divergent (Figure 8). A design project begins with a general building type (e.g. a house or a kindergarten) and basic parameters (e.g. site, space requirements, social background, etc.). Students will develop each of their unique design solutions based on this set of general information. On the contrary, the problem case discussion begins with a very particular problem scenario and through dissecting the problem into a multitude of interrelated issues students acquire knowledge from various topics concerning these issues. The traditional experienced-based studio teaching and learning in architectural education, though widely adopted, has basic pedagogical issues that

are not resolved: namely, the articulation of general design methodological principles and its ineffectiveness in the transfer and creation of design knowledge (Oxman, 1999). In PBL, students generally work in groups in order to engage with the scenario presented and to determine what information they need to acquire so that propositions can be made as to how the problem might be addressed (Savin-Baden, 2000).

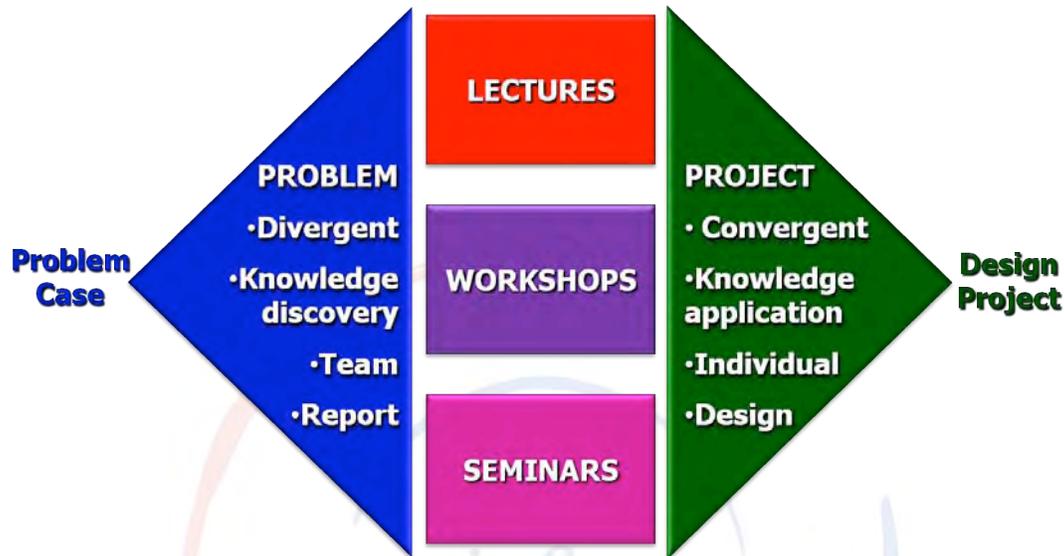


Figure 8: Problem case vs. design project

9. Working in Small Learning Groups

The success of problem-based learning (PBL) hinges upon two important factors: the use of real-life-like problems as the learning vehicle and working in small group team settings as the learning environment. The second of these factors is of particular interest because of its wider application to education in various disciplines and levels. It is often said that working in teams creates results that individuals can never achieve alone and “seems to contribute to greater creativity, productivity, commitment and participation in a diversity of small and large operations” (Partington & Harris, 1999, p.699).

The success of problem-based learning relates closely to the same attributes of success in teamwork in the real world as PBL is inevitably a team process. The major difference lies in the main objectives in that while solving the problem at hand is the main objective for teams in the corporate world, PBL teams focus on solving the problem *and* learning at the same time. It is therefore imperative for PBL programs “to be aware of practicalities as well as the theories of teamwork; using this knowledge as the catalyst for maximising the students’ learning potential by enabling them to experience and reflect on the realities of team-working for themselves” (Watkins & Gibon-Sweet, 1997, p.110). One of the essential, but little researched, areas of teamwork in PBL settings is a *team role model* and its impact on the team process.

A research¹ was conducted by the author to investigate the individual and group behaviour of new ASAS students who are experiencing small group learning for the first time in the PPBL curriculum. The study examines how they cope with problems arising from small group collaborative learning and factors influencing their group dynamics in a PBL setting. Triangulating with semi-structured interviews and non-participant video-taped observations, data were collected from two 6-student teams (12 students) and analysed under the qualitative approach of grounded theory research methods.

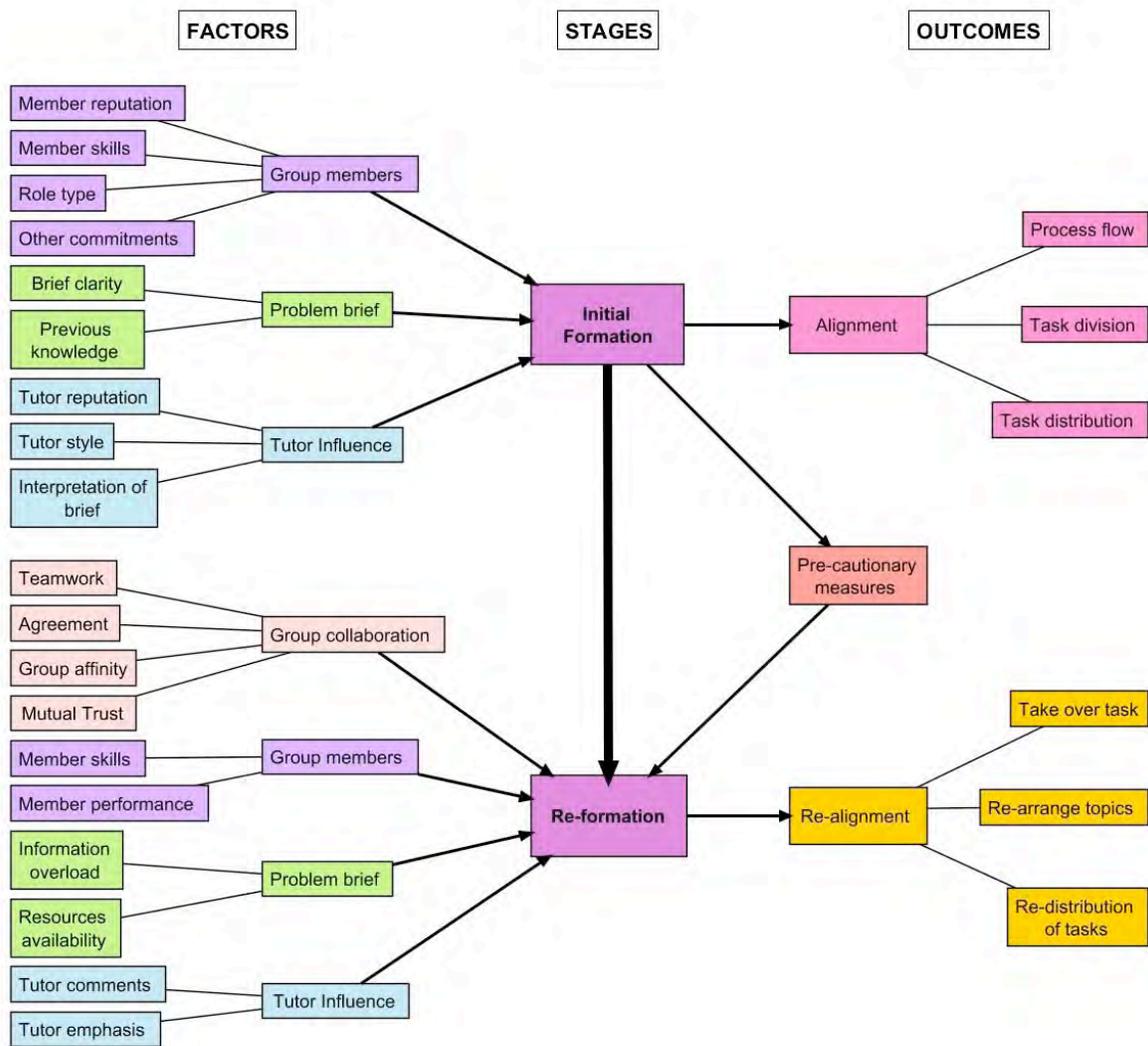


Figure 9: The major categories and sub-categories of the model of adaptive formation

¹ Preliminary findings from the author’s Doctor of Education studies.

Figure 9 presents a summary of the research findings and shows the major categories and sub-categories of a model of adaptive formation in small group collaborative learning. The study found that the small learning groups employ a type of *adaptive formation* and changes the group's *formation* – task division and distribution among team members – to respond to various emerging situations. The phenomenon of constant *formation* and *re-formation* adopted by the students and tutorial groups to adapt to different problems arising from the PPBL process are influenced by four key factors: *group members*, *problem brief*, *tutor influence* and *group collaboration*. The study also identified a typology of PBL students comprising four main student types – *Drivers*, *Adventurers*, *Workers* and *Rider*. Although the emergent theoretical implications remains predominantly substantive in nature, the study illuminates that they are still many important areas of problem/project based learning and small group collaborative learning that are inadequately researched.

10. Conclusion

In theory, two kinds of knowledge are communicated and shared during the process: the students' own tacit knowledge from past experiences and explicit knowledge acquired when researching for materials for solving the problem case. Each student must learn how to describe their own knowledge-in-action by codifying them into communicable information in order to allow the other students to receive them. Furthermore, the discussion promulgates explicit knowledge contributed by each group member, which will be further analyzed to determine whether the shared knowledge is helpful to solving the problem. This is where students combine the newly acquired explicit knowledge from various sources and assimilate them to make them more useful for the task at hand.

The traditional experienced-based studio teaching and learning in architectural education, though widely adopted, has basic pedagogical issues that are not resolved: namely, the articulation of general design methodological principles and its ineffectiveness in the transfer and creation of design knowledge (Oxman, 1999). Nonaka and Takeuchi's model of knowledge transfer in business institutions can be generalized to depict how knowledge is leveraged in any collective learning environment. The four phases of the knowledge spiral are most effective in situations where the motivation for learning outweighs other motivations, such as control, position, power, finance, advancement, etc. One of such situation is in learning-centred educational programs constructed based on OBA, where the main objective of both the individual and the collective is to maximize learning.

Most existing learning-centred architecture curricula utilizing PBL methods employ exclusively either traditional design studio projects infused with PBL components or problem case solving to replace the design projects. Very seldom is there a hybrid of the two learning methods. However, both methods failed to cover all four phases of the Nonaka and Takeuchi knowledge spiral individually. If we adopt the knowledge spiral as the model for collective learning, then our curriculum must be designed to adequately incorporate all four phases, i.e. to combine problem case solving with traditional design studio projects.

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**The Relationship between Big Five Personality Traits
and Learning Style of Iranian Graduate Students at
University Putra Malaysia**

Abstract

People differ considerably in the ways they learn best, and it is believed that these learning styles are linked with personality types (Eysenck, 1978; Furnham, 1992; Busato, Prins, Elshout and Hamaker, 1998; Capretz, 2003) Thus, by considering the importance of personality and its effects on learning behaviour, this study investigated possible relationships between personality and learning styles.

The theoretical framework which guides this research was the Big Five Factor Model of McCrae and Costa (1992) and the Barsch Learning Style Inventory (1996). A total of 302 Iranian graduate students at University Putra Malaysia (UPM) were selected as sample for the study. Data were collected by survey method and analysed using both descriptive and inferential statistics.

The objectives of this study were to: 1) determine learning styles and personality types among respondents; 2) determine the relationship between learning styles and personality types; 3) compare the relationship between personality types and learning styles with gender, and program of study.

Finally, the results of statistical analysis revealed that conscientiousness was the predominant classification of respondents' personality type and Kinesthetic was the predominant learning style of respondents. The study results also showed that there is a statistically significant association between the personality types and learning styles. However, the result of Chi-Square Test showed no statistically significant association between gender and

program of study with learning styles and personality type of respondents.

1. Introduction

Educating students is the main goal of colleges and universities and reaching that goal depends on understanding those learners (Seif, 2001). Learning style is the way a person processes, internalizes, and studies new and challenging material (Biberman & Buchanan, 1986). Learning is a complicated variable that is affected by many factors such as intelligence, motivation, suitable environment, family factors, society, teaching quality, trainer's proficiency (Seif, 2001), and personality. Personality describes how an individual interacts with the environment and other people and has been shown to contribute towards performance and achievement (Keeley, 2006).

Learning styles are often classified based on personality theories or theories of intelligence. The relationships of personality with learning style are also supported by the trait theory that addresses effect of traits on behaviour (Matthews and Geary, 1998). The number of different learning styles varies with the theory, but most theories of learning styles include visual learners, who learn best by perceiving with the eyes, interpretation, and imagery; auditory learners, who learn best by act of listening and by something that is said and; tactile learners, who need to make contact with things (Dunn, Beaudry, and Klavas, 1989; Jester, 2000).

Most people will find that they have one dominant, or most powerful, learning style along with

one or two secondary styles (Barsch, 1996; Dunn et al., 1989; Jester, 2000). Learning styles structure can be responsive to the experiences that allow change to enable adaptive behaviour that's considered stable over time (Cassidy, 2004).

Iranians students, just like other students of any country have their own unique learning styles that generally have been suited to the learning institutions in their home country and adapted to their educational context and personality types. In fact, the Iranian educational systems are mostly instructor-centred while the teaching-learning process at University Putra Malaysia (UPM) is more student-oriented. UPM is the choice of many Iranian students. According to the statistics obtained from the School of Graduate Studies in UPM, there are 1411 Iranian students pursuing their studies in 2009-2010 academic years.

Roueen (2004) and (Ebadi, 2005) investigated relationship between learning styles and personality factors of undergraduate students, and high school Iranian students. However, there are not many studies on personality and learning styles among Iranian graduate students particularly in a foreign context. This study proposes to investigate possible relationships between personality and learning styles of Iranian students learning outside their home country.

At the turn of the decade, the number of Iranian students at UPM has been increasing steadily. They encounter and need to deal with different educational and social situations. They have to learn the language, adapt to new cultural circumstances, learn and acquire new skills of learning and examination methods. Moreover,

they are driven to complete their courses as soon as possible. Although, Iranian students have largely not had any problem with the learning style at UPM, understanding their learning style and its connection with personality can help create a more effective learning opportunities. Also, giving less attention to students' learning style preferences can possibly lower students' learning performances. Also, it is important for educators, according to Chongcharoenpanich (2007) that instructors have to be concerned with students' learning preferences that are possibly different from their planned instructions.

The reviewed literature such as Cohen (2008) and Penn (2003) supports the importance of researching relationship between personality and learning styles. Although there are researchers investigating relationships of personality and learning styles, there is no study on Iranian graduate students. Also there is a lack of research to investigate the relationships of personality and learning styles in foreign learning context. This research provides an opportunity to address personality types of Iranian students in relation to their styles of learning. It also investigates the relationship between personality types and learning styles with gender and program of study.

2. Methods

2.1. Participants and procedures

A cross-sectional study was conducted in the academic year of 2009-2010 on 302 Iranian postgraduate students from the sixteen faculties at University Putra Malaysia.

2.2 Measures

A questionnaire for this study consists of three sections. The first section was demographics that contain questions about gender, age, program of study, and semester of study. The second section was based on McCrae and Costa's (1985) NEO-FFI Big Five Factor Inventory. There are five dimensions of personality: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Respondents responded to 60 items pertaining to their personality traits. A five point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly agree) was used to determine the personality traits of respondents.

The third part contains Barsch Learning Style Inventory (1996) which has 24 statements that are assigned values used in the scoring process. There are three levels of learning style, visual, auditory, and kinesthetic and each part has eight questions to determine the predominant learning style. Respondents responded to 24 items that determined their learning styles. A five-point Likert scale (1: never true, 2: seldom true, 3: sometimes true, 4: usually true, 5: always true) was used to gauge the learning styles of respondents. The questions in the questionnaire were closed-ended where the answers are provided for each question and the respondents chose one best possible answer.

2.3. Statistical analysis

A statistical analysis was conducted to answer the objectives of the study. The finding reports the

demographic profile, descriptive statistics for personality trait and learning style of Iranian graduate students. A Chi-Square goodness of fit tests was used to determine if the percentage of the five trait personality and learning styles was significantly different from the expected probability distribution. The Chi-square (χ^2) test of independence for a 6x4 contingency table was carried out. This test was used to analyse the association of respondents' personality trait and their preferred learning style. A two-way cross tabulation, which evaluated the assumed (Expected) model of independence against the observed data, was carried out. Also, a Chi-Square test of homogeneity was conducted to assess the percentages of students using different learning styles and personality traits for male and female students as well as for program of study.

3. Results

3.1. Demographic Profile of Respondents

Table 1 displays the frequencies and percentage of the respondents' profile. For this study, 59% of respondents were male. The respondents' age ranged from 30 - 55 years. Most (63.2%) of the respondents were between 30 and 45 years of age. A total of 56.6% were PhD students. The respondents are students of UPM from semesters 1-8. A little more than two-thirds of respondents (69.5%) were in the second to fourth semester.

Table 1: Demographic Profile of Respondents

Characteristics	Frequency	Percentage
<u>Gender</u>		
Male	178	59
Female	124	41
Total	302	100
<u>Age (years)</u>		
>30	98	32.5
30- 45	191	63.2
45<	13	4.3
Total	302	100
<u>Program of study</u>		
Master	131	43.4
PhD	171	56.6
Total	302	100
<u>Semester</u>		
First	18	6.0
Second	72	23.8
Third	68	22.5
Fourth	70	23.2
Fifth	37	12.3
Sixth	21	7.0
Seventh	12	4.0
Eighth	4	1.3
Total	302	100.0

3.2. Personality Types

The respondents' status in each of the five NEO-FFM dimensions is investigated through calculating the composite score of related items. Then, the composite score were categorized into three levels namely low, moderate, and high. The results revealed that the majority

of respondents reported a moderate level of trait possession in NEO dimensions except the conscientiousness was scored as high (See Table 2).

Table 2: The Distributions of Respondent in NEO-FFM Dimensions

Five Personality Traits	Level			Total
	Low	Moderate	High	
Neuroticism	92 30.5%	195 64.6%	15 5%	302 100%
Extraversion	7 2.3%	189 62.6%	106 35.1%	302 100%
Openness to experience	7 2.3%	242 80.1%	53 17.5%	302 100%
Agreeableness	1 .3%	180 59.6%	121 40.1%	302 100%
Conscientiousness	4 1.3%	96 31.8%	202 66.9%	302 100%

The results of the frequency distribution of personality traits in Table 3 showed that nearly half (47.7%) of the respondents would be categorized as conscientiousness, 16.2% agreeableness, 9.9% extraversion, 9.9% openness to experience and 7.6% had neuroticism personality characteristics. In addition, 8.6% of respondents had a combination of personality characteristics. Therefore, it could be concluded that personality dimension of the respondents was predominantly conscientiousness.

A Chi-Square goodness of fit results revealed the distribution of respondents belonging to five personality traits and one combined personality factor are statistically significantly different from the expected probability distribution [$\chi^2 (5, N=302) = 217.377, p = .0001$].

Table 3: Frequency Distribution for Five Personality Traits

Five Personality Traits	Frequency	Percentage
Neuroticism	23	7.6
Extraversion	30	9.9
Openness to experience	30	9.9
Agreeableness	49	16.2
Conscientiousness	144	47.7
Combination	26	8.6
Total	302	100.0
Pearson $\chi^2 = 217.377, df = 5, P = .0001, n = 302$		

3.3. Learning Styles

The results of learning styles among respondents indicated that 63.9% of the respondents employed kinesthetic and auditory learning style. The frequency distribution of learning styles in Table 3 shows that 37.4% of respondents were kinesthetic learners, 26.5% were auditory, and 16.9% were visual and 19.2% use a combination of styles. The predominant learning style of respondents was Kinesthetic within this study.

The results revealed the distribution of respondents belonging to three types of learning styles and one combined learning style is statistically significantly different from the expected probability distribution [$\chi^2(3, N=302) = 30.901, p = .0001$].

Table 4: Frequency Distribution for learning styles

Learning style	Frequency	Percentage
Visual	51	16.9
Auditory	80	26.5
Kinesthetic	113	37.4
Combination	58	19.2
Total	302	100.0

$\chi^2 = 30.901, df = 3, p = .0001, n = 302$

3.4. Relationship between Five Personality Traits and Learning Style

Based on second objective, there was statistically significant association between Five Personality Traits and learning styles. Table 5 revealed that there is a statistically significant association between the five personality traits and learning styles [$\chi^2(15, N=302) = 67.684, p = .0001$].

Table 5: A Chi-square test of Independence for Learning Styles by Five Personality Traits

Five Personality Traits	Learning Style				Total
	Visual	Auditory	Kinestheti c	Combinatio n	
Neuroticism	2 8.7%	7 30.4%	9 39.1%	5 21.7%	23 100%
Extraversion	15 50%	4 13.3%	5 16.7%	6 20%	30 100%
Openness to experience	11 36.6%	4 13.3%	4 13.3%	11 36.7%	30 100%
Agreeableness	8 16.3%	11 22.4%	23 46.9%	7 14.3%	49 100%
Conscientiousness	9 6.3%	47 32.6%	67 46.5%	21 14.6%	144 100%
Combination	6 23.1%	7 26.9%	5 19.2%	8 30.8%	26 100%
Total	51 16.9%	80 26.5%	113 37.4%	58 19.2%	302 100%
Pearson $\chi^2 = 67.684$, df = 15, p = .0001, n = 302					

This 6x4 Chi-square analysis revealed four cells (16.7%) with expected counts of less than 5, which validates the inferential Chi-square test of association. According to the basic descriptive statistics and row percent, the most noteworthy results of learning styles within five personality traits shows that within neuroticism personality trait, 39.1% of the respondents had a kinesthetic learning style, while 30.4% used auditory learning style, 21.7% a combination of different learning styles and 8.7% had a visual learning style.

A majority (79.1%) of the conscientiousness use either kinesthetic or auditory learning styles. Half (50%)

of the extraversion used visual learning styles compared to the other learning styles. Also a majority (73.2%) of the openness to experience use either visual or combination.

3.5. Learning styles and five personality traits by demographic characteristics

The results of third objective, the comparison of proportion between the various personality traits and learning styles by gender and program of study students were found to be not significant.

3.5.1 Learning Styles and Gender

The finding of the cross tabulation analysis for learning styles and gender was found to have no significant difference [$\chi^2(3, N=302) = 5.82, p = .121$].

Table 6: A Chi-square test of homogeneity for Learning Styles by gender

Gender	Learning style				Total
	Visual	Auditory	Kinesthetic	Combination	
Male	32 18%	41 23%	64 36%	41 23%	178 100%
Female	19 15.3%	39 31.5%	49 39.5%	17 13.7%	124 100%
Total	51 16.9%	80 26.5%	113 37.4%	58 19.2%	302 100%

Pearson $\chi^2 = 5.816$, $df = 3$, $P = .121$
 $n = 302$

3.5.2 Learning Styles and Program of Study

The findings of the cross tabulation analysis for learning styles and program of study was found to have no significant difference [$\chi^2 (3, N=302) = 3.162$, $p = .367$].

Table 7: A chi-square test of Homogeneity of Learning Styles by program of study

Program of study	Visual	Auditory	Kinesthetic	Combination	Total
Master	27 20.6%	31 23.7%	46 35.1%	27 20.6%	131 100%
PhD	24 14%	49 28.7%	67 39.2%	31 18.1%	171 100%
Total	51 16.9%	80 26.5%	113 37.4%	58 19.2%	302 100%

Pearson $\chi^2 = 3.162$, $df = 3$, $P = .367$
 $n = 302$

3.5.3 Five Personality Traits and Gender

3.6

The finding of the cross tabulation analysis showed that there were no significant differences for five

personality traits and gender. [χ^2 (5, N=302) =6.574, p = .254].

Table 8: A Chi-square test of Homogeneity for Personality Traits by Gender

Five Personality Traits							
Gender	Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientiousness	Combination	Total
Male	16 9%	20 11.2%	21 11.8%	29 16.3%	75 42.1%	17 9.6%	178 100%
Female	7 5.6%	10 8.1%	9 7.3%	20 16.1%	69 55.6%	9 7.3%	124 100%
Total	23 7.6%	30 9.9%	30 9.9%	49 16.2%	144 47.7%	26 8.6%	302 100%
Pearson $\chi^2 = 6.574$, df = 5, P = .254 n = 302							

3.6.1 Five Personality Traits and Program of Study

The finding of the cross tabulation analysis showed that there were no significant differences for personality traits and program of study. [χ^2 (5, N=302) = 8.193, p = .146].

Table 9: A Chi-square test of Homogeneity for Personality Traits by program of study

Five Personality Traits

Program of study	Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientiousness	Combine	Total
Master	9 6.9%	10 7.6%	18 13.7%	16 12.2%	68 51.9%	10 7.6%	131 100%
PhD	14 8.2%	20 11.7%	12 7%	33 19.3%	76 44.4%	16 9.4%	171 100%
Total	23 7.6%	30 9.9%	30 9.9%	49 16.2%	144 47.7%	26 8.6%	302 100%

Pearson $\chi^2 = 8.193$, $df = 5$, $P = .146$
 $n = 302$

4. Discussion

This study examined the personality types and learning styles of Iranian post graduate student in UPM. The findings suggested that conscientiousness was the predominant personality types.

The results of the current study about predominant personality traits do not support some of the previous research probably due to the cultural differences, and individual differences in terms of educational attainment.

The findings support the research result of O'Connor and Paunonen (2007) which showed that conscientiousness personality trait was predominant among students. Also, Roueen (2004) showed that conscientiousness has a positive relationship with learning styles. However the findings of the current study about predominant personality types do not support some of the previous research because of individual's

differences in terms of educational attainment and diligence. This result is similar to the result of research about the Big Five personality traits of professional comedians compared to amateur comedians, comedy writers, and college students, which found significantly lower conscientiousness, extraversion, and agreeableness, and higher openness (Greengross and Miller, 2009).

The findings revealed kinaesthetic learning style as predominant among the Iranian graduate students in UPM. This finding does not correspond with Abrahimi (2004) findings which showed that the majority of the respondents used auditory learning styles. The reason could be related to the similarity of respondent's characters, such as enjoying discussion, expressing emotions and having illustrations explained.

This study also examined the relationships between personality types and learning styles of respondent. The findings show that statistically significant association between personality types and learning styles.

The findings further support the research result of Penn (2003) which showed that there are significant correlations between personality and learning style. The present findings are consistent with other research which found significant relationship between personality types and learning style such as (Eysenck, 1978; Furnham, 1992; Busato, Prins, Elshout and Hamaker, 1998; Capretz, 2003).

Also, the study of Husseininasab, et al., (2007) among Iranian students in Tabriz University; study of

Ebadi (2005) in grade one high school students of Iran's Tarom state; and study of Mansori (1999) among female high school students in Tehran who found a relationship between personality characteristics and learning styles.

Furthermore, Roueen (2004) in a study on the relationship between learning styles and personality factors of undergraduate students of Tabriz University found that there were significant differences between learning styles and personality factors, as well differences in learning styles if we consider gender and educational fields. He indicated that extroversion had a positive correlation with concrete experience, active experimentation learning styles and a negative correlation with reflective observation and abstract conceptualization learning styles. In addition, there were significant difference between learning styles and personality factors of technical engineering students, and significant difference between learning styles of basic sciences students regarding their personality factors. Also it was obtained that there were significant difference between learning styles of humanity students regarding their personality factors.

In addition the comparison of proportion between the various personality types and learning styles by gender and program of study of students were found to be not significant.

In comparing the learning style by gender, several studies have demonstrated that females and males learn differently. In general, the studies on males' and females' learning differences have concluded that more females are relational learners, whereas more males are independent learners (Gabe, 2002). Also, Logan and

Thomas (2002) found gender differences in Honey & Mumford's Learning Styles on the Pragmatist and Theorist measures.

Contrary to what was found in previous studies (Logan and Thomas, 2002; Ebadi, 2005; Rahmanishams, 2001; Roueen, 2004; Gabe, 2002; Wehrwein, et al, 2007), no significant gender difference in terms of learning styles was found in the present research. However, these were found to be consistent with those that found no differences in learning styles in terms of gender such as (Kestern and Wiersinga, 2007; Thomas, 2007; Kordnoghi, 2000). Theoretically learning style is influenced by personality traits. However, factors such as gender do not influence learning styles. Also, the respondents who decide to travel abroad most probably have the high adaptive behaviour or some other similar characters that encourages them to study in a foreign country. Thus, the reason why there was no gender differences in terms of learning style could be related to the similarity of respondents characters, regardless of gender.

The findings of the current study also indicated no differences in learning style in terms of program of study which are consistent with those of Yuh (2003) who found that no significant difference in the learning style between Taiwan students year-two and year-five associate degree of nursing programs, and a two-year baccalaureate degree of nursing program. Also, Rezaii (2000) showed that no significant difference in learning style and program of study among graduate and undergraduate Iranian students majoring in mathematics. This result may be explained by the fact that all respondents of this study were postgraduate students. Perhaps a comparison of undergraduate and postgraduate

students will probably show a different result such as the study of Halsne and Gatta (2002) that reported a significant relationship between educational level and learning style.

The comparison of the personality type by students' program of study was found to be not significant. The finding is in agreement with Thomas (2007) findings which indicated that the personality type of African American college students was more associated with knowing style than gender. Also, there was no statistical difference between males and females with regard to sensing-intuition or introvert-extravert types in study of Shuck and Philips (1999).

The findings contradicted with Greengross and Miller (2009) results of a research about the Big Five personality traits that showed there were significant group differences (gender) for openness to experience, conscientiousness, and extraversion, and marginally significant differences for agreeableness. For male participants, they found significant group differences for openness to experience and conscientiousness and marginally significant for extraversion.

Also in this study the results are inconsistent with Myers-Briggs Type Indicator in 2004 that found a highly significant interaction between gender and thinking – feeling, with men significantly more likely to be thinking types than women. Some 82% of men have a preference for Thinking, compared with 62% of women. Note that the group as a whole has a tendency towards Thinking. Also there was a significant interaction between gender and Extraversion – Introversion, with women significantly more likely to be Extraverts than men. About 70% of women have a preference for Extraversion,

compared with 56% of men. Lastly, sensing – Intuition and Judging – Perceiving show no significant interaction with gender.

The observed results that gender did not affect personality types could be attributed to the environmental situation in shaping respondents' personality types in the present study. Also, people's belief on gender equality particularly among educated individuals and the younger generation could have explained the results of the study.

The comparison of the personality type by students' program of study was also found to be not significant. Shuck and Philips (2007) compared personality types of students electing to track into the Doctor of Pharmacy Program (PharmD) with those in the Bachelor of Science Pharmacy Program. The results of this study showed that there was no significant difference in personality types of respondents in regards to program of study.

Furthermore, Marefat (2006) studied male and female graduate and undergraduate students by using MBTI questionnaire and indicated that there was no significant relationship between program of study and personality dimension expect inters of Sensing- Intuitive preference.

5. Conclusion

The conclusions of this research based upon findings as related to the research objectives of this study can be summarized as follows:-

First: The predominant personality type of respondents was conscientiousness and Kinesthetic was

the predominant learning style of respondents within this study. The findings related to personality type did not confirm the results of some previous studies. Also the findings regarding the predominant learning style was not consistent with earlier studies. These inconsistencies could be related to the context of the study as the study involves students who are studying abroad at a post graduate level.

Second: There was a significant level of association between learning style and dimensions of personality types. The data supports the previous research findings that also found some level of association between learning style and personality type. Also, there is a literature support in Iranian context that there is a significant relationship between learning style and personality type. Although there are few studies that did not show a statistically significant relationship between learning style and dimensions of personality type.

Third: This research results support previous findings that show no significant relationships between gender and personality type. Regarding the association between programs of study with personality type preference, there was a little literature for support. Learning styles are significantly not different between male and female subject which is confirmed by the earlier studies. Also the respondents with different program of study (Masters and PhD) did not have a different learning style.

Implication

The findings of this study have shown that there is a relationship between personality types and learning

styles. This implied that in order to facilitate learning at an institution of higher learning, lecturers and learners have to be aware of the afore-mentioned relationship. An improved understanding of this relationship by knowing the dominant type of personality and learning style could help program professionals understand the required actions. As a result knowing the nature and different kinds of learning styles that were used by students on one hand could help instructors to help the students in optimizing different kind of learning style. In addition, instructors could change their teaching approaches according to their student learning style to achieve the highest educational output.

Common features of the conscientiousness dominant personality type of respondents include efficient, organized, planned, reliable, responsible and thorough learning. It is considered that those who score high in 'conscientiousness', value organization and accomplishment and are persistent, careful, and deliberate. Since conscientious people are informed, rational, and think of themselves as high in competence, they are in the high need for achievement and striving for excellence in everything they do. Thus, higher learning institutions should care for them by providing more structured learning programs.

Having kinesthetic as the predominant learning style of respondents within this study means learners remember by doing and participating, moving (acting out) while memorizing, space, moving to music, non-verbal communication, and doing physical activities when solving problems. The uses of how-to-do books and videos, and simulations, group activities, and projects as assessment can further enhance learning. Hence there are useful implications for higher institution of learning in

the formulation of study plans and the achievement of higher learning outcomes. Understanding of the variation of students' learning styles can help administrators and educators design effective curricula and lesson plans to better prepare their students for enhanced outcomes.

The students will be more successful if they know more about their combination and predominant learning styles and personality types. Thus, by knowing their own styles, students will better understand their learning needs and increase their chances of achievement. Also, the implication for the learner is that their knowledge of learning style can be related with their personality and helps them in their learning style selection.

This study lends credence to the Five Factor Model of Personality (1992) and Barsch Learning Style Inventory (1996) in its use for students studying at a foreign higher learning institution.

Recommendations

The study has contributed new knowledge in the literature of personality and learning styles. Besides providing more insight in understanding preferred learning style under the effect of personality type, the study also provides recommendations as follow:-

1. Consider learning styles of foreign students in general and Iranian students specifically in designing learning atmosphere that meets group preferences for optimum learning outcomes.
2. Discovering of learning style patterns under the influence of personality types among foreign

students is meaningful information to instructors and institution of higher learning to help students and create effective learning outcomes.

3. Conduct professional development training on awareness and the use of preferred learning style with an insightful look to students' personality, to create a more effective learning opportunities.
4. Promote flexible learning environment that consider the individual differences of student's.
5. Promote classroom research and data about learning styles.
6. Inform students of their combination and predominant learning styles and personality types which facilitate their adaptive behaviour, particularly, when they travel abroad for studies.

Suggestions for Future Research

Reinvestigation of personality type and learning style of Iranian students in Iranian context is needed for knowing the difference between Iranian students in foreign country compared to Iranian students in home country.

It is also recommended that the instrument be used in future research to create more precise and standardized measure in Persian which is useful for assessing the personality types and learning styles for more insightful learning. Because culture of respondents was not measured in this research, it is recommended that in the future research of learning style the effect of culture be considered.

A study using a qualitative approach could be conducted to provide an in-depth understanding on the

experiences of students at foreign universities which could provide insights into how students adapt their learning styles by considering their personality types.



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Localization of the global language: English literacy in a Taiwanese context

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ABSTRACT

This paper argues that English language curriculum design in Asian schools and universities needs to be informed by better understanding of the specific roles that English language plays in the lives of members of local society. At present, English curriculum policy in Taiwan focuses on the acquisition of core linguistic knowledge. Such a focus carries with it the implicit assumption that linguistic proficiency, once acquired, can be applied successfully in different social contexts. An alternative view, supported by much recent research in English literacy, suggests that members of social groups associated with particular locations, activities, professional fields or cultural backgrounds use literacy in ways which are specific to these social contexts. However, these multiple “literacies” are rarely supported by the mainstream education system. The first part of this paper reviews this research, arguing that the findings are strongly relevant to current English language education practices in Taiwan. The second part of the paper reports on two exploratory studies conducted by the author into English literacy practices in international trading companies in Taiwan. These studies employed qualitative methods to understand the situated meanings that the English texts produced and consumed in these settings held for the participants, and the professional practices they supported. It was found that the participants appropriated various potentialities of literacy into their professional expertise, creating practices that advanced their commercial goals. However, these practices did not closely resemble those emphasized in the English literacy that is generally taught in schools. Curriculum implications for a view of English literacy as situated social practice are discussed.

Keywords: EFL curriculum, literacy education, literacy research, situated literacies

Introduction

Because English is not widely used as a language of daily communication in Taiwan, reading and writing are the major channels through which many Taiwanese engage with English in their academic and professional lives. In the academic domain, students and scholars in Taiwan are increasingly required to read and write in English as part of their everyday academic activities, while the dominance of English as the lingua franca of international business communication means that for many Taiwanese business people, the reading and writing of English has become a routine part of their work. The importance of reading and writing has also been heightened by the rapid development of new Internet-based technologies of communication, which facilitate frequent international communication in writing.

For these reasons, it is not surprising that reading and writing have been major foci for research in the teaching of English as a foreign language (EFL) in Taiwan. As in other localities, this research has tended to focus on reading and writing as distinct language macro-skills, typically addressing the form and meaning of written texts and their constituent parts, the roles of readers and writers in processing and producing written language, and the strategies they employ in this process (Wallace 2001). However, while such research has made great contributions to our understanding of the products and processes of reading and writing, and contributed to the development of curriculum and instruction in these domains, it has rarely investigated the ways Taiwanese learners actually use English reading and writing in everyday life, or considered how these uses may affect the content and style of EFL instruction. In fact, EFL reading and writing instruction at present seems to be based on the assumption that the primary goal is to teach linguistic and related cognitive skills, and that these skills, once learned, can be successfully applied in whatever domains of life they are required.

In recent years, this cognitive-skill view of reading and writing has been challenged by a number of researchers in the field of first language (L1) literacy studies, who have argued that literacy is better regarded as a form of social practice. They propose that uses of literacy are deeply embedded in localized social and cultural practices, which need to be understood and incorporated into literacy education.

This paper discusses the application of these ideas to the teaching and learning of EFL literacy in Taiwan. First, research into literacy as situated social practice is reviewed, and the relevance of this research to the context of EFL education in Taiwan is

evaluated. After that, examples will be presented of findings from two exploratory studies which address EFL literacy practices in one specific local context – international trading companies in Taiwan. The conclusion will discuss ways in which such studies may be able to inform EFL literacy curriculum and pedagogy in a specifically Taiwanese context.

Theoretical framework and literature review

EFL reading and writing as literacy

Before reviewing research into the notion of literacy as social practice, a brief comment is in order with regard to our preference for the term “literacy” when discussing EFL reading and writing. First, the notion of literacy foregrounds “written communication” as a focus of attention, with reading and writing positioned as essential and complementary dimensions, rather than separate linguistic skills (Kern, 2000). Based on this idea, literacy can be defined as including the ability to produce and interpret written texts, critical awareness of relationships between texts, awareness of discourse conventions, and competence in social and cultural practices associated with the use of texts in particular settings (Gee, 2008; Hasan, 1996; Kern, 2000; Street, 1995). Framing written communication in this way seems much more consonant with the ways reading and writing are really used in human activity. It also allows for the consideration of a wider range of semiotic practices (Kress, 2000; Kress & Street, 2005), and ideological issues, such as the choice of linguistic forms and processes that are taught and valued, the ways in which such choices benefit or disadvantage different social groups, the meanings and consequences of literacy in different cultures and societies, and the ways alternative forms of literacy are regarded (Bernstein, 1996; Bourdieu & Passeron, 1977; Fairclough, 1995; Van Dijk, 2001).

Literacy as social practice

The prevailing view of literacy in the 1980s was that reading and writing were essentially cognitive processes that involved the application of linguistic knowledge and rules in combination with cognitive schemata to construct meaning from texts (Alexander & Fox, 2004). However, a number of ethnographic studies conducted at this time revealed a more complex relationship between texts and meaning (Heath, 1983; Finnegan, 1982; Scribner & Cole, 1981; Street, 1984). Studies such as these have spawned a school of literacy research focusing on meanings and uses of literacy in specific social contexts, which has come to be known as New Literacy Studies

(NLS). This research tradition is characterized by a number of beliefs about literacy, that can be briefly summarized as follows:

1. Literacy is most usefully regarded as a form of social practice, rather than a set of technical skills contained within the heads of individuals (Barton & Hamilton, 2000; Gee, 2008; Street 1984; 1995).
2. The meanings and functions of literacy vary according to the social context in which it is used. Therefore, it is more useful to talk about “literacies” than “literacy” as a single monolithic entity (Barton & Hamilton, 2000; Gee, 2008; Hull, Mikulecky, St. Clair, & Kerka, 2003; New Literacy Group, 1996;)).
3. Literacy practices are imbued with political and ideological significance; hence, literacy is an arena of struggle for social and cultural dominance (Bernstein, 1996; Bourdieu & Passeron, 1977; Foucault, 1969; Friere, 1970; Gee, 2008; Street, 1995).
4. Literacy changes over time, in response to social and technological change (Kope & Kalantzis, 2000; Kress, 2000; Kress & Street; 2005; New London Group, 1996).
5. The reading and writing of texts in specific contexts is shaped by wider social structures, which are in turn reshaped by the literate acts of individuals (Fairclough, 1995; Giddens, 1984; Kern, 2000).

Methods of research and tools of analysis

Literacy research based on these beliefs has tended to adopt qualitative methods, usually involving extended observation of literacy practices in particular settings. For example, some researchers have focused on new electronic literacies (e.g. Guzzetti & Gamboa, 2005; Lam, 2000; Lewis & Fabos, 2005), while others have explored settings as diverse as hospitals (Gowen, 1992), factories (Hull, Jury, Ziv, & Katz, 1996), and prisons (Wilson, 2000). These researchers have tended not to concern themselves with detailed linguistic analysis of texts, but rather seek to discover the roles that texts play in lives of those that employ them. This often involves analysis of contextual layers affecting the reading and writing of texts, moving from the linguistic and other resources that are employed in their construction, through their immediate and eventual communicative purposes, to their role in the wider sociocultural context within which they are used (Kern, 2000). Therefore, researchers are interested not only in the acts of producing and consuming texts, but also the talk and activities that surround their production and consumption, the roles of these activities in particular social systems or institutions, and the roles of these social systems and institutions in the broader functioning of society (Gee, 2008).

One technique which has been employed to assist in this project is the analysis of “literacy events,” defined as recognizable activities that involve the use of texts, and the texts and talk that surround them (Barton & Hamilton, 2000; Heath, 1982; Street, 1995). Examples may include the reading of a bedtime story to a child, or the delivery of an academic lecture from notes. When certain kinds of literacy events occur regularly within a particular social context, they become part of what have been called “literacy practices” – the general cultural ways of using written language that people draw upon in their lives, and the values, attitudes, feelings and social relationships that are related to them (Barton & Hamilton, 1998, 2000; Street, 1995). It is these literacy practices which are of particular interest to researchers looking for links between literacy and social context. For example, literacy practices may play a significant role in the construction and enactment of social identities, which are an important means by which actors position themselves in relation to others in social space (Goffman, 1959). Literacy practices may also be central to the achievement of human activity, such as work, communication, or creativity. The mission of research into literacy as social practice is to identify and describe the different types of literacy practices that are associated with different domains of life, and reflect on the implications of this for literacy education (Barton & Hamilton, 2000; Gee, 2008).

EFL literacy as social practice

Following on from Krashen (2003), Taiwan could currently be said to be in the grip of “English proficiency test fever.” Based on a widely-held conviction that in an era of globalization, an English-proficient workforce is an important strategy in ensuring sustained economic growth and stability, many Taiwanese organizations and institutions have been designating benchmark standards in English proficiency as prerequisites for graduation or promotion. Underlying this demand for benchmarks is an assumption that high scores in proficiency tests are evidence that the candidates will be able to successfully use English in their work. In other words, English proficiency is seen as a kind of knowledge stored “inside the heads” of individuals, which is then applied in various situations as required.

This view of language proficiency bears a striking similarity to what Street (1984; 1995) has labeled the “autonomous” model of literacy. Street uses “autonomous” to denote the perception of literacy as an “independent variable” (1995, p. 76), which can be isolated from its social context. He argues that the autonomous model’s claims to the universality and neutrality of literacy disguise the fact that the type of literacy

taught in schools is heavily steeped in Western middle-class social and cultural values, and thus its claims to superiority and universality are ideological and culturally biased.

Applying this reasoning to the issue of English proficiency in Taiwan, we may ask: Is English proficiency an “independent variable”? Is it appropriate that one standard of English proficiency be applied to all English users, regardless of the context within which they are using English, or the purposes for which they are using it? Is English proficiency a culturally biased concept?

The ideological issues associated with the emergence of English as the language of international communication are a whole separate field of study (Pennycook, 1995; Phillipson, 1992), and extend beyond the scope of this paper. However, the parallels with Street’s autonomous model of literacy are clear. The next section of this paper briefly describes two exploratory studies that attempted to understand socially situated literacies in the EFL domain.

The English literacy practices of a Taiwanese sales manager

Background and motivation

In the first study to be described here (Trezise, 2010), the author set out to explore the meanings of English reading and writing for a sales manager in a small Taiwanese international trading company. This setting was of interest for a number of reasons. First, the activities of such companies lie at the heart of the rationale for the learning of English as a foreign language in Taiwan: enabling Taiwan’s participation in the global economy through engagement with overseas trading partners. Second, such small to medium-sized enterprises are common in Taiwan, and thus a likely locus for the kind of situated literacy practices we are interested in learning about. Finally, we could find no examples of previous ethnographic studies of language use in Taiwanese international trading companies, suggesting that our current understanding of English literacy use in these settings is largely based on intuition and assumption rather than the findings of systematic research.

Aims of the research

The aims of this study were to identify the functions of English literacy in this setting, to understand the roles played by literacy in the construction and enactment of

professional identities, to observe how the principal participant employed linguistic and other resources as literacy “tools” in the performance of his work, and to consider how his uses of literacy were shaped by prevailing practices of the wider community of international traders. Due to space limitations, only the first of these issues is dealt with in this paper.

Research setting and methodology

The setting for the research was a company dealing in the supply of clothing accessories manufactured in China and Taiwan to customers in Europe, Australia and North America. The principle participant, “Tom”, was the head of the sales division, and also vice general manager of the company. The author visited this company regularly over a period of eight months, observing and participating in the work of the manager, collecting examples of the English documents he used, and discussing issues surrounding these documents with him in extended interviews. Over the period of the study, data were collected about literacy events, which in this setting centered around enquiries and transactions. Understandably, access to data was sometimes restricted, with some documents being of a commercially sensitive nature. However, over the period of the study we were able to accumulate data about twenty five literacy events, including documents, observations and interviews. These were then analyzed from both a micro perspective, centering on the texts themselves, and a macro perspective, trying to place the manager’s engagement with these texts within the wider context of the world of international trade.

Findings

One of the themes that emerged from the study was the use of literacy to enact identities, and in Tom’s case this formed an important part of his professional expertise. With customers located in all parts of the world, a substantial part of Tom’s trading work consisted written correspondence with these customers through email. In his own writing, Tom constructed a professional persona that was clearly dislocated from other personal dimensions of his identity. This professional identity reflected a firmly established habitus (Bourdieu, 1977), stable predispositions accumulated through years of experience in international trade, and was realized through the “social languages” (Gee, 2005) that he employed in his literate discourse. With regard to topic choice, Tom’s literate discourse was strictly business, and although customers would sometimes introduce personal topics into their emails, Tom made no attempt to respond in kind. His separation of personal from professional identities was often

enacted through a preference for the institutional “we,” as the comparison of pronoun usage between Tom and his customer in Table 1 shows. This detachment from the personal dimension of his identity was also enacted through the frequent use of formulaic “business phrases,” such as “Many thanks for your enquiry,” and “We are sending a sample for your further evaluation.”

Table 1 *Comparison of Tom and customer’s pronoun usage in one literacy event*

Name (emails)	I	Me	My	We	Us	Our
Tom (10)	3	1	0	13	10	1
Customer (11)	57	6	2	0	0	0

Tom’s customers, on the other hand, frequently engaged in much more subjective discourse. For example, in one literacy event, a customer took the unusual step of highly praising the seller’s products before ordering:

“I have received the x4 samples with thanks, they are perfect, the correct styles.”

In another literacy event, a native-English speaking customer frequently adopted a style of writing that contained numerous syntactical errors, run on sentences, fragments, comma splices and typographical errors:

“I am contacting you from a garment manufacturer who supply (sic) to the UK High dtreet (sic) stores, we are trying to source the trim attached to this email.”

At the widest sociocultural level, both of these statements appear to be problematic. The first statement is unusual because it is usual in the discourse of international trade for buyers to be critical of products, as they attempt to force the price down (Charles, 1996). The second is unusual because accuracy of written language is traditionally regarded as a manifestation of the professionalism of the writer and the company he or she represents. However, in the particular context of these transactions, as elaborated by Tom at interview, this apparent breaking of rules makes perfect sense. In the first case, the statements of praise were made by a new customer, and hinted at the possibility of further regular orders in the future. This created an incentive for Tom to provide a lower price on the current transaction in the hope of establishing the kind of long-term relationship that his company relied on for profitability. Similarly, although the style adopted in the second statement may indicate the writer is poorly educated, or too busy to proofread her emails, it is also possible that the kind of syntax associated with “correct” English did not support the kind of identity she wished to present to Tom. As a buyer, it is mutually understood that the writer is in a position of power over the seller (Charles, 1996). This writer’s choice to adopt a more “oral” style of discourse may thus have been part of a deliberate attempt to lessen the

social distance between Tom and herself, and facilitate a cooperative rather than combative working relationship. Support for this hypothesis can be found several emails later in the same literacy event, when it was necessary for the writer to demand some improvements to the product on behalf of her own customer. In this email, her writing and punctuation suddenly became completely standard, and the informal tone and frequent politeness markers of her other emails were absent. Clearly, the writer was invoking the authority of her “buyer” identity to ensure that the necessary modifications were made.

The “professional” identity enacted through Tom’s written discourse contained a number of distinct dimensions, which were called out at various times by different dimensions of customer identity (Table 2).

Table 2 *Dimensions of Seller and Buyer Identity*

Seller Identities	Buyer Identities
Professional Dimension	Projected Identities
Expert in international trade	Existing customer
Expert in garment accessories	Regular (A)
Service provider	Occasional (B)
Company representative	Lapsed (C)
Personal Dimension	New Inquirer
Friend	High potential
Husband	Low potential
Father	High risk
	Low risk
	Expert
	Novice

As the most experienced salesperson in the company, Tom was entrusted with the most difficult task of cultivating new customers. Based on his experience in the industry, Tom would classify these customers based on clues contained in their communications, and the identities associated with these classifications would call out corresponding dimensions of his own professional identity. For example, one of Tom’s new customers was an expert in the field of garment accessories but inexperienced in international trade. In one literacy event involving this customer, there was a clear shift of identity roles within the course of the transaction. In the first stage, when they discussed product requirements, both parties foregrounded their

identities as experts through the use of technical terms, and their understanding of design features and production procedures. The customer's discourse was confident and authoritative:

“Picture 1 is an embroidered organza butterfly.”

“I want all the pieces to be sew-on”

“I want it done in pink stitching”

However, as the focus of activity moved from the design and production of the products to the processing of the transaction, it became clear that the customer had little familiarity with the standard processes international trade, and her emails rapidly lost their authoritative tone:

“Do I get to see a sample first?”

“I would love if you would do what you suggested. How does it work?”

Tom was quick to perceive the customer's change of tone, and immediately took on the identity of “mentor.” In the emails that followed, he took charge of the discourse, notifying her about the dispatch of samples, reassuring her that she did not need to pay for them, and explaining how shipping costs would be arranged. This shift to “mentor” identity called out a corresponding shift in the identity enacted by the customer, from demanding buyer to appreciative apprentice, as statements in her subsequent emails reveal:

“I saw pictures of the samples, and they look great.”

“I'm looking forward to seeing them. Thanks so much.”

“That's brilliant, Tom.”

This manipulation of identity was a deliberate strategic action, which Tom implemented through literacy with the eventual goal of winning the customer and advancing the commercial interests of his company.

As the above examples have shown, understanding the full social context within which Tom and his customers employed English literacy reveals dynamic links between language, action, and social interaction. Successful use of literacy in this context is inextricably linked to professional expertise, and does not seem to be closely related to the criteria for success in conventional EFL education. This theme is also evident in the second study to be briefly described here.

The literacy practices of junior sales staff in international trading companies

Background and motivation

This study was originally carried out as a pilot for the project reported above. Our

intention was to conduct a small number of in-depth interviews with graduates of university English departments who were currently employed in international trading companies. We wanted to explore the notion of literacy as social practice in this context, and because of the difficulties in gaining access to workplaces and authentic texts, decided on an interview study as a first step. We wanted to know the purposes for which these staff used English literacy in their work, and in particular the impact of new technologies of communication on their uses of literacy. We were surprised to find that in spite of not having access to textual data, the responses of the interviewees provided interesting and useful insights into the idiosyncratic uses of English literacy by junior staff in these workplaces. We are now treating this as a work in progress, to be developed into a larger scale project in the future.

Participants and settings

All the participants in this exercise were former students of English departments in Taiwanese universities. The least experienced had been working in a trading company for just one year, while the most experienced had been working for more than ten years. The interviewees were all female, and their ages ranged from mid-twenties to mid-thirties. The size of their companies ranged from seven employees to 250 employees, and they were involved in importing products such as LEDs and motor oils, or manufacturing and exporting products such as chemicals, baby accessories and spectacles.

Methodology

The participants were interviewed individually in coffee shops or restaurants, for a period of 90 minute to two hours. A list of questions was drawn up which solicited information about their working environment, their use of English in their daily work, and their use of English in association with new technologies of communication, such as email, instant messaging, and internet telephone and webcam. The interviews were recorded and transcribed for analysis.

Findings

Again, due to space limitations, we will focus on just one aspect of the findings of this study, in this case the engagement by junior staff in two parallel levels of literate discourse. On one hand, the staff in these institutions were, like Tom, required to produce documents that represented the voice of their employing institutions. These

documents served as evidence that they had conducted business appropriately, provided certain information, reached certain agreements with customers, and so on. In these documents, which were subject to scrutiny by higher-ranked officials within the company, the junior staff were required to foreground professional dimensions of identity, as demonstrated by Tom in the examples above. However, the young interviewees in this study also subscribed to a model of business practice based on the idea that business usually proceeds more smoothly and efficiently when the parties involved develop close personal relationships. One of the participants, “Lin,” summarized this point succinctly:

“If you’re not friends, actually there are many things you can’t do.”

In order to establish and maintain positive relationships with their customers or suppliers, the interviewees felt it was necessary to foreground more personal levels of identity, which were incompatible with the professional style of discourse sanctioned by their employers.

The participants’ way out of this dilemma involved the widespread application of twin modes of discourse. On one hand, there was official discourse, which consisted of texts that were public, “on-record,” and understood to represent the company line. On the other hand, the participants also engaged in an unofficial mode of discourse, which was “private”, and “off-record”. Like official discourse, it was designed to advance the interests of the employing institution. However, unlike official discourse, it was invariably conducted between a single author and a single reader. Because its purpose was to overcome the communicative limitations imposed by official modes of discourse, it often contained statements that could not be produced within official discourse (such as admissions of error, disclosures of internal policies, etc.). The result of this, and also the reason, was that it did not produce texts which could serve as evidence.

These two modes of discourse were realized through the adoption of contrasting configurations of literacy tools. For official discourse, the participants employed email, knowing it could be forwarded, CC’d, printed and saved, thus fulfilling the required evidentiary function of this discursive mode. For unofficial discourse, they used instant messaging or internet telephone. The advantages offered by these media were that they were synchronous and ephemeral, offering the opportunity for rapid exchange of information and views, without the creation of a permanent record.

Although the official and unofficial modes of discourse described by these participants involved distinctly different kinds of literacy use, there were strong

intertextual links between them. For example, the traders we interviewed usually negotiated and discussed issues in the unofficial mode before switching to the official mode to confirm what had been agreed upon. From this, it can be seen that if we had relied only on the analysis of official documents in order to understand the literacy practices of these participants, we would have erroneously concluded that only relatively formal registers and identities were involved in the participants' literacy work.

Conclusion

In this paper we have argued the necessity for better understanding of local uses of English literacy through investigation of situated social practices of which it forms a part. The two studies we have described here, although exploratory in nature and limited in scope, provide preliminary evidence of how literacy practices may develop that are uniquely tailored to the settings in which they are used. The first revealed how a Taiwanese sales manager and his customers used literacy to negotiate and enact nuanced identities, and how this identity work was important to the achievement of short- and long-term commercial goals. In the second study, we saw how junior staff in international trading companies used English literacy to engage in parallel modes of discourse, which were designed to reconcile the requirements of their employers with their own preferred modes of business communication.

These preliminary findings provide a starting point for considering how study of situated literacies may inform EFL curriculum and instruction in settings such as Taiwan. For example, it was noticeable that some features of English literacy that are currently emphasized in school, such as grammatical correctness and lexical richness, were rarely mentioned by the participants as being of concern in their work. However, we are not suggesting that the teaching of linguistic conventions is not important. Rather, we would argue that it is insufficient. One feature of the literacy practices observed in these studies was the way in which the participants employed linguistic elements as a resource not only for performing functions associated with their work, but also for scaffolding the social relationships that were integral to the successful performance of these functions. This suggests that as they learn about linguistic systems, students need to be sensitized to the choices offered to them by these systems, and led to see elements such as grammar and vocabulary as resources that may be employed for particular purposes, rather than rules that must be obeyed. This kind of learning could begin by broadening curriculum content to include text types encountered in different kinds of literacies, and broadening the focus of attention in

the study of such texts to include consideration not only of formal elements but also the possible functions being performed by such texts, the identities involved in their construction and consumption, the ways in which linguistic and other semiotic resources have been employed, other choices that may have been available to the writer, and factors which may have influenced the choices that were made. Obviously, it is not possible to train students to become proficient users of all the literacies they will encounter in their future lives. However, we can at least raise awareness of the existence of different literacies, and the kinds of attitudes and competencies students need in order participate in them. In curriculum design, we can also start to consider the ideological forces that result in some literacies being more highly valued than others, and whose interests valuing these literacies over others may serve. Clearly there is much work to be done, if we are to develop an EFL curriculum that adequately responds to the present and future needs of Taiwanese learners. Putting locally situated literacies on the agenda for EFL research is an important first step.

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Private Middle School Students' Perception of Competence and Its Influence on Their School
Adaptation Strategies and Identity: A Case Study in Taiwan

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Introduction

In a social system, people are frequently assigned to or self select a position where it appears the most qualified or suitable. In the old sayings, we heard “People who are capable do more”, “People are born for certain functions”, and “The skilled handles the hard work and the wise worries for solutions”. What composes the capable and the wise has been an unanswered puzzle. Does it mean excellence in performance and examinations, interpersonal social skills, or basic survival skills? Under the traditional Confuciusism, the capable one is frequently referred to the winners in school and examination.

Such perception of competence influenced by meritocracy has widely recognized by the general public in Taiwan. Level of education, i.e. diploma, has been viewed as equivalent to one's ability. Under this circumstance, the perception of competence is shaped by the society's IQism (meaning intelligence quotient determines all). Consequently, student's competence is conceptualized as gaining a score to represent the ability from answering cognitive or abstract level questions because the society only recognizes the intelligence quotient as representation of one's competence. Such biased perception of competence contributes to many problems in Taiwan's education system, such as class grouping by academic performance in middle and high schools. Growing within such surrounding social atmosphere, students would form a single dimensional, uniform perception of competence, i.e. value only the ability to gain high scores in school. The perception of competence can be viewed as a product of social structure. Each unique social culture shapes its perception of ability.

The perception of competence means an individual's recognition and conceptualization about ability, i.e. one's beliefs about her/his ability¹. When this concept is applied to students, the

¹ In English, both “ability” and “competence” refer to one's behavioral capability. Ability is a term more frequently used in psychology literature while competence in sociology. Even so, ability still appears in

perception of competence includes the meaning of ability, the characteristics of the competent, their judgment on applicability by its importance, the future projection of the ability's value, and their evaluation to own and peer's performance by such scale. In this study, we conceptualized the perception of competence not only by the external influences from social structure, but also the process of adaptation and/or resistance during socialization. We examined more closely to the influence of factors such as social class, race, and gender and recognized student's perception of competence is not necessarily influenced by the social force. In addition, we considered student's perception of competence as a function of her/his recognition of self and others, as well as a key factor for their behavior development and smooth school adaptation.

As aforementioned, the development of perception of competence would affect one's behaviors and her/his development of self concept. In the process of educating and learning, student's learning adaptation is highly connected with her/his perception of competence, which is developed from the macro social structure, school stratification, and classroom structure. As stated by Simpson and Rosenholtz (1986), under different school environment, students would develop their perception of competence from daily classroom experience, communication, and message exchange. In other word, the perception of competence is not a fixed concept but attached to social structure. The formation of perception of competence is not only linked to external circumstances, but is also relied on interpersonal interactions. Furthermore, as claimed by the progressivism, student is the centerpiece of teaching. The messages they receive from community, school/classroom and their interactions/communications with people would influence their recognition over their perception of competence and/or even further on their personality, achievements, and lifelong development. The formation of and shaping on student's perception of competence have remained significant topics of exploration in education research.

Based on the literature, the formation of perception of competence is highly associated with the circumstance where one stays. It is reasonable to assume student's perception of competence would vary by type of school. Thus far, most of the published studies collected their data from public schools. The private schools had not been under the spotlight. In fact, parents in Taiwan who send their children to private schools frequently devote more resources and funds in education. They also expect the school and teachers to provide better instruction for their children to perform well in the entrance examination and enter highly ranked schools. In addition to parent's elevated expectations, the private school teachers are frequently charged with the responsibility of recruiting sufficient number of students. Under such pressure, how private middle school student's perception of competence is formed through teacher-student interaction and what coping strategy they use became the focus of this study.

Literature Review

sociology literature and competence in psychology literature. There is no strict line to separate ability and competence. In this study, we attempted to adopt competence to keep the consistency throughout the paper.

This study aimed to explore the process of perception of competence formation among private middle school students and its influences over student's self identity and school adaptation. We reviewed the history, related theories, and existing studies and used them for data analysis and verification of theory applicability. Our literature review can be divided into three parts: the construction of perception of competence, the theories of perception of competence formation, and student's adaptation strategies. They also support the rational and necessity to conduct this study.

The Construction of Perception of Competence

The analysis of perception of competence formation includes two parts: perception of competence is part of the social structure, and perception of competence is a product of social recognition via the dialogue of the internal and external self.

Knowledge is one type of product of social construction. Human knowledge are developed, delivered, and maintained in social circumstances (Berger & Luckmann, 1966). Because a competence is within human's range of knowledge, we can reasonably assume an individual's competence and achievement are parts of social construction and can vary by social and cultural traces. In American society, competence is an important concept, has its value, and is recognized as one of the major contributors to success. However, because competence has its untestability, it frequently becomes a myth. Such myth around competence confuses people in understanding the selection system of a society (Rosenbaum, 1986). Myth here means people treat competence as common sense and reality and ignore the meaning behind it and its phenomenal nature. Thus, prior to describe the concept of competence, the foundation from sociology of knowledge is necessary in order to interpret and analyze mistreated features.

The core value of sociology of knowledge is to properly uncover the reality in daily life. Daily life is the exhibit of human interpretation of reality and their objective meaning and consistency. In other words, the human understandable daily life is an orderly world. The sharing and identity of real meaning is built upon human social interactions. Collectively people define circumstances together and negotiate to adjust their self consciousness. This also means the living interactions with others rely on mutual involvement and its referral social knowledge (Berger & Luckmann, 1966). Hence, the knowledge in daily life is the major driving force to formalize human behavior. It defines the proper places and conditions so to control human behaviors. Based on this view, social knowledge is equivalent to one kind of reality and is established on the foundation of objective assessment of subjective processes and meanings. Through the mediation of language and sign, knowledge contributes to an objective world where allows everything an understandable and shared reality. In the meantime, knowledge internalizes objectivity into consciousness via socialization. In the process of socialization, knowledge is passed along to the next generation. Consequently, people obtain their behavioral referral framework and internalize the objective social structure into personal conscious. Socialization is the process for an individual to accept formalized facts and turn them into their acceptance of truth (Berger & Luckmann, 1966).

Ability Formation Theory

Ability formation theory focuses on the interaction between the macro culture and micro school and gives its attention to social construction. Socialization successfully promotes students to accept the formalized wisdom concept by the society and to be surprised of the intelligence-centered view popularly among people (Simpson & Rosenholtz, 1986). The force from social structure makes people recognize intelligence as ability. Not only are school authorized to define student's meaning of ability, but also the force to socialize students toward the direction of intelligence. Schools also provide an environment different from home, enable students to compare with each other, and shape them with certain intelligence concepts.

From ability formation theory's perspectives, students do not necessarily adopt the formalized model of ability. However, they do adopt an interpretation consistent from the socially formalized concept to define ability. Hence, the shaping of student's perception of competence is deeply formulated by school daily activity and structure. The interaction with and feedback from others guide students to accept the traditional formula, i.e. ability is popular, stable, difference among people. The formation of such formalized concept of ability is through: (Rosenholtz & Simpson, 1984; Simpson & Rosenholtz, 1986)

1. Perception of competence is associated with intelligence and is shaped via comparison. For example, I am in the highest level of reading class. This illustrates the comparison of academic achievements to form the concept of ability.
2. The feedback from teachers and peers influences student's shaping of perception of competence.
3. Student's assignments in each discipline characterize the inference of her/his ability. The daily schedule reflects how the student's ability is formulated.
4. The composition and interpretation of performance evaluation methods reflect student's own appraisal of her/his ability.
5. School experience makes student to gradually accept their formalized understanding of ability is real.

Based on this understanding, school daily routine can be viewed as the process of shaping perception of competence. Students obtain related information about ability through peer comparison, teacher or peer feedback and various forms of evaluation to shape their perception of competence. The shaping of perception of competence is not instant and not given. The shaping of perception of competence is indirect via the collection of information related to academic performance during a period of time.

Rosenholtz and Rosenholtz (1981) especially emphasized the dimensionality of classroom structure would influence the process of comparison among students. One of the dimension,

classroom, includes class's mission structure, student's ownership, teacher's style in grouping students, and evaluation by competition. By its level of dimension, unidimensional and multidimensional are introduced. Rosenholtz and Simpson (1984) indicates unidimensional classroom structure helps student's shaping of perception of competence. Its characteristics include unclassified structure in assignments, uniform assignments, or use similar materials and methods; few options for students, small variation in assignments, and keep students from evaluating themselves; use a whole class as a unit of teaching or clear distinguish of ability groups; and teacher's emphasis in clear distinguish of ability and one dimensional evaluation by subject area. On the contrary, a multidimensional class has different levels of instructional materials, a teacher designs different evaluation for different students, students own higher level of control, and its multidimensional standards also allow students to elevate their self concept via multiple options in a society.

Ability formation theory seems over optimistic about school's functions for socialization. Do students tend to accept the ability under social construction and believe ability has the characteristics of popularity, consensus, and stability. In addition, a society may not have the same perception of ability because of its complex composition of race, social class, and gender factors. Students may not buy in, as Rosenholtz and Simpson (1984) illustrated, teacher-delivered perception of competence.

Student's Adaptation Strategies

School adaptation is a process when a student attempts to adapt, accept or resist an environment actively or passively. Student's school adaptation actually includes a series of adaptation strategies. During daily school routines, both student and teacher take adaptive strategies to fit in each other and seek their own self (Pollard, 1992). Under sociology's scope, strategies means an individual carefully and consciously chooses the solution out of possible options (Scarth, 1987). In other words, student's adaptation strategies means student's selection of idea or action under various conditions and roles such as leader, clown, or bully.

Woods (1979) examined the different ways pupils deal with school life. He argues, however, that schools are more complex than Hargreaves's work would suggest. Woods based his ideas upon a study of Lowfield, a secondary modern in a rural area of the Midlands. He argued that it depended upon whether they accept or reject the aim of academic success and the appropriate forms of behavior within the school. He found eight different modes of adaptation in behavior, varying from conforming to rebellion. This highlights the notion that pupils are not passive recipients of teachers' knowledge but they actively participate in learning and resistance. The eight different modes of adaptation to the school are as following:

1. Ingratiation is the most positive adaptation. Pupils who try to ingratiate themselves identify completely with teachers, and try to earn their favor.
2. Compliance is a less strong positive adaptation to the school. This adaptation is regarded as typical of new pupils in secondary schools.

3. Opportunism is an adaptation which often develops in the second year at school and may be a temporary phase before the pupil develops a stable attitude to the school.
4. Ritualists are deviant to the extent that they reject the goals of education, but they are not difficult to control.
5. Retreatists reject both the goals and the means laid down by the school, but without outright rebellion.
6. According to Woods, a very common adaptation in later years at the school is colonization. This is characterized by indifference to goals with ambivalence about means.
7. Intransigent pupils are indifferent to academic success, and reject the accepted standards of behavior. They are much less afraid than the colonizers to hide their deviance.
8. The final adaptation, rebellion, involves the rejection of both goals and means and their replacement with alternatives.

Research Methods

Site and Sample Selection

A private middle school in northern Taiwan was selected as the location of the study. The school is located in a rural area and the campus holds kindergarten to 12th grades. This middle school has been highly recognized by student's performance over high school entrance examinations, routine habits, and various inter-school competitions. The school also emphasizes extracurricular enrichments. Thus, many enrolled students actually come from out of their assigned school district.

This study purposefully selected one of the top ranked classes, wishfully named Bright Future Class (labeled by the researchers for research purposes). Among the 45 students, 23 are males. Their parents' education levels are around college with spare master's or doctoral degrees. As to their socioeconomic status, most of them are in the mid-class. The majority of the parent's occupations are in business.

Data Collection

This study used a longitudinal participatory observation, in-depth interview, and document analysis. Since September 2009 when the participants entered 8th grade, the researchers observed, twice a week, student's self study periods in the morning, classes, recessions, and lunch breaks for a year. The researchers interviewed the teachers individually and students as a group. Researcher's document analysis covers the school calendar, student's academic records, transcripts, textbooks, notebooks, and assignments. At the time when document appeared inconsistent from interviews, the researchers collected additional data to re-examine the data.

Results and Discussion

Private Middle School Student's Perception of Competence Is Multidimensional and Values Academic Achievements

In the 8th grade class, although students had different attitudes toward competence, they all thought that an outstanding student should get good grades in school. In Tim's opinion², a student of superior competence should have intelligence and knowledge, learn a variety of languages, establish a close relationship with friends and teachers, and develop lots of particular abilities. Sam also emphasized the importance of academic achievements. However, he did not treat all subjects equally important. He thinks the smarter students are supposed to spend more time on sciences than the liberal arts. He sensed people would show the greater respect to the students who are good at Mathematics, Physics, and Chemistry. David said he feels his time in school is not enough. If one student spends all the time on study, he would not be a good student. He gave much attention to extracurricular activities. For example, he likes to play basketball, see movies, and sing songs. So he has more life experience which attracted a lot of peers like to talk to him and make friends. He enjoys greater popularity in the class. Sara thinks a student who only studies hard and treats other people with indifference is not a man of ability. She thinks a bright student should have discussion with teacher in class, get along with peers and process of social influence in which one person can enlist the aid and support of others in a common task.

This middle school has been highly recognized in student's performance over high school entrance examinations, routine habits, and various inter-school competitions. Rosenholtz and Rosenholtz (1981) emphasized the dimensionality of classroom structure would influence the process of comparison among students. In the 8th grade class, tasks are relatively undifferentiated, performance structure is unidimensional. No matter how the teacher managed the instruction by student's preparation or not, the outcome evaluations of learning are the same. This strategy only assures a single stratification dimension for all students. Rosenholtz and Simpson (1984) also indicated grades carry compact symbolic meanings. They can be averaged, giving the appearance of unidimensionality, and they symbolically increase the salience of ability in the classroom. In their opinions, unidimensional classroom structure helps student's shaping of perception of competence. Contrary to the above literature, we found the students in the 8th grade class had relatively more multidimensional perception of competence while values the academic achievements. We found although the students were under the influences of class structure and tended to judge one's abilities by uniformed criteria, they still perceived abilities as performance from multiple sources. They recognize academic achievements as core ability but not the only one. Moreover, possessing smooth interpersonal relationships, showing exceptional talents, being optimistic and aggressive are treated as symbolic of competence.

Students' Fundamental Perception of Competence Can Be Resulted from Their Social Identity

² All student's names are labeled by the researchers.

In school education, the success in student's (learning) adaptation is closely related to self perception of competence, and the development of student's perception of competence varies by the macro social structure, school stratification, and classroom structure. For instances, school administrators support or speak in favor of the ideology of credentialism at any time, and teachers of different subjects assign a huge load of homework to push students to review lessons after class. In addition, students take a lot of tests every day. On a similar track, Stanley's parents are doctors. They believe in that more education is associated with better careers. Stanley has personal tutors at every school level, and he plays the piano very well to receive international awards. Stanley's parents also perceived the learning environment of private school can help their son accumulate greater social capitals. As far as Olivia is concerned, she feels teachers and peers like to have friendly relationships with the students who have academic excellence, especially in the science subjects. She noted people usually describe these kinds of students as genius or the model of ideal students. She also feels the students who are welcomed by teachers and peers possess a higher social status. On the other hand, Kevin's parents are bank managers, and they want Kevin to develop eloquences. They think, after all, to get distinguished social skills is the key to success in the future social life.

As Berger and Luckmann (1966) indicated, socialization is the process for an individual to accept formalized facts and turn them into their acceptance. Knowledge internalizes objectivity into consciousness via socialization and passes along to the next generation. The life experiences of Stanley's parents make Stanley to have a particular idea that the highly educated could bring the lucrative job. Furthermore, the sharing and identity of real meaning is built upon human social interaction. Collectively people define circumstances together and negotiate to adjust their self consciousness. Knowledge is also developed, delivered and maintained in social circumstances (Berger & Luckmann, 1966). Likewise, Olivia perceived the types of people who are popular and liked to become them. Her competence and behaviors are parts of social construction via social interaction. Concluded from our findings, we found, under the influence of significant others such as parents, teachers, and peers, the students shaped their perception of competence and internalized it as part of their self identity.

Private Middle School Students Usually Take Compliance or Colonization Strategies.

Different student groups have their different perception of competence, and it affects their school adaptation strategies. Among the participants, the majority of students tend to take the compliance strategies. For example, they take notes carefully, obey the school curriculum, and try to get good grades to enter the top high schools. Adam and Carol usually raise their hands to offer opinions, and have interactions with teachers voluntarily. Ella always studies hard until she goes over all the schoolwork completely. In addition, Willy insists that the multiple quizzes from school could be beneficial to compete for an outstanding high school. Nevertheless, some students adopt colonization strategies. Although they agree the importance of credentialism, they don't really like spending all the time on books. For instances, Van draws some pictures in the textbook and dozes off in history class. Larry copies Tim's homework to cope with the checks by

the teachers. These students strive against the school regulations in an implicit way.

Strategies means an individual carefully and consciously chooses the solution out of possible options (Scarth, 1987). Woods (1979) examined the different ways pupils deal with school life. These students who take compliance strategies often aim for posts of responsibility and prestige within the school and present themselves as having enthusiasm for the school. As evidenced by this study, the students tended to perform well in class or other extracurricular activities by the school's expectations. On the other hand, students who adopt colonization strategies employ both official and unofficial means to achieve either official or unofficial ends (Woods, 1979). They have the instrumental considerations. Even they don't recognize the policies from school, they still finish in other ways to avoid official punishments. Van's and Larry's acts confirmed Woods' findings. In general, because the parents of private school students tend to agree school's requirements in student's acts and elevated restrictions on daily norm and academic performance, most students chose to follow the rules or pretended to adopt. Very few students used violent or aggressive strategies.

Conclusion

During schooling, the success of learning is closely associated with the student's perception on her/his own competence. This paper has sought to engage with the key question to explore the perception of competence of middle school students who attended a private middle school and how the perception of competence associates with their adaptation strategies in school and their identity. Under the ideology of credentialism in Taiwanese society over a long time, established values, systems and objectives exist and convey to students through various education and activities in school. In fact, middle school students are at the stage of developing self-identity, but the cutting throat competition in high school entrance examination leads to obviously overemphasize intellectual development in middle school education.

The major findings are as following. First of all, private middle school students' perception of competence is multidimensional and values the academic achievements. In addition, students' fundamental perception of competence can be resulted from their social identity. Moreover, under the pressure of standardized tests for high school admission, the private middle school students usually take either compliance or colonization strategy.

In conclusion, exploring the incubation process of and contributors to the perception of competence among private middle school students can enhance the understanding of educational opportunity inequality and broaden the horizon of educational research.

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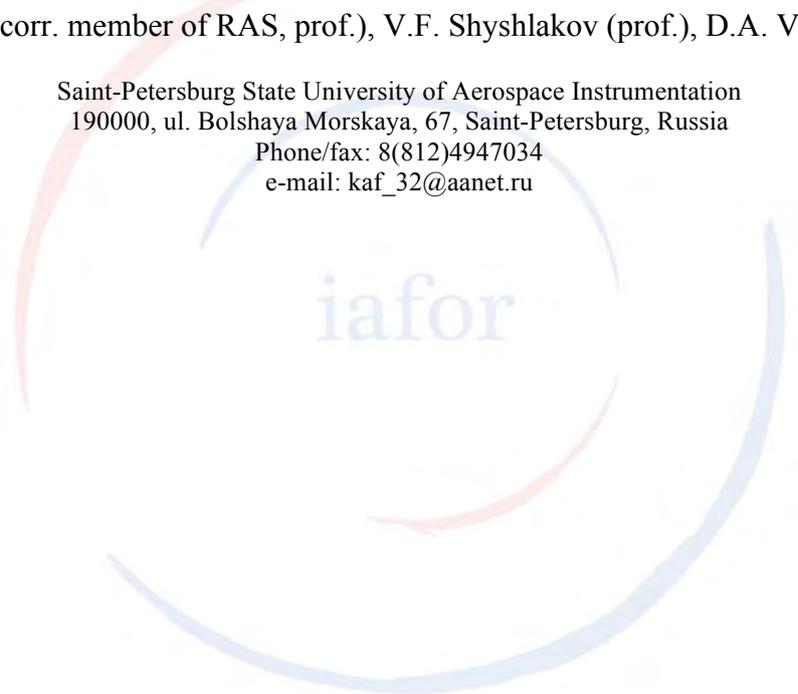
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**RESEARCH ACTIVITY OF STUDENTS AND POSTGRADUATES
IN SCIENTIFIC AND EDUCATIONAL CENTER**

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The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The upper arc is light blue and the lower arc is light red, creating a stylized circular frame around the text.

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Introduction

Two years ago in Russian Federation there was launched a new federal program aimed at the development of Scientific and Research Centers, acting within the Universities. The program is supported and financed by the Ministry for Education and Science. The projects are being accepted on a competitive base. There were approximately 25-30 candidate Universities for one supported project.

The main goal of the Center's activity is the realization of creative potential of College and University students and postgraduates.

General remarks

Saint-Petersburg State University of Aerospace Instrumentation (Russia) has won several projects, but presented below are the results of practical activity of the Center "Innovative Technologies in Electromechanics & Electric Power Engineering". It unites the Faculty of Intelligent Control Systems & Nanotechnologies, Research Institute, acting within the Faculty with well-equipped test facilities and autonomous non-profit-making organization "Electromechanics & Superconductivity". This combination of intellectual potential and physical resources permits to increase the level of education to attract students and postgraduates to scientific researches and to enhance total amount of researches carried out by a joint team. The Center is a structural subdivision of the University and functions in accordance with the statute of the University [1]. Moreover, the joint team, possessing a higher potential, uses an increased amount of possibilities in the international market. As a result the Center is well known for the World-wide Educational and Scientific community [2].

Examples of practical results

During almost 2 years of the Center activity the students took part in numerous theoretical and practical researches. They have developed and tested superconducting model transformer with high-temperature superconducting windings and magnetic cores of amorphous alloy tape. It was presented on the International Exhibition-congress "High Technologies, Innovations, and Investments" in Saint-Petersburg in 2009 and was awarded with a Diploma and silver medal in the nomination "The best juvenile innovation project" (Fig. 1).



Fig. 1 – The Awards of the students
given for the superconducting model transformer development

Also, the students have developed a special device for magnetic fields measurements based on of application of special scanner-analyzer (Fig. 2). It was exposed in 2010 on a Saint-Petersburg Technical Fair and has received a Diploma and silver medal as well. Some students develop a model superconductive magnetic levitation train.



Fig. 2 – The students use the scanner-analyzer
for magnetic fields measurements

The students and postgraduates are the members of the joint team developing new electrotechnical devices based on application of nanomaterials of different kinds: high-temperature superconductors of 2-nd generation, mew types of rare-earth magnets, amorphous alloys, etc.

They take part in Joint International projects as well. For example, in ongoing Israeli-Russian Project dedicated to the development of fault current limiters and energy storage systems for application in solar- and wind power installations. The research work unites our University and the Ben-Gurion University (Tel-Aviv, Israel).

The results of investigations as well as the developed models and make-ups are introduced in the educational process (Fig. 3).



Fig. 3 – The educational process using the models and systems developed

Students become more active with reference to participation in different scientific conferences both held within the University and outside (Fig. 4). Those who graduated the University this year have a good amount of publications; some of them are co-authors of the

patents as well. The best students and postgraduates present the results of their scientific activity on the annually held international conferences organized by the University on board a ship, cruising along the Ladoga and Onega lakes. This year there was carried out a special section dedicated to the scientific activity of the Center. It comprises the master classes of the leading specialists in both innovative and nano-technologies and presentations of the students and postgraduates. The papers were published as individual Proceedings [2].



Fig. 4 – Participation of the students and postgraduates in international and local conferences

Conclusion

The activity of the Scientific and research Center “Innovative Technologies in Electromechanics & Electric Power Engineering” obviously demonstrated a positive influence on the educational process of the faculty of Intelligent Control Systems & Nanotechnologies. It increased the amount of students and postgraduates participating in scientific researches. As a result their graduate diploma projects have higher practical level. The results of students’ scientific and technical activity were successfully presented in the international exhibitions and conferences all around the world. The young team has a good amount of publications and patents; it is involved in the international activity and is acknowledged with the activity of the leading specialists in innovative fields including superconductivity [2].

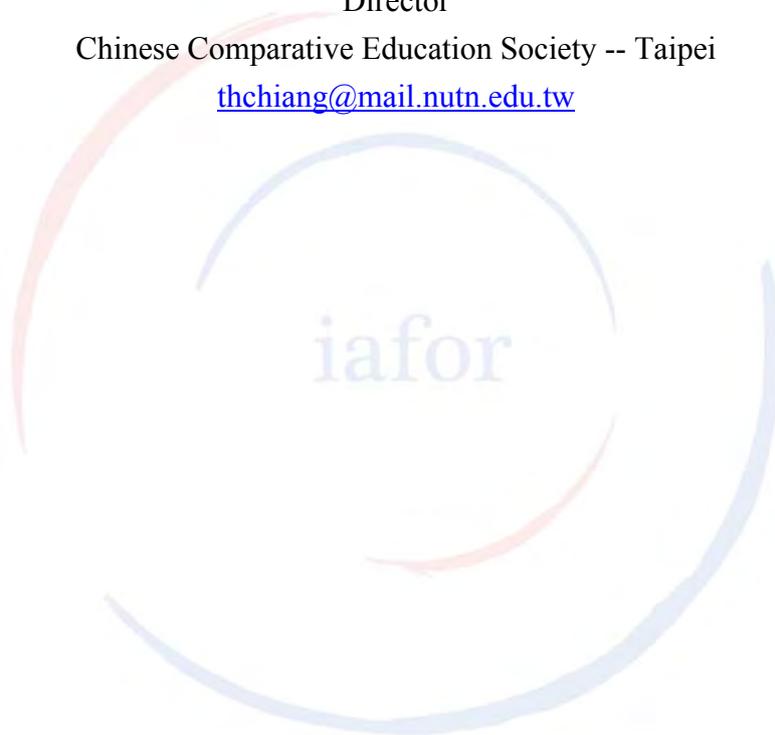
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How Globalization Drives the Higher Education Policy of the State

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Abstract

The theories of A. Gramsci and M. Foucault indicate that the state is actively involved with constructing social discourses, functioning to achieve the purposes of social control. Such arguments tend to view the state as a passive tool, serving the interests of dominant groups. Although the theory of C. Offe is able to fit this gap, the influence of economic globalization hasn't been taken into account.

The emergence of globalization can be traced to the oil crisis in the 1970s, the impact of which crossed national boundaries and fused many countries into an economic alliance. However, the achievement of greater capital profit has changed this trend, as witnessed by the phenomenon that capitalists and their agents, such as the IMF and the OECD, have been proactively promulgating the idea and value of globalization. This development substantially transforms globalization into a certain form of hegemony, leaving the states no choice but to subject themselves to its domination. On the other hand, Western cultures, under the guise of globalization, are able to invade imported countries and deteriorate the national identities of their citizens. It has been argued that in order to lessen this impact, the state will initiate localization, mainly through the channel of education. This article sets out to explore the interactive relationships between globalization and the state.

Keywords: globalization, the state, capitalist, higher education

Introduction

Some key sociologists, such as A. Gramsci and M. Foucault, tend to view the state as a passive tool, serving the interests of dominant groups. Such perspectives tend to underestimate the positive functions of the state. In contrast, C. Offe believes that internal rationalization will maximize the positive functions of bureaucracy. Although such a viewpoint is able to fill the gap noted above, the influence of globalization has not been taken into account. Currently, the world has stepped into a new era of globalization, which generates a profound influence on regulating the daily

life of people. Obviously, globalization has significantly expanded its dominant influence in both economic and political aspects. In response to this phenomenon, this essay intends to profile the relationships between globalization and the state. A further intention is to identify ways in which globalization drives the higher educational policy of the state.

The Political Functions of the State

The Theory of A. Gramsci

Unlike traditional Marxists, whose perspectives have long been confined within a rather narrow scope of political and economic aspects, Gramsci (1971) uncovered the influence of culture on operating the mechanisms of social control. He argued that social control is not mainly reliant upon coercive force, termed as political society, but upon social consensus, termed as civil society. This is because values are the main force that drive people's behavior. Furthermore, values are normally embedded within social cultures. Immersed within such a context, people will be effectively socialized to internalize those values. As a result, most people view social cultures as normal and, thus, lose their critical consciousness. Therefore, in order to maintain the governance of ruling classes, they need to establish the mechanism of cultural hegemony. Functioning like the form of organic solidarity argued by Durkheim (1933), 'cultural hegemony' is able to create a new form of belief, resulting in a strong mode of social consensus. This connection indicates that the culture is able to reshape the public's philosophy of life and, thus, make them subject to its domination. Furthermore, the state in temporary society behaves as an educator:

The bourgeois class poses itself as an organism in continuous movement, capable of absorbing the entire society, assimilating it to its own cultural and economic level. The entire function of the State has been transformed; the State has become an "educator", etc. (Gramsci, 1971: 260)

Therefore, if ruling classes want to sustain their dominant position, they need to direct the development of mainstream social cultures. For Gramsci, achieving such a political intention requires the maximization of the political function of intellectuals:

Each man, finally, outside his professional activity, carries on some form of intellectual activity, that is, he is a "philosopher", an artist, a man of taste, he participates in a particular conception of the world, has a conscious line of moral conduct, and therefore contributes to sustain a conception of the world

or to modify it, that is, to bring into being new modes of thought...

... The mode of being of the new intellectuals can no longer consist in eloquence, which is an exterior and momentary mover of feelings and passions, but in active participation in practical life, as constructor, organizer, "permanent persuader".... (Gramsci, 1971: 9-10)

As the constructors of life philosophy, organic intellectuals are effective in transforming the values and ideas of dominant groups into the mainstream of social cultures that let dominated groups accept what they are. Due to this powerfully political function, dominant groups will devote themselves to assimilating organic intellectuals by offering them numerous posts in the state.

The Theory of M. Foucault

Similarly, Foucault (1972) argues that in terms of constructing the dominant ideology, the state serves as a proactive device. For Foucault, it is very hard for dominant groups to efficiently control their dominated counterparts by employing suppressive force. Rather, a more effective method needs to be employed, which is to construct social discourse which functions to cultivate people with certain forms of ideas and values. This cultivation intends to hatch people into 'docile bodies' who view the existing social institutes as a natural and inevitable result and, then, willingly take the instructions of ruling groups (Foucault, 1991). The close connection between ideas and docile bodies indicates that social discourse serves as a key means for dominant groups to achieve social control. Its educational function is to reshape the operation of social control, shifting from corporal punishment to spiritual discipline:

It is no longer the terrifying restoration of sovereignty that will sustain the ceremony of punishment, but the reactivation of the code, the collective reinforcements of the link between the idea of crime and the idea of punishment. In the penalty, rather than seeing the presence of the sovereign, one will read the laws themselves. The laws associated a particular crime with a particular punishment. As soon as the crime is committed, the punishment will follow at once, enacting the discourse of the law and showing that the code, which links ideas, also links realities...

The meaning of this mourning must be clear to all; each element of its ritual must speak, repeat the crime, recall the law, show the need for punishment and justify its degree... The publicity of punishment must not have the physical effect of terror; it must open up a book to be read. (Foucault, 1991: 110-111)

Those ideas of dominant groups are able to reformulate the philosophy of daily life for people. After the process of socialization, people develop similar concepts and values to those of dominant groups, so that they actively support the instructions of these dominant groups. Due to this great influence, dominant groups are eager to direct the development of social discourses in order to cultivate people into the form of docile bodies, as witnessed by the change of sexual values in history:

By placing the advent of the age of repression in the seventeenth century, after hundreds of years of open spaces and free expression, one adjusts it to coincide with the development of capitalism... if sex is so rigorously repressed, this is because it is incompatible with a general and intensive work imperative. At a time when labor capacity was being systematically exploited, how could this capacity be allowed to dissipate itself in pleasurable pursuits, except in those --- reduced to a minimum --- that enabled it to reproduce itself? (Foucault, 1990: 5-6)

What Foucault emphasizes is that the system of social institutes actively constructs and transmits dominant concepts in order to regulate people's behaviors naturally:

...the 'mind' as a surface of inscription for power, with semiology as its tool; the submission of bodies through the control of ideas; the analysis of representations as a principle in a politics of bodies that was much more effective than the ritual anatomy of torture and execution. (Foucault, 1991: 102)

For Foucault (1990), social institutes have been integrated into the requirements of capital society. Therefore, the system of social institutes commonly assembles and promulgates capitalist ideologies in order to hatch 'docile bodies' that cannot criticize the directions of dominant groups, and can only conform to them.

Both M. Foucault and A. Gramsci provide powerful insights into the notion that concepts are not naturally constructed, and can generate a powerful influence on directing people's behaviors. Therefore, the state is actively involved with building up and transmitting capital ideologies with political intentions – in Popkewitz's (2000: 1803) terms, "*the deployment of power through the construction of particular styles of 'thinking' and 'acting'*". Säfström also comments powerfully on this phenomenon:

The knowledge society tends to promise an essential freedom from the forces of oppression and ignorance with unconditional empowerment of the individual, through which the individual can realize his/her dreams and destiny: an autonomous individual how in freedom creates his/her self. (Säfström, 2005: 585)

The above analysis shows that A. Gramsci and M. Foucault tend to view the state as a device, serving the interests of dominant classes. Therefore, in the eyes of those two scholars, the state is pictured as a passive tool without a neutral position or positive functions.

The Theory of C. Offe

Unlike A. Gramsci and M. Foucault, who view the state as a political instrument to achieve social control and sustain the interests of dominant classes, C. Offe (1985a) intends to highlight the positive functions of the state. Borrowing concepts from some key sociologists, such as T. Parsons and M. Weber, Offe developed the notion of internal rationalization with a functional orientation. For Parsons (1951), individual social parts generate independent functions and, further, formulate integrated services to meet the various needs of people. Following this functional orientation, Offe (1985a, 1985b, 1996) contends that the state needs to be viewed as a functional-oriented system because it has legitimate obligations to promote the interests of people. Offe further borrowed Weber's idea, the mode of rationalization, to explain how the state implements its role. For Weber (1964), the bureaucratic system can be viewed as a typical paradigm to profile modern society. Its operation is mainly reliant upon a key characteristic in scientific mode, rationalization.

Basically, Offe synthesized the above two concepts to develop his own argument, internal rationalization, referring to the idea that civil servants in the bureaucratic system will be loyal to their duties rather than defer to the interests of dominant classes.

A state that is necessary to deal with the collective problems of universal and pure selfishness is at the same time impossible because it cannot originate from a condition of such selfishness. And neither can a state maintain itself in the context of pure selfishness, least of all a democratic state. (Offe, 1996: 163)

What civil servants are concerned with is to benefit the majority of people. Because the relevant policies that they introduce are able to enlarge the scope of economic activities, this change inevitably brings a side effect – that capitalists gain

more profit. Offe further noted that this side effect cannot reverse the functional orientation of civil servants. If they cannot be loyal to their legitimate obligations, the state will fail to implement its role, and, thus, people's trust in the state will collapse. This situation will jeopardize the operation of the state and, thus, result in the generation of social chaos.

Unlike A. Gramsci and M. Foucault who define the state as a passive tool, serving the interests of dominant classes, Offe addresses the positive aspect of the state, arguing that it consistently creates a better life for people and is thus able to sustain a relationship of trust with them. This function is mainly implemented by civil servants, who comply with their legitimate obligations to introduce better policies for the people. Although Offe's argument is able to fill the gap in the theories of Gramsci and Foucault, his functional-oriented perspective doesn't take the issue of globalization into account. Globalization has had a profound influence on the reshaping of new relationships among countries.

Globalization and the State

Backgrounds

Schumpeter (1954) argues that capitalism will not collapse or cease its progression because it carries on the process of creative destruction, referring to a phenomenon that productivity sustains its own innovation. Efficiency determines what kind of productive mode can survive. This principle generates a selective mechanism, in which old modes are continually destroyed by new, more efficient ones. This replacement produces a constant process of creative destruction. Such a principle also mirrors the emergence and development of globalization.

It has been argued that the emergence of globalization can be traced back to the oil crisis in 1970s, which put the issue of natural resources onto the political agenda and also made regional conflict a world issue. This change further instituted the formation of a new political context from 1979 to 1985 in which industrialized societies realized that cooperation rather than competition was the way to produce more profit. This new value has driven most advanced societies to devote themselves to exporting, and, has further significantly expanded the size of the global market. This market has been further enlarged by the entry of former socialist countries from 1990. Another critical factor to brew the development of globalization derived from the deficit budget policy in America since the 1980s, which has gradually opened a large international market for the flow of capital. R. Reagan adopted a philosophy of neo-liberalism in 1980s, the idea of which was to minimize the authority of the state if

a free market could be sustained. This value led his government to implement a severe cut in tax rates, leading to a significant shrink in national tax income. On the other hand, he largely increased capital investment in the military, developing stronger defense forces in order to maintain a leading position in the democratic sphere against the Soviet Union (Frieden, 2006). Another suspected reason for this financial deficit was a strong US dollar policy in the early 1980s that was triggered by the raising of its interest rates. The rise in the dollar substantially decreased the competitiveness of American manufacturers in the world market, and this further decreased national tax income (Glyn, 2006). In order to tackle this severe financial shortage, Reagan's strategy was to borrow money from overseas by selling American national bonds to the value of about 20 millions dollars annually on average, which was equivalent to about 3% of GDP. The next president, G. Bush, didn't change this policy. Ironically, this increasingly serious debt did not serve to reverse this policy trend, and in fact created a new prevailing value in the world (Frieden, 2006). This process was boosted by some countries adopting a philosophy of neo-liberalism, such as the UK (Knight, 1990; Trowler, 2003; Whitty, 1990) and New Zealand (Codd, Gordon and Harker, 1997). The new world value motivated many European countries to join the game, and this further triggered the flow of capital in the world, as was witnessed by the case of G. Soros, who used to prey on the international currency market, taking advantage of events such as the 1997 financial crisis in Asia. The development of internet technology has further accelerated the flow of capital in the international finance market (Frieden, 2006).

For whatever reasons, the key force to move globalization forwards is capitalism. The world system tends to be associated with capitalism, as Wallerstein (2004: 24) noted:

*...A world-economy and a capitalist system go together...
...capitalism cannot function without markets, and it is also true that capitalists regularly say that they favor free markets. But capitalists in fact need not totally free markets but rather markets that are only partially free. (Wallerstein, 2004: 24-25)*

This narration shows that capitalists can gain more profit in a larger market. Therefore, they are eager to expand the size of the global market. As Wallerstein (2004) argued, in order to realize this intention, the most advanced country, the USA, has been proactive in exporting the ideas and values of globalization to imported countries. Washington contends that the global economy is able to benefit American exports and also to enhance the degree of social civilization for its members (Stiglitz,

2002). Giddens (2002) argues that the predominant power of America (or countries in the Western region) doesn't let it fully dominate the operation of globalization. This is because the operation of a globalized economy also requires a common framework of criteria that need to be recognized by its members:

It is fundamental to my argument that globalization today is only partly Westernization. Of course, the Western nations, and more generally the industrial countries, still have far more influence over world affairs than do the poorer states...

... Trade always needs a framework of institutions, as do other forms of economic development. Markets cannot be created by purely economic means, and how far a given economy should be exposed to the world market-place must depend upon a range of criteria. (Giddens, 2002: 16-17)

Therefore, in order to swell the size of the global market, individual countries need to recognize the value and importance of globalization. The first step concerns schooling. In doing this, America has become a transnational corporation to facilitate the expansion of global capitalism:

Today, in the early twenty-first century, the dominant institution that has facilitated global capitalist expansion on behalf of the current center of world imperialism since the post-World War II period --- the United States --- is the transnational corporation... The transnational corporations and banks, based in the leading centers of world capitalism, have thus become the chief instruments of global capitalist expansion and capital accumulation. (Berberoglu, 2003: 125)

It has been argued that in order to achieve this intention, some regional and international agencies have been created (Robertson, Bonal and Dale, 2006).

... Globalization has been accompanied by the creation of new institutions that have joined with existing ones to work across borders. (Stiglitz, 2002: 9)

Their major mission is to transform the concept of globalization into a world value.

The major driving force behind the advance of neoliberal ideas and structures has been economic globalization. Globalization has witnessed the

incorporation of national economies into an interlocking global economy in which production is internationalized and capital flows freely, and often instantly, between countries... The institutions of global economic governance, the International Monetary Fund, the World Bank and, since 1995, the World Trade Organization (formally GATT) were , as a result, converted to the idea of a neoliberal economic order based upon free-market and free-trade principles. Globalization has therefore gone hand in hand with neoliberalism. (Heywood, 2003: 56)

In fact, what those international institutions deliver is the ideology of free market. The Organization for European Economic Cooperation (OECD), for example, was originally entitled the Marshall Program in 1961 and was created for the purpose of reconstructing the collapsed economy in Europe after the Second World War (Rizvi and Lingard, 2006). Because the USA has been its largest sponsor, America is able to manipulate the direction of the OECD. Without the force of a constitution, the key way for the OECD to achieve its purpose, promulgating the value of economic globalization, is to employ a consistent system of strategies. Issuing publications, for example, allows the OECD to create a linear linkage among human capital, economic situation and national power. It is also able to advocate the idea of social efficiency that perfectly matches the requirement of a globalized economy. Open debate and peer pressure are also effective ways for the OECD to build up a consensus among its members.

In terms of profiling such political agencies, the World Bank and the IMF can be viewed as archetypes as well. They were created with the twin mission of rebuilding the devastated European economy after World II and taking collective action at the global level for economic stability in order to prevent the world from another global depression like that of the 1930s. Initially, the operation of the World Bank and the IMF were based on the philosophy of John Maynard Keynes, who argues that governments cannot utilize monetary policy to deal with recessions and unacceptable unemployment rates, but instead must employ fiscal policies, either by increasing expenditure or cutting taxes. However, the World Bank and the IMF began to adopt a free market ideology in the 1980s when Ronald Reagan and Margaret Thatcher were in power:

The ideas and intentions behind the creation of the international economic institution were good ones, yet they gradually evolved over the years to become something very different. The Keynesian orientation of the IMF, which emphasized market failures and the role for government in job creation, was

replaced by the free market mantra of the 1980s, part of a new “Washington Consensus” --- a consensus between the IMF, the World Bank and the US Treasury about the “right” policies for developing countries. (Stiglitz, 2002: 16).

Because developing countries were always in need of help, these countries were generally subject to the imperialistic instructions of international institutions, such as the IMF and the World Bank (Stiglitz, 2002), whose philosophy, the ideology of the free market, tended to buttress the domination of globalization.

The Influence of Globalization on the State

As the above analysis shows, globalization has become a dominant mode directing the world economic system. The world market has been gradually integrated into the mode of globalization. This development allows the market to enlarge its size significantly, and, thus, create a tremendous amount of profit, which is what capitalists are most concerned about. This considerable amount of profit tends to leave most states with no choice but to accept the rules of globalization (Dale, 2003). In pursuing this economic target, the states need to adjust themselves in order to meet the demands of this new system. Generally speaking, they abandon control over the tax policies for imported goods. This phenomenon also projects an impression that globalization has extended its influence from the economic field to the political one. As Giddens (1990) argues, traditionally, sovereignty was mainly reliant upon the boundaries between countries. However, globalization is able to blur such boundaries and, thus, erode the authority of states:

... These processes mark an overall movement towards “one world,” although they are continually fractured by war. Nation-states, it is held, are becoming progressively less sovereign than they used to be in terms of control over their own affairs. (Giddens, 1990: 66)

Giddens further points out that this political crisis normally fuses the states that lose autonomy into regional bodies. Such an argument coincides with the development of regional unions. The European Union (EU), for example, projects this phenomenon. The EU had its genesis in the Single European Act of 1986 and later enlarged its force by creating the European Parliament, with a strong policy of a single currency, the Euro, under the Maastricht Treaty. However, the development of the EU has mainly served to strengthen the influence of Europe both in political and

economic spheres, against the predominance of America (Frieden, 2006). The emergence of the EU in 1986 stimulated the USA to create a counterpart body in North America by simply uniting with Canada to create the North American Free Trade Agreement in 1987. These two bodies project an image that regional bodies are able to let their own members acquire economic profit from globalization and lessen its negative impact, as mentioned above. This prevailing ideology has bred some similar regional bodies. The Southern Common Market, for example, was developed in South America by 1994. This ideology is also able to remold the nature of existing regional bodies. The Association of Southeast Asian Nations, for example, has shifted from a political orientation against communism to a free market domain since 1990 (Frieden, 2006).

Another trend, stimulated by globalization, is localization. Globalization normally facilitates the ability of its advocators, usually Western states, to export their ideas and values to imported countries. This situation will jeopardize the mother cultures of the imported countries and, thus, injure the national identity of their citizens (Dale, 2003; Schriewer, 2003).

The process of globalization is seen as blurring national boundaries, shifting solidarities within and between nation-states, and deeply affecting the constitution of national and interest-group identities. (Morrow and Torres, 2000: 29)

It has been argued that the decline of national identity is partly due to the media. Appadurai (2006), for example, argues that in terms of broadcasting information, the development of advanced internet technology bestows great power upon the media, stimulating the emergence of a global cultural system. It also triggers the mega speed of information transmission that molds an imaginal context in which it is hard for someone to trace any information that he/she receives:

... The world we live in today is characterized by a new role for the imagination in social life...

... The image, the imagined, the imaginary --- these are all terms that direct us to something critical and new in global cultural processes: the imagination as a social practice... the imagination has become an organized field of social practices. (Appadurai, 2006: 180)

This situation generates the phenomenon of ‘no sense of place,’ so that the global cultural system tends to decompose the national identity of citizens in individual

countries. Regarding this political/cultural crisis, Said (2006) contends that one of the key factors that enables America to extend its hegemonic domination is a voluntary subjection of imported countries, such as those in Muslim regions. Socialization occurring in American top universities has made Muslim elites become advocates of American values when they return to their own countries. This phenomenon further devalues the position of their local cultures and, thus collapses their national identities. However, it has also been argued that these imported countries are not so passive, and adopt strategies of localization in order to gain capitalist profit and to avoid this cultural invasion (Dale, 2003; Schriewer, 2003).

The New Higher Educational Policy of the State

The above analysis demonstrates that the state abandons its own governance in order to acquire capital profit, embedding it within a globalized economy. This inclination blurs the boundaries between countries, which used to be a key element sustaining the sovereignty of the state. Therefore, countries are fused into an interlocking body within a global system which has a central value, the free market, and this further reshapes the direction of the states. Unlike the traditional mode of production, globalization emphasizes creativity, based on knowledge. This characteristic not only moves societies into a knowledge-based structure, but also requires them to initiate a new direction in higher education, which is the main avenue for the delivery of knowledge (Stromquist, 2002).

This connection is reinforced by international institutions that, as noted previously, firmly espouse the ideology of globalization, a free market. It has been argued that in terms of this transmission, the OECD is particularly active (Morrow and Torres, 2000; Rizvi and Lingard, 2006). Initially, the OECD focused on the economy. Later, however, education became its central agenda. Its assumption is that higher education institutes are the main base for enhancing the quality of human capital, which in turn is the main force driving the economic development of a country. Therefore, the OECD is committed to persuading its members to have more capital investment in higher education. Furthermore, the OECD has been convinced by its senior administrators, who were mainly recruited from the financial institutes in the Wall Street and persist in the philosophy of neo-liberalism, that a free market is able to promote competitiveness. The idea of free market also means that governmental intervention needs to be minimized. Therefore, neo-liberalism has gradually changed the higher educational policy of the OECD's members, shifting the agenda from social justice to free market. The concept of new managerialism replaces the old one, equity, and dominates higher educational policies of member countries:

The OECD has thus been a strong advocate of the idea of devolution. However, its commitment to devolution does not rest on assumptions of social democracy, but on a set of corporate management principles. Its perspective on devolution has been framed not only by corporate managerialism, but also by market ideologies...

Indeed, the ideology of privatization, the notion that services are best delivered by the private sector within a competitive market, has become something of a mantra within the OECD. (Rizvi and Lingard, 2006: 255)

For advocates of neo-liberalism, privatization is the key way to achieve the devolution that further creates the mechanism of new managerialism, and ensures the effectiveness and competitiveness of higher education. Furthermore, as privatization legitimizes the intrusion of enterprise on education, private managerialism becomes a dogmatic principle for running public universities.

... neoliberal pressures to develop educational policies that attempt to restructure postsecondary educational systems along entrepreneurial lines in order to provide flexible educational responses to the new model of industrial productions... the shift toward “academic capitalism” in higher education. (Morrow and Torres, 2000: 35)

This phenomenon tends to engender a variety of effects, such as reductions in state funding, linkages between higher education and the market, diversification through the creation of specialized universities, and homogenization through standardization of credentials and curricula:

While there is a tendency toward homogenizing content across countries, the simultaneous differentiation of types of universities and institutions of higher education is a globalization goal not only because it caters to different requirements for workers and occupations but also because it opens the educational market to private entrepreneurs and investment. A key tool in accelerating the diversification of institutions of higher education is deregulation, or decreasing the number of rules and guidelines to facilitate the creation and functioning of new institutions. Differentiation of institutions is closely linked to privatization, a path pursued by many countries to reduce public expenditures in education. (Stromquist, 2002: 106)

Morrow and Torres (2000) argue that inevitably, the force of globalization will remold the functions and characteristics of higher education. Its ideology of free market creates a legitimate platform for the introduction of privatization, the rational mechanism of which will tend to transform higher education into “academic capitalism”. Although globalization is able to erode the sovereignty of the state (Morrow and Torres, 2000; Robertson, Bonal and Dale, 2006), the states are not so passive as to conform to the demands of globalization (Dale, 2003; Schriewer, 2003). As noted previously, globalization facilitates the invasion by western cultures of exporting countries. This impact serves to erode their mother cultures, which traditionally function as a key element to sustain the national identity of their citizens. In order to protect their cultures from this crisis, the states normally initiate the strategy of localization. This vital mission is generally reliant upon education (Green, 2006), because schools are the main base for conducting socialization (Parsons, 1961). Therefore, the states will reinforce the socializing function of higher education by introducing more relevant courses in a liberal education curriculum.

Conclusion

Globalization has gradually expanded its influence, remolding the world system. This development is further reinforced by international institutions, such as the OECD and the IMF, which have been created by capitalism with the mission of broadcasting the ideology of free market in order to unleash the operation of globalization. Therefore, domination is not reliant upon the use of coercive force, but on education, which tends to hatch the states as ‘docile bodies’. As a result, the philosophy of neo-liberalism has bestowed a great degree of power upon globalization, allowing it to extend its influence from economy to politic, as witnessed by the phenomenon of states being fused into a global system. Another factor is capitalist profit. As globalization becomes a predominant force to govern the world economy, most countries do not have too much latitude to resist, and must adapt themselves to meet the requirements of globalization. Because higher education is the main base for the improvement of the quality of human capital, functioning as a key element in developing the civilization of a country, normally in the sense of economy, the states are forced to invest more capital in this system. As noted above, the philosophy of globalization is neo-liberalism; hence, the principle of private managerialism has become the canon for running the system of higher education, as witnessed by the phenomenon that most states have introduced policies of privatization. It has been argued that this situation creates a rather large space for capitalists to turn education into “academic capitalism”. On the other hand, the states may not lose control over

education. This is because Western cultures, accompanying globalization, tend to threaten the mother cultures of imported countries and, further, jeopardize the national identities of the citizens of these countries. This situation creates incentive for those imported countries to initiate the strategy of localization to resist this cultural invasion.

All these relationships show how globalization can drive the higher education policy of the state because of the considerable profits that are at stake. The philosophy of the free market creates relevant perfect concepts, such as competitiveness and efficiency. These concepts are able to transform neo-liberalism, the key spirit of globalization, into a world value. The mixture of this material orientation and the new value tends to produce a synthesis that rationalizes globalization as a natural form to regulate the daily life of people. Privatization becomes the best choice to run universities. This situation will commercialize the market of higher education. It would be anticipated that the states become effective implementers to achieve this mission, pressuring higher education to move from a cultural form to an academic/commercial synthesis. This synthesis will require universities to transform themselves into flexible creatures with commercial souls in order to meet the demands of globalization.

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Self-Identification and Citizenship Education in a Global Context

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Abstract

Through theoretical approach, this paper aims at analyzing the self-identification in a global context and its implications about citizenship education. Firstly, this paper lays bare the definitions and critiques of globalization while dealing with the related issues. Then, it describes the transformation of the conceptual development from the traditional fixed self-identity to the fluid self-identification in a global context. Next, it mentioned issues and problems of modern citizenship education based on the traditional self-identity. Finally, it provides some implications about citizenship education on the basement of the self-identification in a global context.

Keywords: self-identification, globalization, citizenship education

I. Introduction

Due to the results of globalization, cosmopolitan citizen society whose values and purposes it pursues is not based on national but global has formed. The foundation of cosmopolitan citizen society comes from values and tradition of culture and religion, and the society also realizes that it should take the whole global as its duty including liberty, diversity and tolerance. Cosmopolitan citizen society, thus, would regard global issues as thoughts of politics and center of movements and offer negotiations and actions while solving transnational problems. Though global citizen have diverse concepts and opinions toward cosmopolitan citizen society, all of them cooperate together to carry out values and forms of cosmopolitanism.

In fact, Imm. Kant proposed in 1795 in “Zum ewigen Frieden” the idea of cosmopolitan citizen. Kant points out that the communication of all nations in the world has developed to some tight extent, so he explains that in nations, it might develop some kind of soft federated relationship and in personal, people should devote to world peace under the context of treating one another as cosmopolitan citizen. With Kant’s viewpoint, although it is hard to achieve the goal of world peace under the endeavor of the United Nations, the connection between people, nations, societies and states, through the process of globalization, is closer than Kant’s generation; even global village has appeared. People living in the world, regardless of their understanding and willing, have been put in the network of cosmopolitan society and even their life have been globalized. Citizen identity, therefore, suffer serious dilemma in the traditional meaning of nations. One the one hand, in the field of national politics whose legality derives from democracy, and the uncertainty of legality become more and more political. On the other hand, in the field of transnational non-politics, the legality coming from non-democratic way has transnational effects. The way to solve the dilemma might depend on the wakefulness of the consciousness of cosmopolitan citizen, which means that all of them should become members of community to cooperate and share one another.

With the development of globalized society, the cosmopolitan citizen in the future should have the identity including the viewpoints of cosmopolitanism which combine the difference of overtaking nations, races, religions, languages and values, and the liberality of diversity and difference. And how to cultivate people’s consciousness of

cosmopolitan, make citizens learn to seek common ground while reserving differences, and to keep diversities and differences improving common interest become a crucial issue. Therefore, this paper tries to analyze, through theoretical approach, the self-identification in a global context and its implications about citizenship education. First, it lays bare the definitions of globalization, global society, and cosmopolitan citizen. Then, it analyzes citizen identification of cosmopolitan citizen. Finally, it offers the suggestion to execute the notion and practice of identification of cosmopolitan citizen.

II. Globalization defined

According to Waters (1995), the word “global” has existed over four hundred years, but after 1960s “globalization,” “globalize,” and “globalizing” are universalized. It is not until the early stage and even the middle age in the 1980s, the academic circle realized the importance of the concept of globalization and then this word is used globally (Robertson, 1992). And, as what Beck (1998) mentions: globalization is actually the word used, misused frequently but defined seldom in the past years; besides, it is also the word which is often misunderstood, ambiguous and influenced deeply by politics.

To understand the meaning of globalization, some scholars define it from the reality. Take Tomlinson (1999) for example, he regards that globalization is an economic space integrating quickly through mutual internationalization among the increasing international trade, financial market, and global fax system within network. This process affects life in modern society and forms a phenomenon that not only each level lives interdependently but also produces synchronicity in time and proximity in space and generally changes local living ways. The limitation of space becomes blurred.

There are other scholars discuss globalization from the changed relationship between time and space, for example, Giddens (1990) describes that globalization is the reinforcement of social relationship around the world and makes events occur locally influenced internationally and vice versa. It is time-space compression (Harvey, 1989) and the consciousness of the world seen as a whole make global condense to a unit.

Robertson (1992) indicates that globalization is not only the condense of the world but also the strength of seeing the world as a whole. The inclination of this one-way dimension is inevitable and it actually is a complicated social phenomenon. Besides, it forms a cosmopolitan culture of all global human beings, and people with different races live in would have no conflicts. Robertson explains the process of the forms of global culture with “selves,” “national societies,” “world system of societies” and “humankind”(Robertson, 1992).

Robertson proposes that globalization is the increase of mutual interactions among these elements and should not be necessary to be opposite to localization but their relationship is interactive. The process between global universality and local particularity is a mobile, and that is to say, the universalism is particularized and the particularism is universalized. He further offers the idea of “glocalization” to eliminate the opposition of universality and particularity and globalization and localization (Tomlinson, 1999).

On the surface, globalization seems born from economical liberalization in the middle of twentieth century, but, actually, globalization keeps going in history and accelerates recently (Waters, 1995). From Robertson’s analysis, the relationship among globalization, capitalism and Western movement is close. Giddens (1990) also presents that the process of modernity produces globalization which is the reinforcement of social relationship around the world. In other word, globalization is almost equal to westernization and most nations suffer or face the influence of western idea, capital system and values.

The other crucial point to promote the development of globalization is modern information, dissemination and communication technology (van Ginkel, 2002 ; Edwards, R. & Usher, R., 2000). These developments compress time and spaces, and prompt to connect time and space globally immediately. People can connect with one another around the world almost synchronously. Because the compression of time and space, it brings out the transformation of space and the movement of the world. With the assistance of communication technology, distance is no more a difficult. The disappearance of boundaries which between nations, no matter made artificially or naturally, and the distance cause temporary movement by touring and long-term movement by laboring, immigrating and exiling. This global movement also changes

“ethnoscapes” and re-describes the map of social space (Appadurai, 1990). A single community might distribute over different space, and the same space might combine a lot of communities. Such diverse distribution of community makes impact on the identity of society, culture and nation.

Bauman(1995) indicates that identity in a postmodern global society has become diverse, fluid and fragmental. He expresses that subject of modernity is to construct a firm identity, but in postmodern society, it tries to keep the openness of identification rather than a fixable one. Bauman also uses a metaphor to lay bare that people in modern life are like pilgrims, and the problem they have to solve is to know how to go from here to there. But, people live in postmodern society are like “stroller,” “vagabond,” “tourist” and “player” who face the problems as: Where can or should I go? and Where the load leads to? The tasks of pilgrims in modern society are to store energy, confirm the belief and keep the goal moving forward to holy city to accomplish the definite mission. Otherwise, people in postmodern society would choose a way at the nearest crossroads, look for new experiences in a new place, and at the same time narrow down the risk that new experiences might bring. They would, thus, tear down the experience of each roam, pause and play into fragments.

As what mentions above, globalization mainly means the outcome of westernization through these two drives, information dissemination and communication and transportation. Both the drives make the world develop into an ongoing process that a unit or homogeneity is forming. The ongoing process has changed people’s recognition of time and space. The relationship between human beings, societies, nations and regions is tight and interdependent, challenging the boundaries between nations, shaking and decreasing interior power in nations, and individual identification also become fluid, fragmental and diverse. When people are involved in cosmopolitan society, it is the destiny instead of individual choice for them to be cosmopolitan citizen. Under such context, the consciousness of cosmopolitan citizen is, step by step, known and accepted, and, in the future, the identification of cosmopolitan citizen should be paid attention to.

III. Identification under Globalization

According to Silverman, “citizenship” which has elements as “universal”, “particular,” public and private sphere occurred in the Enlightenment and the French Revolution (Silverman, 1999). Citizenship means that citizen have their status and right in the society, especially the right to participate in politics. Habermas also shows that citizenship might not only mean members in a nation, define citizen’s right and obligation, but also indicate the core of citizen identification which is the right to practice politics and communication. And there are two viewpoints about “citizenship,” one is from Locke’s liberalism which takes the idea of individualism-instrumentalism as citizen’s role and the other is from Aristotle’s republicanism which takes the idea of communication and ethicality as citizen’s role (Habermas, 1996).

Liberalism originates from Locke and Kant, and is spread by Rawls. It presumes that society consists of individuals and each of them has “the self” transcendently which means the transcendental self is prior to purpose and value. Rawls’ argument of justice describes an “original position” and a “veil of ignorance” of the self. The self makes decisions which form the community life with ignorance. Therefore, the self is prior to community and individual decisions construct the community. Rawls also mentions “justice as fairness” to indicate society should be combined with citizen with liberality and fairness.

Callan(1991) further says that achievement of Rawls’ argument is based on a particular citizenship education which has three aims: first, all social members agree with the validity of justice; second, all social members should have the same explanation of justice; third, to integrate the society with citizenship education. And any individual value cannot go beyond justice while conflicts occur between justice and citizen’s value. Callan thinks that Rawls’ idea shows out that justice of liberalism is beyond the diverse value of private sphere, and with the common consensus toward justice, the content of citizenship education appears.

Sandel (1998); however, argues the self of liberalism is “a teleological, embedded, cognitive self.” He expresses that no one can live without community and individual identification is decided by community instead of forming transcendently. In other words, it is the community decides who I am, not the individual himself. So the way to understand individual identification, purpose, and value is to understand the

historical context of the community. MacIntyre (1984) has similar opinion that people's moral value owns its context and to understand the purpose and value should understand the community people live first. MacIntyre lays bare that only through studying individual landscape or "narrative" can his life be understood. But his narrative and other's happen simultaneously and other's narrative involves with his narrative. That is to say, only in the community can individual be understood. Therefore, each one response the surroundings as a social identified bearer who is also called "narrative selfhood."

Taylor (1985) names liberalism and individualism as "atomic individualism" and regards that only in the community can individual autonomy develop. So the community becomes a common culture whose premise is moral autonomy. In other words, individual autonomy operates within social culture.

The main idea of communitarianism is that people cannot live without history and culture. People should follow the values and rules in the community to pursue common good. Republicanism based on communitarianism shows that as a citizen, he must participate in democracy rather than just observe outside. By this way, the democracy should be constructed within some politics and it would be carried out if people participate in it with inter-subjectivity. From Robertson's opinion, liberalism is the process from universal to particular, but republicanism is from particular to universal. Liberalism emphasizes on the individual instead of the nation and the knowledge of common decision, right and ability influenced by the individual. Otherwise, republicanism puts the individual within the nation and people's duty is to participate in common life (Alfonsi, 1997).

Habermas (1996) makes the difference between citizenship in liberalism and in republicanism. Citizenship in liberalism is based on law, but in republicanism is based on ethical culture. The law protects citizen's right to pursue personal interest without violate it and also prevents over interventions of nations. The subject in that way has passive right in a promised space. However, citizenship in republicanism belonging to active mode regards that civil right is to participate public politics and to communicate. It promises citizen to participate public affairs in order to form liberal and fair subject.

No matter liberalism or republicanism, basically, is the democracy based on the nation. But, while globalization spreads around the world and does impact on nations, is the premise based on nations still appropriate? Democracy does not consider about globalization and forms nations in early time, but as time goes by, globalization challenges democracy founded by nations which can no longer deal with transnational events and problems. McGrew (1997) thinks that democracy based on nations is not suitable for human community, and a new democracy should be constructed. It is what Robertson remarks in the global field that citizenship should be put into the interaction between nations and human beings.

With the formation of global society and the challenge of global democracy, Habermas (1996) regards that either liberalism or republicanism takes will to see citizen's political participation, which means that all man should have equal opportunity to show his political will. So, either to pursue individual interest as Locke or to get political liberty as Mill, it shows what public is. Thus, democracy turns into an open discourse of all human beings and decides people's expectancy and acceptance of reasonable results. This discourse changes a procedure of democracy which is the "model of deliberative politics."

The model of deliberative politics means that citizen develops a common consensus in arguable politics, laws and moral problems through discourse. And the common consensus might be temporal because everyone might make mistake. So they should learn to accept other's opinions. Only with diverse opinions instead of oppression, people can examine what is good for them. Besides, the "model of deliberative politics" makes sure that no one is excluded or marginalized and promises to protect the weakness (Habermas, 1996). That is to say, through the model of deliberative politics, individual preference can and should change with public discussion on public interest and exists without being oppressed or excluded.

It should promise the open discourse to prevent strategical behaviors or conspiracy in the model of deliberative politics; therefore, in an ideal deliberative politics of democratic community people can take part in freely and are ready to change their viewpoint while having discourse. With the discourse, the achievement of common consensus and decision reflect not only the participators' interest or opinions but also their judgment (Miller, 2000). In other words, the aim of democracy of this discourse

is not to pursue common consensus but to balance different opinions while discussing (Miller, 2000).

The characteristic of the model of deliberative politics can be the conditions of being cosmopolitan citizens whose civil position develops gradually with political communication. At last, Habermas (1996) optimistically thinks that through the discourse, to be a cosmopolitan citizen is no longer a dream, and the continuum between national citizenship and cosmopolitan citizenship has gradually formed.

IV. Citizenship Education in a Global Context

Dewey proposes the importance of citizenship education near a century age. He presents that teachers who profoundly realize democracy can influence more extensive discussion on community, can bring a revolution of democratic education and makes a reciprocal relationship between society and education. Thus, education plays critical role in reconstructing democratic citizenship.

Giroux (1989) offers four dimensions to citizenship education in modern society. First, agree with the concept of democracy which cannot be constructed with transcendent truth or authority because democracy is a social practice formed by competitive powers, politics and community ideology. And citizens play the role to query, define and form their relationship between politics and society. Second, strengthen citizens' relationship between citizen identification and democracy. Third, the recovery of democratic discourse cannot eliminate critical language and need a language to connect and construct a new social order. At last, educator should place school as a public space which means educator should legalize school as a space where offers citizens common service. And school education would cultivate citizens' abilities, participation and morality.

Giroux' concept of citizenship education succeeds to Dewey's idea which emphasizes on the ability of criticizing and introspecting. But, democracy in global society is different from in nation stage, Olssen, Codd & O'Neil(2004) points out that democracy in global society focuses on: 1. security; 2. liberty; 3. tolerance; 4. fairness

and justice; 5. the equality between resource and ability. Olssen, Codd & O'Neill also mentions that such democracy should respect multiculturalism, and vice versa. Such democracy should construct a new universality and let the minority open to the world and such "open" becomes a leading idea of cosmopolitan involving in citizenship education. So democracy becomes the support of multiculturalism (Olssen, Codd & O'Neill, 2004). Then, Kymlicka's (1995) "multicultural citizenship" will become an important identification of cosmopolitan citizens. The global society must become a multicultural society and to understand multi-culture is necessary. Therefore, to add multicultural education to Giroux' citizenship education will make the nurture of cosmopolitan citizenship more complete.

Callan(1991) describes that such multicultural education need a citizenship with "sympathetic imagination" which means the ability to think for others and to live with others in order to concern about the alienated life. Rorty (1999) maintains that people can completely understand other races through sympathetic education. The union of cosmopolitan citizen is founded by human right whose fundamental is moralism. That is to say, people will show their indignation on nation's suppressing and abusing human right. Rorty says that education can help to educate students be kind, tolerant, reliable and respectful. It does not teach students to put unreasonable label on "the other" who do not understand tolerance, but to teach them "the other" might be more reasonable than them. The problem of "the other" is that they cannot live well in some good surroundings, and lose the opportunity to accept good education. Security and sympathy are what they are deprived, so to compensate them these two elements is necessary. Security, which is a living condition to avoid risks and sympathy, which is a reflection of cruel institution, are implicative of each other. Thus, "trust" rather than "obligation" should be seen as basic moral value, and this is not the command of moral rules but a progress of sympathy.

Except "sympathetic imagination," "conversation" is also a main concept of multicultural education. To resist racial discrimination in educational surrounding, the importance is through "conversation" rather than exclude "prejudice." Through conversation, the two parties no longer try to persuade each other but to consider the other's opinions and explore both sides' preference and interest to find out common consensus. Jones' education of conversation echoes Habermas viewpoints of the deliberative democracy and makes it the major condition of deliberative democracy. In the global society what cosmopolitan citizen should be equipped with tolerance and

diverse, sympathy and imagination, critique and introspection, union and conversation, and any complicated deliberative forms.

In conclusion, cosmopolitan citizen should have: liberty and democracy, sympathy and concern, fairness and justice, respect and tolerance, conversation and common consensus, and movement and responsibility. And this is the main point to practice citizenship education.

V. Conclusion

There are no necessary of conflicts in the cosmopolitan citizen and local identification. Citizenship in the global society is fluid, diverse and relative. To be a cosmopolitan citizen does not need to give up or deny localized identification because no matter glocalization or globalization is basically a dynamic process. Individuals extend their living experience and meaning from localized identification, but each of them belongs to the world and have to respect and concern one another. Thus, to figure out citizenship education with the aim of being a cosmopolitan citizen is important. Such identification gets rid of the framework of liberalism and communitarianism, but appears in the “model of deliberative politics.” Habermas also proposes that through the “model of deliberative politics,” national and cosmopolitan citizen become a continuum. Education of the cosmopolitan citizenship focuses on democracy, tolerance, diversity, conversation and sympathetic imagination. Only through education can people become cosmopolitan citizen in the global world.

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Standard-based teacher education reform in the context of globalization: The case in Taiwan

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Abstract

Teacher education reforms are underway in many parts of the world, including Europe, British, and the US. Reflecting an international convergence is toward uniformity, conformity, and compliance. Obviously, teaching professional standards clearly to identify teacher knowledge and competence are the most concrete symbolic for highly quality of teacher education reform. This paper is to analyze the policy of standard-based of teacher education reform in Taiwan in context of globalization. First, this paper examines trend of standards-based teacher education from global. Second, this paper analyzes the development of standard-based teacher education policy in Taiwan by comparing documents and interview. Finally, this article makes conclusion to teacher education policy in Taiwan.

Keywords: standard-based teacher education policy, teacher education policy, Taiwan

I. Globalization trend

The “Bologna Declaration” is adapted by ministers of education of 29 European countries at University of Bologna in Italy in 1999, and is the main guiding document of the Bologna process. The declaration accentuates that a whole “European Higher Education Area” will be completed in 2010 (Fwu & Hwang, 2010). Due to constructing and executing “Europe of Knowledge” of education policy, European Commission confronts many new and rapidly changing tasks and roles. It claims “High quality teachers and teacher education” has to be central components, and must be another leitmotif of education policy. (Buchberger et al., 2000). Meanwhile, Organization for Economic Co-operation and Development (OECD, 2005:10) analyzes the development of teacher quality in various nations, induces that teacher quality is an abundant professional knowledge on lifelong learning, and values that quality is better than quantity for teachers. In order to realize teacher quality, confirming assessments or maintaining the indicators of teacher quality is significantly important. Obviously, promoting teacher quality is the drive of teacher education reform.

In 2005, the 30th annual European Network on Teacher Education Policy seminar whose topic is “*Standards and quality of teachers and teacher educators*”, discusses teacher quality and standards. Next year, the report for teacher quality policy is made to develop standards which decide directions for teacher quality policy. Besides, quality standards become the shared reference framework and common language (ATEE, 2006). In addition, Eurydice continued to publish four reports by “*The teaching profession in Europe: Profile, trends and concerns*” (Eurydice, 2002a, 2002b, 2003, 2004), which analyze the status, quality assurance and assessments for institutes of teacher education in European countries. European Commission indicated explicitly that teachers develop the competences of challenge to cope with different students. The teachers have following competences include promoting learning result of outcome, constructing learning environment, entering into classroom and community, partnership cooperation, integrating information technology into learning situation, professional practice, continuing professionalization as well as increasing professional self-development of accountability. These teacher competences are made by teacher education, schools, research-based teacher education and quality control to form framework.

In 2005, European Commission (2005 : 9-10) suggests four common principles for teacher competences and qualifications: 1. a well-qualified profession: all teachers are graduates from higher education institutions. 2. a profession placed within the context of lifelong learning: teachers should be supported in order to continue their professional development throughout their careers. 3. a mobile profession: mobility should be a central component of initial and continuing teacher education programmes. 4. a profession based on partnerships: teachers education institutions should organize their work collaboratively in partnership with schools, local work environments, work-based training provides and other stakeholders. There are three key competences which teachers should be able to: 1. work with others: they should be able to work in ways which increase the collective intelligence of learners and cooperate and collaborate with colleagues to enhance their own learning and teaching. 2. work with knowledge, technology and information: teachers need to be able to work with a variety of types of knowledge. Their pedagogic skills should allow them to build and manage learning environments and retain the intellectual freedom to make choices over the delivery of education. 3. work with and in society: they contribute to prepare learners to be globally responsible in their role as EU citizens. To be in line with international, European Commission (2006) with OECD to survey teachers, teaching and learning to form teacher education must have common norm and standard and decide teacher education providing knowledge and content skills.

Just as Whitty, Power, & Halpin (1998:39-41) pointed out education reform in England and Wales, New Zealand, Australia, U.S. and Sweden had to accounting for policy convergence when education policy-makers formulate proposed reforms they look to other countries for inspiration and justification by applying new managerial model to apply standards for controlling the quality of products. As same as in teacher education reform in the trend of teacher education reform in European, UK, U.S., Australia, Singapore, the trend is to control teacher quality by using standards in the accountability system.

In the context of globalization to search for highly qualified teachers, this paper aimed to know what happen in Taiwan in the trend for standard-based teacher education policy. For understanding the context of standard-based teacher education policy in Taiwan, this paper compares different versions of teacher education policy content to find out what have to be figured, done, and lost. Then, some relative teacher education policy makers, officers and scholars are interviewed to see the issues in the process of making policy in Taiwan.

II Methods

For understanding the case in Taiwan in the context of standards-based teacher education policy, this paper firstly reviews the “Proposal for teacher education policy” by the Association of Normal Educations of the R.O.C., “Programme on promoting the quality of teacher education” in 2006 and “Programme on promoting the quality of elementary and secondary teachers” in 2009 the two important policy texts in Taiwan to establish standard based teacher education policy. Secondly, this paper compares the contents of the above three to find the same and different to define the stability of policy development. Thirdly, this paper interviews teacher education policy maker and scholars (see the table 1) to understand the context for developing standards-based teacher education.

Table 1 Interviewees list

interviewee	Identification at time
A, professor	Leader of research team
B, professor	member of research team
C, professor	department head of Ministry of Education
D, policy maker	department head of Ministry of Education
E, policy maker	Chief of Division

III. The historical development

“Teachers Preparation Act of 1994” was enacted to substitute for “Normal Education Act of 1979” in Taiwan. In 1994, the new teacher education policy was initiated that turned the model of teacher education in Taiwan from a labor market driven by planning and centralized control to one that guided by market principle. By market principle, the number of Teacher Education Institutions (or Center for Teacher Education Program) increased from 12(nine teacher colleges and three normal universities) to 78 within a short period of time. The reformed was implemented to increase the quality and independence of teachers through competition and diversified sources of supply. Since 2004, teacher education has become even more challenging for policy makers due to the oversupply of teacher candidates, problematic teacher quality, and decreasing prestige to teacher education policy. The Ministry of

Education in Taiwan began to delete over prepare teacher candidates by teacher qualification test, evaluation of teacher education program, and normal university or college transform into comprehensive university. At the same time, the Association of Normal Educations of the R.O.C was sponsored to research on teacher education by Ministry of Education due to promote teacher quality.

“Teachers Preparation Act of 1994” shaped by market model to prepare teachers without research based made to big crash to teacher education (interviewee A). In order to making policy on research, Ministry of Education formulates “Programme on promoting on the quality of teacher education” based on the research result from “Proposal on teacher education policy”. But the original contact title “White paper for teacher education policy” is changed as “Proposal for teacher education policy” for unworthy of the name by new minister Tu, Cheng-sheng (interview A). After implementing “Programme on promoting on the quality of teacher education” since 2006, Ministry of Education enforces “Programme on promoting on the quality of elementary and secondary school teachers” the second stages to upgrade teacher quality. Since executing the “Programme on promoting on the quality of teacher education”, this is the first time Ministry of Education sets up the direction to standard-based teacher education. The most impact on standard-based teacher education is the research outcomes of “Proposal on teacher education policy” (MOE, 2006:1; Wu, 2005:232). Therefore, “Proposal on teacher education policy”, “Programme on promoting on the quality of teacher education” and “Programme on promoting on the quality of teacher education” are the texts this paper analysis.

IV. The context in standard-based teacher education policy

“Teachers Preparation Act of 1994” was the politic product for opening the teacher pool to let one who wants to be a teacher without traditional preparation. Former minister Huang, Jong-Tsun is the former research fellow, Academia Sinica. He does know the principle of the policy comes from researches base. So when Huang as minister, he subsidizes the Association of Normal Educations of the R.O.C to taking shape “White paper for teacher education policy” in 2003.(Interviewee B, D) Market-driven teacher education might not be an ideal choice for preparing future teachers in Taiwan. There must be another approach to preparing highly qualified teachers. On searching excellent teachers’ picture, the Association of Normal Educations of the R.O.C scheme the model of teacher education. The Association forms a research team making up from leader of diversity type of teacher education program including traditional normal university and college, teacher education center

from comprehensive university, and private university. There were 8 research fellows and an assistant. The Association used literatures review, questionnaire survey, data, focus meeting, discussion meeting, and public hearing (Wu, Yang, Chou, Wu, Kao, Fwu, Chen, Fang, & Chen, 2005: 10). The research ended in March 2005 and submitted to Ministry of Education and changed the title as “Proposal for teacher education policy”.

This research based on the idea of professionalize and high quality teacher education to divide into five dimensions, pre-service teacher education, intern, teacher qualification test, select teachers, and teacher professional development. Every dimension demarcates idea and goal, question/issues analysis, strategy, picture, and action plan to make rubric for recommendation to government (Wu, et.al., 2005:10).

Due to changing minister, the chair of the Association made twice of presentation brief to new minister Tu. On unworthy of the name “white paper”, the title turned into “Proposal for teacher education policy” and set up the standard-based teacher education policy (Interviewee, B).

Chen, I Hsing, the head of Department of Secondary School, read “Proposal for teacher education policy” several times making the standard-based approach to establish “Programme on promoting the quality of teacher education” in 2006(Interviewee, A, D, E). The four-years programme follows the research results to set up standard-based teacher education policy. The research results and the programme is compared as table 2

Table 2 : Comparative table between “Proposal for teacher education policy” and “Programme on promoting the quality of teacher education”

Proposal for teacher education policy	Programme on promoting the quality of teacher education
Suggesting standard-based teacher education policy	Suggesting standard-based teacher education policy
Assisting in reforming “teachers’ collage”	Assisting in reforming “normal university/ university of education”
Building in “institutes of teacher education” of assessment and announcing and countermanding mechanism	Building in “university of teacher education” of assessment and announcing and countermanding mechanism
Gaining teaching professional graduate	none

of teacher education process	
Completing system of Teacher Certification Exam	Reinforcing system of Teacher Certification Exam
Executing education practice	Reinforcing education practice of effectiveness
Strengthening the development of teacher professional competences	Strengthening teacher professional competences
Constructing teachers' supply-demand of assessment and teachers' database system	Constructing supply-demand System of Human Resources for teachers as well as supervisory mechanism
	Improving below Senior High School teachers' educational background
	Promoting mechanism which award excellent teachers and eliminate unqualified teachers

As table 2, the standard-based teacher education policy is the first one on the list. And there are highly percents of research suggestions turn into programme. Apparently, "Programme on promoting the quality of teacher education" was based on the research.

Ministry of Education announces the standards for specific kind of branch of teacher education program made by the Association of Normal Educations of the R.O.C. in 2007 to demand teacher education institutes to implement. But it's hard for teacher education institutes to carry out the standards without regulations or steps. In 2008, the head executing "Programme on promoting the quality of teacher education" was replaced to transform to be the director of National Taiwan Science Education Center (Interviewee, E). The successor head of Department of Secondary Education emphasis on the evaluation of teacher professional development and neglect the standard-based teacher education policy. Thought there still has the standards of evaluation of teachers, but it doesn't connect with the standards of different kind of branch. The standards of teacher education program and teacher evaluation seem not to be integrated.

Works to standard-based teacher education policy procrastinate until the research "*Review and future development of teacher education policy*" is published by National Academy of Education Research Preparatory Office and the dateline of "Programme on promoting the quality of teacher education" is approaching in 2009.

Ministry of Education arranges secondary stages of standard-based teacher education policy “Programme on promoting on the quality of elementary and secondary school teachers”. The comparison among three texts for going standard-based of teacher is as table 3:

Table 3 The comparison among proposal for teacher education policy” and “Programme on promoting the quality of teacher education”

proposal for teacher education policy	Programme on promoting the quality of teacher education	Programme on promoting the quality of elementary and secondary school Teachers (execution strategy)
Advising the standard-based of teacher education policies	Advising the standard-based of teacher education policies	Implementing the policy for teacher education with measure Enhancing the quality of teacher education Advancing the nurture government-supported student Impulsing the educational service in remote districts
Assisting teachers' colleges have transition development	Assisting normal/education university have transition development	Developing the key teacher education universities
Building in “institutes of teacher education” of assessment and announcing and countermanding mechanism	Building in “university of teacher education” of assessment and announcing and countermanding mechanism	none
Gaining teaching professional graduate of teacher education process		Performing the context of strategy of “develop graduated teacher education system” that enforce the executive of quality for teacher education
”Completing” system of Teacher Certification Exam	” Reinforcing” system of Teacher Certification Exam	Advancing the teacher certification system
”Executing” education practice	” Reinforcing” education practice of effectiveness	The completion for internship system Advancing the contents for internship system

<p>Strengthening the development of teacher professional competences</p>	<p>Strengthening teacher professional competences</p>	<p>Conducting central, native, and school teachers in service training Building diverse teachers in service training Building teachers advanced system Promoting the quality of teachers in remote districts Promoting principles and teachers' professional ability The professional development evaluation for elementary and secondary school teachers</p>
<p>Constructing teachers' supply-demand of assessment and teachers' database system</p>	<p>Constructing supply-demand System of Human Resources for teachers as well as supervisory mechanism</p>	<p>implementing fair and explicit teacher-selection advancing the system of elementary teaching license with special skills establishing the system of supportive teachers for elementary and secondary teaching implementing the regulation of agent teacher and applying human resource</p>
	<p>Improving below Senior High School teachers' educational background</p>	
	<p>Promoting mechanism which award excellent teachers and eliminate unqualified teachers</p>	<p>Awarding excellent teachers holding interactional activities for teachers establishing the system of concern for teachers implementing to start and inquiry unqualified teachers completing to handle unqualified teachers of</p>

		mechanism
		Rationalizing rights of teacher retirement and pension Planning the system of teacher salary and benefits

As table 3 shows, there are clear the differences between the three texts. Standard-based teacher education policy is missing in “Programme on promoting on the quality of elementary and secondary school teachers” at least not at the items. Despite Lee (2008: 256) mentioned that government after reviewing the achievement in 2006 and 2007 gives fresh impetus to control, but the fourth-years efforts are without assessing the outcomes. As Sun (2010:35) points out that standard-based teacher education policy doesn’t put into practice from abstract levels without examine how teacher education program should be managed to prepare highly qualified teachers and organized or what teacher should know and be able to do.

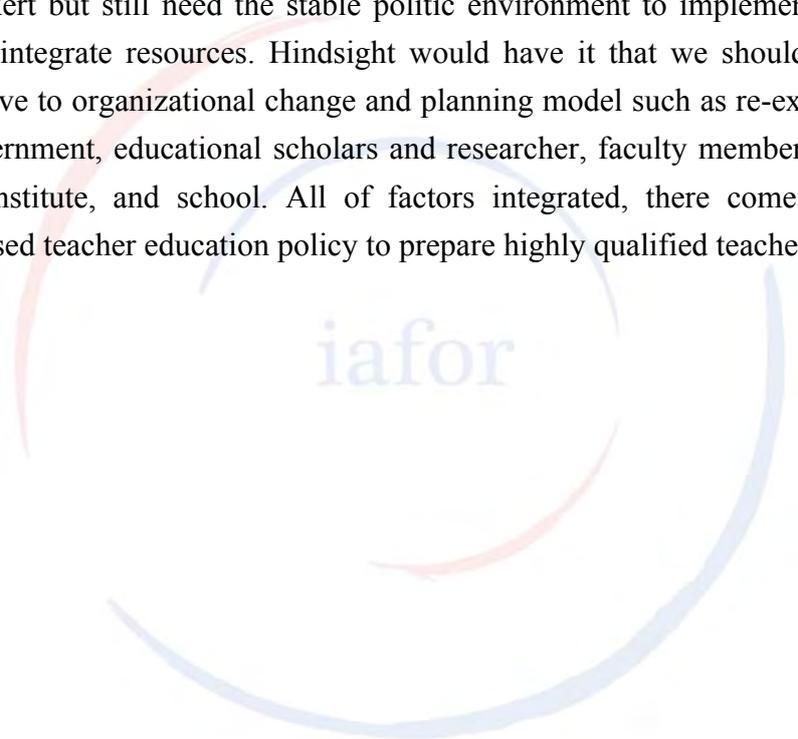
Review versions of the standard-based on preparation or in-service in Taiwan, standards are used as reference not as regulatory text. It’s hard for teachers or teacher educators to know the contents of standards, even to implement it. Teacher professional standards are still in constructive stage (Sun, 2010:27). There is no specific action plan and concrete strategies for teacher education program to follow. After four-years programme running, and coming up the new four-years programme, the standards-based teacher education policy is fuzzy focal point. If standards-based policy is the global tendency, it can’t be overlook in Taiwan as one of the international country.

As the interviewee who has power to influence the teacher education policy says, the market-driven is not suitable for teacher education in Taiwan. Despite market-driven means to produce the accountability, the outcome to prove teacher qualities still is neglect. One of standards functions is to direct the outcome. But According the interviews, it seems the policy makers are the most important factor affecting the standard-based teacher education policy. Although standard-based teacher education policy is depend on research conclusions. Who is the policy maker will ruin the direction of standard-based trend in Taiwan. It is not surprising that politic circumstance modifies the tendency just as Gideonese’s (1993:402) category as political modes. Politic can seriously filter or block out altogether the expertise of professionals in defining and maintaining standard-based teacher education policy.

Policy makers as reformers typically make Standard-based teacher policy easier, more efficient, and of higher status professionally. But it has stuck by policy maker changed. In those conditions, standard-based teacher education reform still has to put a fight in the context of globalization.

V. Conclusion

The process has been painstakingly slow, but there is real evidence of progress. There is not only one strategy to promote teacher education quality or teacher quality by standards. It seems that standard-based of teacher education policy can be core policy to exert but still need the stable politic environment to implement long-term efforts and integrate resources. Hindsight would have it that we should have been more attentive to organizational change and planning model such as re-examining the role of government, educational scholars and researcher, faculty members in teacher education institute, and school. All of factors integrated, there comes the better standard-based teacher education policy to prepare highly qualified teachers.

The logo for the International Association for Frontiers Research (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is surrounded by a circular graphic composed of several overlapping, semi-transparent arcs in shades of blue and red, creating a sense of motion or a globe.

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Ethical challenges regarding globalization of Higher Education

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In the current context of globalization at several levels of human existence – including the economic, cultural, political, technological and ecological – one cannot afford to ignore the impact of such globalization on education, especially where international exchanges in higher education are concerned. What interests me specifically in this regard are ethical issues pertaining to the internationalization of education in such an already largely globalized world, especially if one considers that globalization entails the weakening of former barriers between nations in economic, cultural, social and political terms, in this way increasing the reciprocal ‘flows’ between them (Steger 2003; Olivier 2007). This is the case despite the fact that, at the level of the political, increased security-awareness post-9/11 has placed significant restrictions on, and obstacles in the way of, travel and immigration among different countries.

In brief, I would argue that what one might call ‘Higher Education ethics’ is not merely a subspecies of applied ethics, insofar as ethical considerations concerning internationalization of education cannot omit addressing fundamental philosophical (ethical) questions. To be able to conceptualize the ‘application’ of questions (or answers) regarding justice, for instance, to an increasingly international global student collective, entails a rigorous hermeneutic dialectic between all levels of ethical reflection – from the most abstract to the most materially specific – because of the fact that international contact between students and educational agencies (including lecturing staff) ineluctably includes a confrontation between different cultural values.

These different value-systems are not all of equal cratological (power-related) status, however, with the consequence that some students find themselves in situations where their own value-orientation seems fragile compared to hegemonic systems within which they may find themselves from time to time. Rather than diminishing the need for ethical intervention, however, this makes such intervention – at a rigorous philosophical level – all the more urgent.

1. Social and political justice in a ‘globalized’ world.

When it comes to university education, there are distinguishable (and distinct) social ideals embodied in different models of what ‘the university’ supposedly entails – all rooted, significantly, in distinct cultural epochs – metaphorically in the form of city-names – those of Athens, Berlin, New York and Calcutta (Naudé 2005: 93; see also Olivier 2005). This is heuristically valuable, given the graphic manner in which it invites a critique of contemporary ‘ethical’ consciousness. ‘Athens’, as model of the university, for instance, signifies the universalistic ideal of *rationality* as organizing principle of society, regarding both *theory and*

political praxis among the ancient Greeks, but what it hides is the fact that the society structured by this conception of reason was one shot through with inequalities of all sorts – neither women nor slaves could co-determine their own place or potential contribution to society. Nevertheless, as Hannah Arendt (1958) has shown, Athens did give us the legacy of (a model for) democracy, even if its own version was a *limited* democracy, and foreigners were mostly regarded as barbarians (*barbaroi* – those who spoke an incomprehensible, ‘rebarbative’ babble).

While the ‘*Berlin*’-model of the university emphasizes the inalienable *cultural* (literary as well as scientific) role of the institution (harking back to the Von Humboldt-era in European cultural history) – one conspicuous in an age of globalization insofar as universities face the task of having to reflect both the *local* and the *universal* in their faculties – the ‘*New York*’-model represents one side of a more realistic appraisal of the function of universities, that of the role of the *market* in current ‘knowledge-production’ in the contemporary era, the other side being reflected by the ‘*Calcutta*’-model, which emphasizes the educational needs of the *developing* world. The reason is, firstly, that contemporary universities (especially in the western world) are increasingly market-related in the sense that knowledge itself, unlike in former eras, is treated as a commodity, with the result that there is constant interanimation between the private sector of entrepreneurship and the university as training ground for future entrepreneurs. Needless to say, this does not fully capture the role of contemporary universities (even, or especially, in New York itself!), insofar as critical disciplines co-exist with the market-related ones at these institutions – the New School for Social Science and City College, New York, to mention but two of these. At the other end of the scale the ‘*Calcutta*’ university-model represents the developmental needs of the so-called Third World – to which one may add its hopes and fears, given the unequal development witnessed in the latter compared to the ‘First World’.

Against this background I should say that I would approach the question of social justice in relation to the different university-ideals as actualized in the contemporary world in such a way as to do justice to the complexity of cultural differences and the social (including educational) interaction between different cultures. Insofar as particular universities, which are socially very differently situated (compare South Africa and the U.S, Canada, Japan or Norway, e.g.), would emulate different models, instead of affirming that each of these models is equally ‘legitimate’ – which can no longer be done in a situation where there is cultural heterogeneity existing side by side with a tendency towards global homogeneity (Steger 2003) – I would argue for a consideration and negotiation of their complex intertwinement at scientific and disciplinary level. In other words, in a world characterized by extreme socio-economic inequalities among nations (and within nations), the legitimacy of each of these models, taken by themselves, should be subjected to radical theoretical-ethical critique, and those aspects of each that can play a meaningful role in the present, postmodern world, should be placed in what Adorno might call a fecund ‘constellation’.

Such a critique has been in the process of being articulated for decades, for example in J-F. Lyotard’s *The postmodern condition* of 1979 (as well as, at least implicitly, in his subsequent work, especially *The inhuman*), in the work of Jürgen Habermas, Jacques Derrida, Gilles Deleuze, Julia Kristeva, Fredric Jameson, David Harvey, Emmanuel Wallerstein, and recently, Michael Hardt and Antonio Negri, to mention only a few relevant thinkers. When Lyotard (1984) argued, in 1979, that international relations of power were being reconfigured by the link between economic power (itself inseparable from political and military power) and the generation of knowledge conceived of in terms of (technological) performativity, he

was adumbrating a new world order theorized in an encompassing manner by Hardt and Negri in *Empire* (2001) and *Multitude* (2005). The latter's claim that we are witnessing the emergence of a new form of sovereign power ('Empire') at supra-national juridical, political, economic and cultural level – a state of affairs where power can no longer be conceived in terms of the boundaries of the nation state of modernity, but which surpasses these – not only confirmed Lyotard's earlier insights concerning the structure of power in postmodernity, but also explained the noticeable global trend towards 'supra-national', and no longer 'international' structures of governance and organization. That this emerging new order is characterized by the dominant order of the so-called capitalist states being constantly challenged by the countervailing power of what they call 'multitude' (the vast numbers of people who, despite their social, cultural and individual differences, share the 'common' of producing modes of resistance against the hegemony of Empire), may not seem to be immediately relevant to this paper. And yet, one cannot leave this out of any consideration of education in a global context given the fact that 'education' inescapably involves questions of power and dominance, and the concomitant implications of less powerful cultures yielding to the pervasive, stronger, power of Empire in cultural (including linguistic), economic and political terms (Steger 2003: 37, 56, 69, 82).

Therefore, in light of the critique on the part of these thinkers, social justice in an international context will remain a mere mirage unless the 'New York' model of the university is somehow brought into *rapprochement* with the 'Calcutta'- as well as the 'Athens'- and 'Berlin'-models, in this way yielding a truly 'postmodern' university where social 'justice' is strived for (however elusive it may be) by reconciling local *and* global economic, political, social and cultural needs and values in a forum of properly international institutional debate and restructuring. What this requires, is that the economic weight of market-related, advanced computerized knowledge *à la* New York's Wall Street be mediated with the universalistic epistemological demands of the Athens model, with the creative cultural and scientific ideals embodied in the Berlin model, as well as the developmental requirements and implications of the so-called Calcutta model. Universities in a postmodern, globalized world cannot avoid representing and negotiating the sometimes conflicting characteristics attached to these four divergent notions of the being of universities.

Until this is seriously addressed, only social injustice will be served worldwide at universities, with the powerful nations (from which one cannot separate the economic power of the multinational corporations) reinforcing their power even as they expose international students to the discursive and epistemic demands of the humanities, the natural and social sciences in their theoretically most sophisticated contemporary form. Having imbibed these intoxicating educational sources of information and potential enlightenment, probably as many of these international students opt (if this is possible) to stay in the country where their graduate studies took them, as those who return to their countries of origin in the hope of reaping the benefit of their studies by investing their newly acquired knowledge at home. In the case of the latter, such intentions can hardly succeed in uplifting local society, given the cultural and educational differences, at institutional level, between the home country (the less privileged nations) and the host country, in this way perpetuating the gap that exists between them (Olivier 2004).

Moreover, the 'New York'-model for universities invites an ethical critique more urgently than any of the others by themselves (although such a critique ultimately has to be inscribed into a more encompassing critical field), given the economic (and therefore also political)

international hegemony of ‘First World’ countries in a globalized and still globalizing world. This is related to ‘distributive justice’, which is addressed below.

2. Administrative justice in a ‘globalized’ world.

I believe that Naudé (2005: 95) is right when he indicates that a consideration of the ethical requirements pertaining to ‘administrative justice’ are just too many to enumerate and address in detail within limited space. By and large, those considerations he lists reflect some of the important areas of administrative activity where the needs of international students can and should be met, namely marketing claims on the part of universities competing in the international arena, entry requirements, programme quality, accreditation agreements and feedback systems. What I would like to add is that all of these, which are administrative measures aimed at the optimization of success on the part of international students, should be seen in conjunction with the requirements of *social* justice, addressed above. In other words, something like ‘programme quality’ cannot be divorced from the question whether ‘quality’ is solely determined in terms of western criteria – by which I don’t mean only *intellectual* criteria, on which the leading universities in western countries can seldom be faulted, but cultural and economic criteria of inclusion and exclusion as well. As soon as one admits that ‘inclusiveness’ should be entrenched as a guiding principle, however, it impacts on intellectual criteria as well – not merely in terms of so-called ‘standards’ (which are often ‘exclusive’ in terms that go beyond intellectual ability), but as far as *linguistic* accessibility and cultural preconceptions are concerned, too. Too often ‘administration’ becomes the self-justifying discourse of bureaucracy, without critical questions being taken seriously regarding the underlying (often unjust) principles in which such administration is grounded, with the result that ‘administrative injustice’ occurs in the guise of exclusion.

3. Distributive justice in a ‘globalized’ world.

For some time now, it has been the case that internationalization of education cannot be separated from globalization as a multi-faceted phenomenon (Suarez-Orozco & Qin-Hilliard 2003: 1). This inevitably raises the question of whether such globalization, especially given its inseparability from advanced (electronic) communicational developments (partly as a means to the sharing of knowledge and, unavoidably, economic prosperity), is judged and/or regulated in light of the normative requirements of ‘distributive justice’. The answer to this question is, to my mind, an unambiguous ‘No’.

The economic disparities between the ‘First’ and the ‘Third World’ are such that, even if thousands of international students are annually accommodated at universities in First World countries, those who return to their countries of origin do not seriously challenge the economic (political, cultural) hegemony of the First World. Moreover, the ostensible international educational ‘openness’ or hospitality on the part of First World countries is usually a double-edged sword: on the one hand it empowers international students regarding their chosen disciplines, while on the other it serves to export (very conveniently) the ideology or discursive constraints implicit in the teaching of many of these disciplines, namely a fusion of liberal democracy and late capitalism – something that conveniently serves the purposes of the dominant powers. And as Foucault, following Nietzsche and Machiavelli, has taught us, it is power that usually prevails, and not critical-ethical reason (as opposed to the technical embodiments of instrumental reason). This is no reason to give up on such critical-ethical reason, though – today there is a more urgent need for its cultivation among students internationally than ever before.

This may seem innocuous, even desirable, to some, but some of the world's leading thinkers – including the recently deceased Jacques Derrida, in his powerful text, *Specters of Marx* (1994) – have warned against a premature triumphalism regarding the global embrace of this (to my mind unholy) union of liberal democracy and advanced market-capitalism, for instance on the part of Francis Fukuyama.. The point is, as Derrida warns, that one can all too easily confuse the freedom to satisfy one's material-economic needs with political freedom, blinding oneself to the surreptitious growth of the power of multinational corporations to the point where they hold 'democratic' political leaders and parties in thrall, and insidiously undermine true political freedom (see Steger 2003: 76-82; regarding the ownership of media companies by vast conglomerates, an ownership that largely determines what is printed and broadcast in the media). This question has too many sides and ramifications to pursue here; suffice it to say that 'distributive justice' as an ethical consideration cannot be divorced from questions of hegemonic power-relations in the world, and fresh perspectives on the center of power – the 'New York'-model of the university – should be encouraged in an international educational context.

4. Cultural justice in a 'globalized' world.

This kind of justice is intimately related to those kinds briefly discussed above. As Naudé (2005: 97) indicates, it displays at least two faces, namely the countervailing ones of cultural homogenization and of fragmentation. What he does not elaborate on, is the unavoidable, related phenomenon of cultural hybridization, which draws attention to the creative side of cultural globalization (Steger 2003: 75-76). Both homogenization and fragmentation also show their advantages and their disadvantages: on the *one hand* the homogenization-process goes hand in hand with the threat to linguistic diversity in the world by the ever-increasing internationalization of (especially American) English via satellite communications and the global hegemony of (American) English television programming. And with linguistic domination comes cultural domination, to which many of the world's less powerful, sometimes fragile cultures are simply not resistant. It is true, of course, that such homogenization offers the advantage of all cultures being able to avail themselves of the knowledge-dissemination that is occurring by means of the largely global accessibility of English as a medium. But the threat posed to linguistic diversity by this phenomenon should not be underestimated, especially when one remembers that every extant language represents a system or repository of indigenous knowledge accumulated over centuries. To lose any of these languages is tantamount to losing cultural and epistemological 'biodiversity'.

On the *other hand* the typically postmodern fragmentation of culture is accompanied by a salutary recognition of difference and otherness (Olivier 2007), so lacking in modernity, where a hierarchical subordination of the cultural (colonized, racial) 'other' was the rule. This should, ethically speaking, be good news for all cultures and for both genders, were it not for the sad fact that new global hierarchies are already in the process of establishing themselves – hierarchies that have consequences for international students as well. By and large these hierarchies seem to have an economic basis. In his shockingly demystifying book, *The enemy of nature*, Joel Kovel (2007) points out, for instance, that poor nations are still (even increasingly) being exploited by rich ones, and that whatever the international gains of the women's movement may have been, today the socio-economic position of women in especially those cultures where the effect of gender-sensitive legislation has not been felt (or where such legislation has not even occurred), is worse than ever. One of the reasons for this is that women in many Third World cultures are more subservient workers than men, and therefore preferred as employees by factory ('sweat shop') bosses. The irony is that these

factories are often set up in these countries because of the cultural differences involved, by companies based in First World countries because exploitation of workers in these Third World countries is easier, and profits higher, than in their home countries. Clearly, then, otherness does not necessarily mean mutual respect; often it means exploitation of the cultural other, today no less than during the heyday of imperialism.

In such a situation, it is imperative that international educational authorities constantly test themselves in relation to the question, whether they are providing the educational means for not only the advanced technical training of international students, but for their critical-intellectual development as well. In fact, one of the ‘plagues of the present world-order’ (to borrow a phrase from Derrida in *Specters of Marx*) is the neglect of critical-intellectual education in favour of mere technical training – what the young American philosopher, Farhang Erfani, has aptly, in the course of a lecture, called the training of mere ‘*labourers*’ instead of the education of (responsible, informed) ‘*citizens*’ by universities.

5. Ecological justice in a ‘globalized’ world.

It would be irresponsible on my part not to add another kind of justice under the rubric of ‘ecological justice,’ although (given its tremendous importance) it really deserves a lengthy discussion of its own. Briefly, this entails ethical considerations regarding the increasingly apparent fact of the destruction of natural ecosystems by human ‘development’. In the book by Joel Kovel (2007; see also Olivier 2005a, 2009) mentioned earlier (*The enemy of nature*, subtitled *The end of capitalism or the end of the world*), a grim picture of the state of nature emerges, with Kovel inexorably listing all the evidence of nature’s devastation at the hands of human beings, such as the depletion of the ozone layer, the pollution of the oceans to the point where people cannot swim in their waters in many areas (such as the coast of Florida in the US) without risking contamination by noxious bacteria, the accelerating extinction of animal and plant species the world over because of global warming as well as human destruction of natural habitats, and many other such instances (too many to address here).

His argument – which is carefully and persuasively constructed in the course of the book – is that the main culprit regarding the destruction of nature is the economic system known as (neoliberal) capitalism, mainly because of the fact that it rests on the principle of unrestrained *growth*. In fact, the *process* known as ‘capital’ implies such unlimited growth. Although there was a call to ‘limit growth’ during the 1970s (ironically on the part of the capitalist elites themselves; see the report of the ‘Club of Rome’ of 1972), nothing has come of this exhortation; on the contrary, growth-figures have multiplied and actual economic growth has accelerated in advanced capitalist economies worldwide, with the result that it has reached the point where no one even talks of limiting it any longer (perhaps because of a feeling of unlimited power, or conversely, a feeling of helplessness in the face of the ostensibly insurmountable ecological and related social problems facing the world today; see Ulrich Beck’s illuminating, if disturbing, book, *Risk society* [1992], in this regard).

The ethical implications are – or should be – obvious, especially in an international educational context. Perhaps this is the best place to start addressing these problems, which bear on the future survival and morally justified continued living of the people of this planet as well as the survival of all other living creatures on it. It cannot be emphasized too strongly: *unless the leading powers of the world – symbolized by the ‘New York’-model of the university – take the ecological crisis seriously enough to start implementing an alternative to energy-through-oil, for example, and put everything into play to limit growth, it is a real*

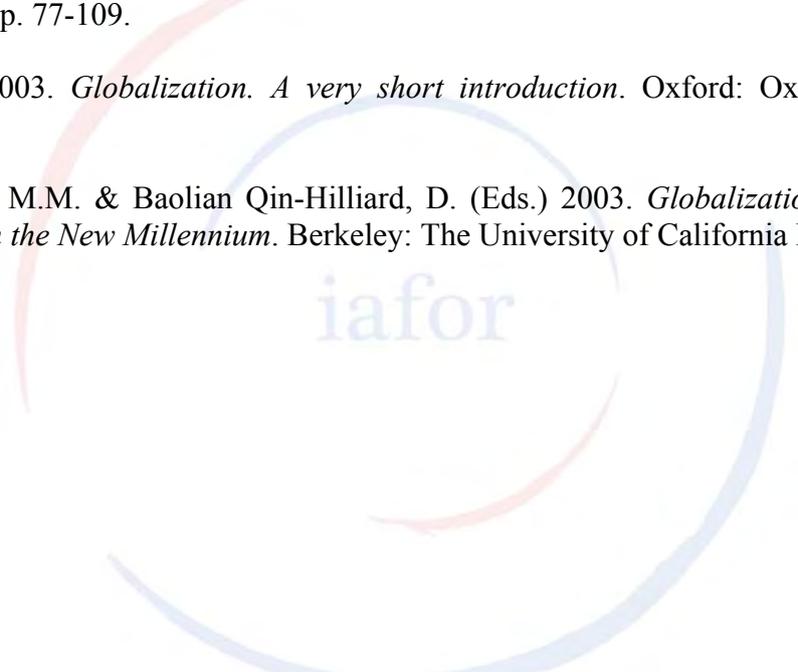
possibility that humanity will have to take responsibility for the utter devastation of all natural life on this planet, as well as of the human cultures that have developed in dependence on nature. The rate at which forests are being destroyed for economic gain, for example, simply ignores the fact that these forests are the ‘lungs’ of the planet, and no financial profit could ever replace their indispensable function for our survival. Wouldn’t it be the greatest irony if the very beings (human beings) capable of ‘taking responsibility’ for nature as their *guardians*, turned out to be its (and their own) *destroyers*? And does this not point to the greatest international ethical (educational) priority of all – a truly holistic one?

I therefore conclude this paper with the call on the educators – especially at tertiary level – of the nations of the world, to attend to the *urgent* need for a radically different approach to education as far as priorities are concerned. Instead of calibrating educational institutions worldwide for the promotion, through the New York-model type of the university, of optimal economic development through ‘growth’, such development should be pursued in such a way that it does not impact so negatively or destructively on ecological conditions as to place the very survival of life on earth in peril. This is, to my mind, the most urgent educational challenge faced by educators today – without attending to *ecological justice*, therefore, promoting the other kinds of justice referred to would be an empty gesture, given the real possibility that the *world* in which they have to be pursued may not have a future.

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**One Novice Teacher's Research on Teaching ESL
to Chinese Adult Learners:
Student-centeredness Implementation & Learner
Autonomy Development**

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iafor

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Topic of the Submission: Languages Education and Applied Linguistics
(ESL/TESL/TEFL)

One Novice Teacher's Research on Teaching ESL to Chinese Adult Learners: Student-centeredness Implementation & Learner Autonomy Development

Pei-Hsuan Tu 杜佩璇

Introduction

The ongoing shift from method-based pedagogy to postmethod pedagogy in the Teaching English to Speakers of Other Languages (TESOL) profession manifests the importance of teacher's judgments (Kumaravadivelu, 2006; Crabbe, 2003; Prabhu, 1990) and learner autonomy (Kumaravadivelu, 2003) in language teaching and learning. The emphasis on teachers' contextualized decision-making lends support to my belief that there is no best theoretical methodology fit for students under any context (Celce-Murcia, Thurrell & Dornyei, 1997; Prabhu, 1990: 172). Only if teachers regarding learners as the main focus in the classroom by understanding their needs and goals, and observing their learning situations is there a most appropriate teaching process to facilitate a greater learning. In order to create a student-centered classroom, learner autonomy development was the first challenge I undertook (Nunan, 1995: 140). Without students' own efforts and a sense of responsibility, learning cannot happen and all the pedagogies or teaching approaches would then be meaningless (Tudor, 1996). Therefore, with learner autonomy as a continuous process throughout the classes, I used the shared native language between my students and me to provide explanatory and comprehensible support based on my observation as a teacher. Following are the two research questions guiding the discussions:

- Q.1 "How did I foster learner autonomy for my adult students?"
- Q.2 "How did I use first language (L1) to facilitate adult students' second language (L2) learning in a low-intermediate level classroom?"

Demographic description

Starting from November 2, 2008, I taught an ESL class to a group of adult immigrants at an intermediate level. The class met for one and half hours, once a week in Philadelphia's Chinatown, open to anyone who wanted to learn English at no cost. The class was held in and sponsored by Holy Redeemer Chinese Catholic Church and School (HRC), a non-profit ESL institution serving Chinese immigrants from Mainland China.

HRC was characterized by its flexible atmosphere and the total trust of teachers. I was instructed that the language learning goals for the class are to help students develop their English competence on four skills (reading, writing, listening and speaking) to meet their conversational needs in daily life, to improve their English proficiency to live independently in USA, and to learn strategies for future English acquisition. Though given an assigned textbook, I was allowed to develop my own curriculum.

I had seven students in my class whose ages ranged from forty to fifty and all of them are Chinese immigrants with Cantonese as their native language and Mandarin as the second. We shared the same language in the classroom even though their spoken ability of

Mandarin was not very fluent. Although most of them had stayed in America over ten years, their living and working in communities where Chinese was the dominant language made them remain on the same level of English for many years. Combined with the fact that few of them would finish my assigned homework since all of them were at work and had family occupying most of their time, I felt a low motivation of learning among my students. The learner autonomy development thus played a significant role in my class.

Q.1 “How did I foster learner autonomy for my adult students?”

Holec (1981:3) describes ‘learner autonomy’ as “the ability to take charge of one’s own learning”. The basis of it is that the autonomous learners take responsibility for their learning, who understand that their learning success results from controllable factors such as personal effort, and the failure can be overcome with greater effort and better use of strategies (Dickinson, 1995; Wang & Palincsar, 1989). The understanding of self-attributed success and failure is what Deci and Ryan (1985) called “intrinsic motivation”, which is essential to create learner autonomy and the better effective learning. The strong link between autonomy and motivation also displays in their sharing of several key concepts such as “learner independence, learner responsibility, and learner choice” and in the reciprocal influence on each other (Dickinson, 1995). Given the relationship between autonomy and motivation, and their positive influences on students’ language learning, I tried to foster my students’ intrinsic motivation through various designed activities to reach the goal of learner autonomy development.

Making instructional goals explicit to learners enhances learning and teaching efficacy (Nunan, 1995: 154). Students’ understanding of ‘learner autonomy’ is as significant as that of the teacher in the path of their self-direction development. In my class, I did not regard “learner autonomy” as a goal which many higher education settings set and train their student to achieve by completing a project single-handed, rather I saw it as an ability of learning independently from teachers. This goal is critical for learners since there is no student anywhere that will have teachers accompanying them throughout his or her life (Littlewood, 1999: 73). However, it is not enough that only the teacher knows how important learner autonomy is. Letting students know how it can help achieve their learning goal and what to expect is crucial as well. The following statements mentioned in my journal could fully express what I wanted my students to understand:

[Excerpt 1: What the students should expect to achieve]

I want to let them know a success of learning depends as much on the student as on the teacher. Therefore, I decide to give my students and also myself a chance. As a new teacher [without any former experience], I am going to follow the steps and suggested activities in *Learner Autonomy* written by Scharle & Szabo (2000), hoping to enhance their responsibility and autonomy by teaching them how to catch fish rather than giving them fish all the time, and letting them realize that their contribution is as important as mine in their learning processes.

(Fieldnotes, 02/15/09)

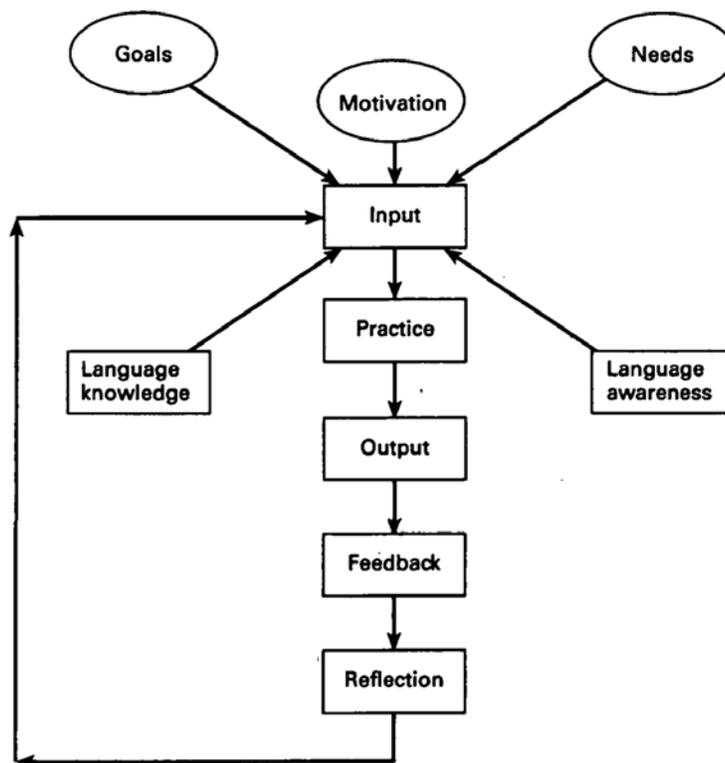
In addition to helping students see the goal and the path ahead beforehand, strengthening their new-constructed concepts (i.e. the explanations I gave them) on the way to learner autonomy is equally important. I told my students the main goal and language focus before each activity started. By doing this, I fostered their responsibility to reach certain goal, reinforced their motivation during and after each activity, and therefore they participated more actively than before when I had not done the same way. When doing the activity *Words you already know* (Fieldnotes, 03/01/09), I started from mentioning the goal of it which was meant to show how much they already know, to mobilize their existing knowledge, and to encourage their contribution to classroom work by telling them that “any word you share is so important to everybody because it might be the one you really need to know” and “Let’s fill up the board with all of your words!”. Even though some of the words they had chosen were not really practical, they did broaden each other’s knowledge. After the activity, I kept emphasizing on how many words they already knew and they should be proud of this, hoping through this activity, they could be aware of their existing target language repertoire and therefore building up their self-confidence.

In addition to reinforcing motivation, self-confidence contributes to the development of responsibility as well. The learners must believe that they are able to control over their own learning and they can rely on themselves besides on the teacher, which is the main notion of Bandura’s “self-efficacy” (1977, p.3). However, some students might need teachers’ help to provide them with appropriate tools and with opportunities to practicing them since not everyone has inborn learning or studying strategies (Little, 1995: 176; Nunan, 1995: 134). I myself learned such skills from formal schooling, from related books, and from cram schools while preparing English tests, which helped me have the ability to control over the tests or learning progressing. Moreover, according to Child’s (1994) *Attribution theory*, learners who believe that they can manage their learning tend to be more successful than others. Therefore, I believed that by equipping my students with some learning strategies, they could be more confident on learning English by themselves, and the sense of the confidence would bring a feeling of responsibility and independence where the effect worked the other way as well.

I would like to use one of the activities that was used in my class called *Grouping Words* (Fieldnotes, 02/15/09), a technique for learning new words, to be the example of learning strategy. In the beginning, I randomly wrote down ten words with no grammatical or topical cohesion, then asked students to look at the board and try to memorize as many of the words as they could in ten seconds. After ten seconds I erased the words and asked my students to write them down as many as possible. A quick survey showed most of them could write down 5 to 6 words. Then, I gave them another list where the same number of words was shown to them but with five in the group left and the other five in the group right; each group had certain relationship in a topical way. The same task was then given. Another quick survey showed most of them could write down 9 words or so. In the end of the activity, I asked their opinions about this strategy to make sure they got the point, and knew how to apply this skill to taking notes. I believed that this technique could help my students manage vocabulary learning more efficiently in their language learning process.

While learning strategies helped my students make progress on the way to learner autonomy because of their contribution to the higher self-confidence of the learners, helping my students understand language learning process could never be less important. One of my students wrote on the questionnaire that he wanted to improve his speaking, but he preferred to do lots of grammar exercises. Because of the mismatch between what he wanted to achieve and how he intended to do, I decided to discuss this crucial concepts of language development with the class. Learners can only be autonomous if they know various approaches that lead to learning, and understand the consequences of their choices (Cotterall, 2000: 111). Being aware of the importance of second language acquisition, I used the “simplified model of the language learning process” displayed in Cotterall’s article in my class to show my students how a foreign language develops (2000, p.113) (see Figure 1).

Figure 1: Simplified model of the language learning process



As the figure shows, *goals, motivation, needs, language knowledge and awareness* are the five main elements contribute to language *input*. From input to meaningful output, we need numerous practice through different methods to externalize our language competence. Seeking feedback after performance can be a significant way for input as well. The example of my student’s gap between what he wanted to accomplish and how he planned to do showed his misunderstanding of the stance of grammar exercises in the model of language learning process. During the class, I helped my students to identify grammar in the language learning model as *language knowledge*, learning only through which would not contribute to the development of proficiency. I believed that the adult learners benefited from the explanation and discussions in this way. By equipping them

with the cause-effect relationship in second language acquisition, I transferred the learning responsibility to them and therefore they moved forward on their way to learner autonomy.

In the previous paragraphs, I discussed how learner goals, learning strategies, and language learning process helped my student develop self-direction and autonomy. Though these were critical elements to transfer learning responsibility from the teacher to the students in my class, they mainly focused on individual understanding and efforts. However, learning is never solitary. Even though we learn a lot from the research of psychological perspective as to mental and emotional characteristics of learners, all the learning processes proceed within a level of social interaction (Vygotsky, 1978) or are in equilibrium with human interdependence (Allwright, 1990:12). Learner autonomy development, therefore, should not totally rely on a learner by his or her own. I hoped my students know besides their own, their classmates could also serve as precious learning resources or provide informative feedback to them. Taking charge of one's own learning included knowing where to find support on the way of language learning. Therefore, I tried to use some activities to let my students experience the effect of cooperation. One example is the activity called *Group discussion—Favorite class activity* (See Appendix 1). The students needed to ask questions to one another regarding certain topic until they wrote down each classmate's answer on the worksheet. Even though at the very beginning they were a little bit shy and seemed to be afraid of making errors, after I kept talking to them that the focus was not on grammar but on comprehension of the listeners, they were getting more and more involved. During their conversation, I found out that they corrected each other's errors on speaking and writing, asked questions trying to understand their partners, and gave positive feedback to encourage each other. When reflecting and discussing what my students learned from this activity, one student told me "I never thought I could learn so much without a teacher's help." From this, I knew that they gained more responsibility on their own learning, and took one step further towards learner autonomy.

Exercising the activities which aimed to develop learner autonomy needed specific instructions. While my students were at the low-intermediate level of English, it was difficult for them to totally understand me if I used English only. Using the shared first language appropriately facilitated my students' understanding and pushed the process go smoothly.

Q.2 "How did I use first language (L1) to facilitate my adult students' second language (L2) learning in a low-intermediate level classroom?"

Avoidance of L1 use in the language classroom has been proposed and studied by many researchers (Prodromou, 2002; Polio & Duff, 1994; Atkinson, 1993; Auerbach, 1993: 15-18). No matter whether this discouragement of L1 use is phrased in the stronger form, that is "Ban the L1 from the classroom," or the weaker form, that is "Minimize the L1 in the classroom," there is an underlying proposition that the L2 is positive and the L1 is negative (Cook, 2001: 404). Many teachers take this concept for granted as the foundation of language teaching, without considering the situations that the teacher and the students have the shared language, or that the students' limited language proficiency

can make them absorbing less information which is conveyed through the foreign language than through the native language (Cook, 1997). When these teachers use L1 in the classroom despite the need for it, they often feel guilty for not exercising the dominant L2 (Cook, 2001: 408; Mitchell, 1988: 28; Auerbach, 1993: 14). I had accepted that view of using L2 only before I started teaching English in Holy Redeemer Church. In Taiwan, “English only” was one of the administrative principles for all English classes during my internship, while in America it has been supported by plenty of theories and discussions in TESOL professional. However, teaching adult students who were in the low-intermediate level in the Church changed my thinking and made me reexamine the importance of my L1 use.

Having previous learning experience in their native countries is one of the most outstanding features of my adult learners when compared to children, and this influenced my use of L1. Each student in my class had different English learning background and language proficiency. They had varying learning goals and needs, and had different priorities as to English macro- and micro-skills; yet, they shared the sensitivity to the teacher’s teaching methods. During the classes, they would raise questions and express explicitly what they wanted from me as long as they needed; for example, when they still felt confused about certain concepts or unknown vocabulary, they would ask me to explain it again without hesitation (Fieldnotes, 02/22/09). However, being critical of methodologies also meant that my adult students might expect certain teaching styles from me and might be uncomfortable with unfamiliar teaching approaches (Harmer, 2007: 84). Using English only could be a new approach to my students. They might not know how to manage it when they were lost or might be afraid of using English to ask questions. I believe that creating a positive learning atmosphere plays a primary role in learners’ progress, because the consequent lower anxiety would make students like coming to the class, enjoy the leaning process, foster their motivation, and therefore enhance their language learning proficiency (Krashen, 1982). Therefore, in order to lower my students’ “affective filter”, I decided to allow myself using Chinese (Krashen, 1982).

From the time I used Chinese, English, and code switching while teaching, the classroom atmosphere started to become more and more energetic; they were much more eager to ask questions and expressed their own opinions. I believe this flexibility between the languages was significant in my classroom where the teacher shared a language with the students. A teacher’s avoidance of L1 is probably a necessity in many ESL classrooms because the students are from different countries and have different mother tongues where no L1 can be used (Butzkamm, 2003: 30). However, this was not the context of my classroom.

Allowing myself to use L1 did not mean I could use it whenever I wanted; judicious use of it was the bottom line. Using L1 in the classroom should be handled critically since it is influential on the students’ learning process, where unprincipled use of L1 could have long-lasting negative effects on the learners’ acquisition and production of the target (Ellis, 1985; Gabrielatos, 1998; Cook, 2001; Gabrielatos, 2001).. How and what teachers do are crucial to students. As a teacher, all the decision-makings, such as the methodology I chose, the activities I exercised, and the curriculum I designed, should be

on my students' behalf. By doing these I hoped that on the students' learning path of a foreign language, I could help them move forward and closer to their goals or aspirations.

However, without using L1 appropriately, we could also be the ones who undermine the learners' potentiality of being successful on learning languages other than L1. The role of L1 should be exerted as a facilitator and resource to help students learn new languages (Nazary, 2008). Therefore, by asking myself questions such as "what for", "when", and "to what extent" (Gabrielatos, 2001: 8) during and after teaching the classes in Holy Redeemer Church, I realized that I used the L1 for various purposes especially: to compensate for a lack of comprehension; to clarify vocabulary meaning; and to instruct grammar.

When teaching new concepts or introducing new words, I exercised a certain sequence to use L1 and L2 to make them more understandable. The sequence can be shown clearly in my following activity. As my students were all adults, I found out it was necessary for them to understand the underlying purposes and principles of each activity, which was applied to develop their learner autonomy originally as I mentioned in my question one. Sometimes I used simplified or adapted principles to explain why I chose this activity. One example was the activity *Words you already* (see Appendix 2). This activity aimed to show how many words they already knew, to mobilize their existing knowledge, to encourage their contribution to classroom work, and subsequently to build their self-confidence. Before starting it, I wanted to encourage them by showing that there is a gap between language competence and language performance, since it showed from the needs assessment survey that they all thought their average English proficiency was at the beginning level even though they knew the words "gallstone" and "biometrics". I would like to use the following excerpt to illustrate the concept I wanted to impart to my students.

[Excerpt 2: Concept before activity]

I wanted them to know that in fact, the words they already know are much more than they imagined. Therefore, I told them that the proportion of one's real English knowledge to one's oral performance is about 100 to 1, which may not be proven by [each] theory, but from my own English learning experience, the feeling cannot be true more!
(Fieldnotes, 03/01/09)

I hoped by letting them know this imbalance between receptive and productive competence, my students could be aware of how much English they already knew and where to focus on to reduce the gap. Since this knowledge background was practiced purposely for an encouragement purpose in my lesson plan, it should be followed immediately by the major activity. However, my planned curriculum was often changed by the students which could be demonstrated in the following statements:

[Excerpt 3: Curriculum change]

In the beginning, I just wanted to share my experience with them and used this lead to the activity's purposes, but I can always be initiated by these students and therefore think of some way to teach them more!
While talking about the proportion things in English, my students used

confused expression looking at me. Then I decided to say it again in English the second time. Before doing so, I asked them try to guess what I was talking about [...].

Then, I used Chinese explaining again to let them check how much information they got, and showed how guessing as a listening strategy works. To my surprise, my students asked me to speak English again. They said “*One more time in English.*” Which to me was meaningful, because it stood for their enhanced motivation, higher learner autonomy, and own decision-making rather teacher-leading. This was a huge progress to them.

(Fieldnotes, 03/01/09)

From the illustration above, we can see that the planned purpose of the language concept teaching changed into the listening practice as a result of being initiated by the adult students’ question. Also, I exercised the listening practice with the following sequence: ① English only; ② English only but slower; ③ Chinese; ④ English only (Fieldnotes, 3/1/09). I used L1 between English because judging from students’ confused facial expressions and no responses from them to my comprehension-checking questions, I knew they couldn’t even obtain the central point. Further, after using L1 (the third step), my students asked me to say it all over again in English. Therefore, L1 here functioned as a mediator freeing up the learners’ knowledge capacity. They got the main idea and thus had more space in their brain to deal with the complicated processing of getting meanings through a foreign language (Storch & Wigglesworth, 2003: 768). While the “sandwich-technique” could be used for teaching dialogues (Dodson, 1972), I accidentally used it for teaching listening where the use of L1 compensated for the students’ lack of comprehension.

Another important function of my L1 use was to clarify vocabulary meaning. Sometimes the students still could not offer me the appropriate Chinese translation even after clear explanation. At that time, I would transfer into Chinese, letting them gain the full comprehension of the vocabulary by connecting the L1 and L2. Consider the following interaction:

[Excerpt 4: L1 use on clarifying vocabulary meaning]

S1: Uh...pollution...what does mean?

T: Pollution, what does it mean? Pollution means...You make lots of trash and trash is everywhere, so you make “earth pollution”.

S1: ...

T: And if the trash starts to smell bad, you can say it’s “air pollution”.

S2: Too much....too much ...

S1: “很多垃圾”, 還是“髒亂”的意思? (Does it mean “lots of trash” or “dirty”?)

SSS: Dirty...dirty...

T: Other opinions?

SSS: Trash...Dirty...

T: 污染(pollution).

SSS: Ohhhhh...

From my own learning experience, a new word in the L2 can be remembered for a longer period of time if it is understood via the L1 counterpart than via L2 only, which is also supported by Nazary (2008: 142). I believe using L1 as a meaning clarifier can help learners develop their amount of vocabulary. Through our mother tongue, we build upon our vocabulary, our speaking, reading, and writing abilities, all of which are so complicated and have been inevitably constituted by culture and socialization. If using L1 is forbidden, it would be as someone asking us to turn off the knowledge we have (Butzkamm, 2003: 31); it might also imply that learning a foreign language means we need to learn all of the concepts in the world all over again. This means L1 use could lead to more comprehensible input and faster acquisition. As the given example shown, I found it necessary to give them the Chinese version of “pollution,” as “dirty” would also fit perfectly in the imagined picture I gave to them. However, “dirty” and “pollution” have different connotations, which needed to be differentiated.

The last most common purpose for which I used the L1 was for grammar instruction. In grammar teaching, I thought using L1 is better than L2 because of my own grammar learning experience in Taiwan as a beginner and in America as an advanced L2 user. My grammar knowledge of English had been developed via Chinese grammatical terms, which though translated from English, still are endowed with subtle differences as a result of different culture backgrounds. Even now as a graduate student at University of Pennsylvania, when I took the course *structure of English* sometimes I still had difficulties understanding the grammatical terms which would turn into easy concepts once I knew the Chinese counterpart. This can be supported by Cook (1997) that even the advanced L2 learners absorb information less efficiently via the L2 than via the L1. The similar situation of less knowledge receiving could also happen to intermediate learners as my students. While they liked to learn grammar through explicit instruction, they asked questions as long as they needed. Following is one of the examples of their questions:

[Excerpt 5: Question of grammar]

When talking about the sentence “I’m sorry, I didn’t follow you”, one student asked me “Why is I ‘*am*’ sorry, but I ‘*did*’ not follow you? Why don’t we say *I ‘*am*’ not follow you?” Then I told him the word “sorry” is an adjective, but “follow” is a verb. Only adjectives and nouns can follow be-verb, but the auxiliary verb can only be followed by verbs because of the former’s role as helping verbs.

(Fieldnotes, 2/22/09)

During the explanation, my students had problems with *adjectives*, *nouns*, *be verb* and *auxiliary*. Even though all of my adult students had been taught some basic grammatical terms in China, their lack of knowledge and familiarity of these English counterparts became an obstacle to the learning and teaching process. Moreover, because their focus from the above example was on understanding the grammar rather than developing other language skills, using L1 could be more efficient and might be a better way to teach grammar; as I recorded in my fieldnotes:

[Excerpt 6: L1 use for grammar instruction]

Here I use almost only L1 because it's more important for them to know and understand the rules than to guess what an "auxiliary" verb and a "be" verb actually mean.

(Fieldnotes, 2/22/09)

As a non-native-English teacher, the shared L1 with my students could be an advantage. In addition to compensating for a lack of understanding and clarifying vocabulary meaning, using L1 to address grammar could be easier than using L2 in that I could think of different skills or techniques from the native language perspective to help my students understand or remember the grammar if needed. This strategy was also used in my classroom to teach pronunciation.

Conclusion

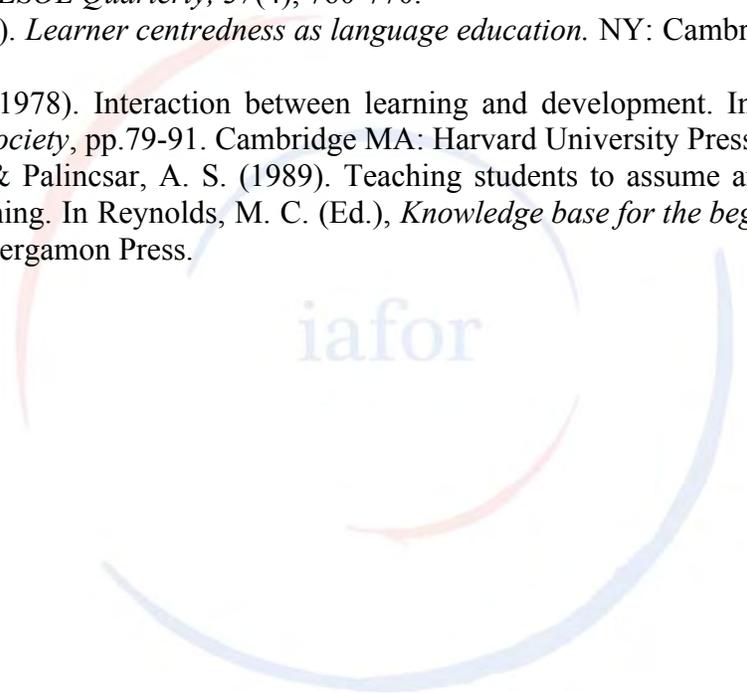
Teaching in HRC was an invaluable experience. While the students benefited from the teacher's appropriate planned lesson, the latter could even learn much more from the whole teaching processes. Teaching ESL to adult students made me reconsider the role of student centeredness which I never thought of when teaching EFL to elementary children. Good teachers should not only endeavor to pursue professional development and always follow the lesson plans strictly; rather, it is important for teachers to be flexible, being able to analyze their teaching situation and adjust their teaching practice accordingly. Without considering students as the heart of teaching, a teacher is just a performer but not an educator. Upon reflecting on my teaching, it was the unfamiliarity with my students' needs and learning background at my very first several classes that led to my students' low level of motivation and my frustration with teaching, which I thought that there might be nothing I could do to improve the situation. However, by explicitly informing my students the purposes of all the activities and teaching methods, they realized what they were learning, why they were learning, and where they would reach. The learning strategies also equipped my students for the future self-learning, with which they were more aware of their capability of learning the target language strategically and efficiently. Through these teaching methods, my students gained the self-confidence and self-understanding, and consequently I successfully improved their learner autonomy. Furthermore, with the understanding of my students' needs of the teacher's L1 use, I performed it with diverse purposes to reduce their barriers to understanding.

Though I was frustrated by my students' low motivation and inactive classroom atmosphere at the very beginning, I now believe that by practicing the processes of identifying the two problems, trying out solutions, and evaluating the outcomes, I am much closer to being a reflective teacher and moving forward on the path of professional development. While I taught my students how to improve their confidence, they enhanced my self-confidence as well. Knowing how to integrate the students' needs with the teacher's professional knowledge is crucial for both student learning and teacher self-development. As long as the teacher cares about the students and always put them at the center of teaching, the students would reward you reciprocally in various forms.

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The logo for the International Association of Teachers of English as a Foreign Language (iafor) is centered on the page. It features the lowercase letters "iafor" in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a larger light blue arc and a smaller, slightly offset light red arc.

Appendix 1

Classroom Activity

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Appendix 1

Classroom Activity

- A) Title of the activity:
Group discussions—Favorite class activity
- B) Source for the activity:
Scharle, A., & Szabo, A. (2000). *Learner autonomy: A guide to developing learner responsibility*. New York: Cambridge University Press.
- C) Course goals/objectives:
- Share their own opinions to the classmates;
 - Discover their own and their partners' learning styles;
 - Apply the words and sentences that the teacher kept using in class to speaking;
 - Write a report regarding the partner's viewpoints.
- D) Language microskills:
- Understand each classmate's learning styles through conversation;
 - Ask questions by using the target sentence "What's your...?" fluently and accurately;
 - Express their own opinions by using "like with gerund" correctly;
 - Take notes of the partner's answers while (s)he is talking.
- E) Background and methodological rationale for the activity:

In the very beginning, I was hoping to collect students' information on learning preferences. However, these adult students were too busy to stay after class for my interview, and I didn't want to use in-class time to do it because the 1.5 hr of English class each week is so precious for them; thus, I decided to do an activity that could meet both demands, that is, to collect my needed information and at the same time the students could learn English.

This integrated activity built students' oral fluency, made them more proficient in certain words through writing, and promoted group cohesion. Through the pair work with different people in class, students could think consciously about themselves as learners and realize that others may be different while they may also discover shared tastes or interests, which encouraged them to think of the class as a community. Also, because they talked about the same topic over 6-7 times, oral fluency improved. As to writing while they were talking, it trained them to write down main ideas of the partners' opinions; for those who couldn't do this, they said through the writing they got more and more involved in and had feelings for the language.

- F) What specific needs of students you are addressing through this activity:

- Speaking ability (which is the ability that they prioritized in needs assessment);
- Listening ability (i.e. understand others' speaking);
- Chunk learning to improve speaking fluency.

G) Materials needed: worksheets (see *Worksheet 1*)

H) What product students are expected to produce:

Students could be able to:

- Use “*What is your favorite class activity?*” to ask questions;
- Use “*My favorite activity is _____, / I like _____ing ..., because...*” to answer the questions;
- Write reports and complete the worksheet with each classmate's opinions.

I) Method for assessing students' performance:

While the students were implementing this activity, I used the following criteria to assess their performance:

- Conversation was focused on the topic?
- Ideas were well developed?
- Wrote down the corresponding answer?
- Used the focused two sentences right?

J) What do you assume students have done the lesson BEFORE (to prepare for this activity & to build background knowledge), and what will students do in the NEXT lesson to review:

Students do not have to prepare anything in the activity. However, for teachers, before the activity we have to make sure the words and sentences are the ones we've mentioned but the ones the students are not familiar enough to produce. Also, don't use the examples we didn't actually use in class, otherwise that would make them confused. We can also ask students to prepare and report each other's learning preferences for the next class as a review. After the review, the second, third or four can be continued without certain sequence.

K) Description of how it worked when you used this activity in your class (the good, the bad, and the ugly).

The students were excited about talking about themselves to each other, and during conversation I found out they could respect the feedback from their peers. They were also eager to know many sentences in English (*How to say ... in English?*) so they asked me lots of questions and used them in the following conversation right away. However, their conversation was almost limited to the examples I gave them, that is, little portion of ideas were initiated by them. Even though I asked lots of extended questions as other examples, they still stuck to the given information. Even so, from the students' oral feedback, they loved this activity and thought it was really helpful, because, according to them, they finally

knew they had the ability to speak English for such a long period of time (about one hour) and the writing played a role as facilitator to help them remember these things longer and stronger.

L) Detailed, step-by-step description of the procedure for this activity:

- (1) Write the first question (totally four) to be discussed on the backboard and its examples:
 - ① Favorite class activity (ex. dialogues in pairs; reading stories; listening to stories; collaboration with partners; the teacher-leading activity; listening to classmates' opinions; practicing pronunciation, etc.)
 - ② Favorite learning way (ex. reading texts; watching pictures/video; listening to speech; listening to music; touching; miming, etc.)
 - ③ Best talent in the foreign language
 - ④ Ways of using the foreign language outside class (ex. friends; computer games; newspapers; holiday, etc.)
- (2) Explain the examples and the corresponding real class activities one by one, and tell them they need to at least use these sentences to discuss this topic in the activity later:
- (3) Review the question and examples and check understanding.
- (4) Teach students the sentence “*What is your _____?*”
In this question, it should be “*What is your favorite class activity?*”
- (5) Describe the rules and distribute the worksheet (*see Worksheet 1*) for them to fill in: students work in pairs to talk about what their favorite class activities are, then fill in each other's name in their own worksheet on the above row and each other's answers in the cells.
- (6) When the pair work is almost done, tell them to switch partners until they talk to every classmate and fill up the cells. During their conversation, point out “*like with gerund*” if necessary.
- (7) During the activity, keep telling them the focus was not on grammar but on letting your classmates understand you is important, so they won't be afraid to make errors. Also, help them clarify what their partner wanted to express when the conversation broke down.
- (8) Hand back their worksheets and continue the following question(s) that have not been finished.



Appendix 2

Fieldnotes

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Pei-Hsuan Tu

01/22/2009

Journal #1

Field notes	Reflections & Analysis
<p>01/11</p> <p>Today was the first time I didn't use the textbook as a teaching source but used the material I designed and modified from the book "Speak English Like An American" which has lots of American idioms in it. The teaching material was just a short conversation between a boss and an employer but with 20 idioms embedded. At first, I was worried about the students' response because I never taught idioms to adult learners. I didn't know whether the idioms I chose were too easy or too difficult for them because all of them have some English learning background and also have lived here for a period of time (10 years or so) which might cause their language developmental sequences are not as obvious as that of L2 learners who learn English totally in their hometown.</p> <p>However, when I taught them the idioms contextually, helped them understand the main idea of the conversation, and used simple words or acted or associated English with Chinese in story thinking, though they couldn't memorize all of them, to my surprise, they love it. They said this was what they want; they wanted to know how Americans say in certain conditions; and because I chose a topic that is directly related to them: talking about sales with your boss, they responded and asked questions enthusiastically.</p>	<p>01/11</p> <p>I didn't expect them to learn all of the 20 idioms at one time and knew how to use them. That would be definitely too much. So when I prepared for the idiom teaching, I set a goal for myself, which was that they were to get the gist of the conversation, and for idioms, they just needed to know whether it's negative or positive. If they can remember some of their meanings, of course that would be the best, but if not, that would be totally fine, because what I wanted them to learn at the first step was to get the feeling of each idiom through context. Even though, I still felt a little bit uncertain ("Secret Self" in the Johari Window) before I taught because I didn't know how far my students could get.</p> <p>During the teaching, I found out it was when I explained an idiom kinesthetically that my students could get the meaning right away and learn the most efficiently. For example, when I taught the idiom "go belly-up", I pretended to tighten up my belt and made them imagine the situation that when we were starving but had no money to buy things to eat, we could only tighten our belt and make our belly up, and this miserable situation came from bankruptcy. So "go belly-up" means go bankrupt. The teaching approach I used was like TPR because when I did the action of tightening up, all of the students did the same action. Moreover, I found out every time when I asked them the meaning of this idiom, they would say and act at the same time, and laughs came along as well.</p> <p>Following was my steps of teaching idioms: 1) Through context, I helped them guess the positive or negative connotation of certain idioms; 2) In order to help them</p>

<p>01/18</p> <p>Today was the second time of the idiom teaching. Because I thought my students learnt well last time, I prepared to spend half of the time to review and half of the time to continue our textbook. When I started the class and helped them review the idioms, I was surprised that they can only remember a few of them. How could I forget they are not “students” but adults with jobs and families? Suddenly I realized that I had to change my lesson plan totally. So I taught the idioms again, but differently from the last time, I used more questions to motivate students’ responses and focused more on their understanding.</p> <p>It seemed to be fine when the review was finished because everyone could answer me correctly to each of my question and gave me positive back-channeling (nodding, smiling and saying “no questions”). However, I just felt not right; I had to do something to reinforce their learning. It took me a few seconds to decide what to do next. They were then asked to choose at least three idioms out of 20 and make a sentence for each three. The sentences had to be very colloquial, and as short as possible for them to be able to speak in a real conversation.</p> <p>I could feel the struggles on their face when they were writing, so I told them there was no need to think about the spelling and grammar, just think what you wanted to say with the chosen idiom in it. The worry on their faces suddenly disappeared. After about 10 minutes, I</p>	<p>get further feeling of the idioms, I made lots and lots of examples, acted, or associated English and Chinese with similar pronunciation or story thinking. 3) Once they got the meaning in Chinese, I encouraged them to think in English; like I would ask them “Is there another way to express the same meaning?”</p> <p>01/18</p> <p>When I was in a surprise of my students’ unfamiliarity with the idioms I had taught, I realized that I overlooked one of the most important elements of material designing: the students’ background. Under the situation that my students have little time to read and review, I need to slow down my teaching tempo, lessen their learning workload and come up with more activities focusing on certain goal to help them learn new things. Actually, these were the thinking that instantly happened in my head when I was surprised by the students’ slow learning, which led to my following thinking of letting them brainstorm by using the idioms on their own.</p> <p>It was the first time that I come up with an activity in class off-hand. To be honest, I didn’t know what kind of result I could get. However, from my own learning experience, I know only when one can use a vocabulary/ phrase/idiom in a sentence does he/she know it thoroughly. Therefore, I let them make up their own sentences, and discussed it all together. Through discussing the usage of the idioms, the students were far willing to speak English than usual because they wanted to know whether their sentences were right. Also, more and more students were willing to share their own sentences even though they are incomplete. I knew this activity was very successful and surely it would be put in my teaching grab bag of activities.</p>
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asked for volunteers to speak out their sentences, and wrote them down on the whiteboard. I made sure what they really wanted to convey and modified the sentences into a version with the vocabulary and structures well within their grasp. From these processes, I learned that even if the students seem to understand a new idiom/word/phrase outwardly, they do not necessarily know how to correctly use it. For example, when everyone tried to use “break the news”, many of them made the sentence like this “I hate to break the news, but the economic recession nowadays is very serious and I hope Obama could save the day (Modified version).” It looked very nice at first blush, however, the students just got the superficial definition of “tell some information first”, but neglected the connotation of its “often used when relating news that might be difficult for other people to hear”. It was from their make-up sentences that I found out they used certain idioms improperly. The sentences were sound grammatically, but not contextually.

Pei-Hsuan Tu

01/29/2009

Journal #2

Field notes	Reflections & Analysis
<p>01/28 13th class; 3rd time of idiom teaching. 6~8 adult students who are immigrants from China; they usually speak Cantonese that I cannot understand; they can speak little Taiwanese (my L1) and can understand my L1 thoroughly.</p> <p>Students are reciting the idiom-embedded conversation while I walking into the classroom.</p> <p>First activity: useful expressions on “agreeing with an opinion”</p>	<p>01/28 Last time the sentence-making activity was a real success and the students said they love it, so decide to continue this activity today.</p> <p>Oh my god, what a lovely class! But hearing their English, I really think they should have more pronunciation training. I wonder if it works when I teach pronunciation only while the need arises. Should I teach them pronunciation systematically? But time is so limited, and I believe they want to focus more on how to communicate rather than how to pronounce correctly. What should I do?</p> <p>(***Possible themes: A. pronunciation teaching > ①Is it possible or necessary for adults to learn target-like pronunciation? ②Does it work if I teach pronunciation only when students have difficulties or when it’s hard for me to understand them? ③How can I integrate pronunciation teaching into other activities in a systematic way? ④Why do our students want to improve their pronunciation? [Socio-affective factors]; B. Focus-on-form instruction)</p> <p>There are 11 sentences of agreement expression; I choose 5 sentences that are used and heard most frequently. Hope this would help those who think 11 are too many. (***Possible theme: Lexical/chunk teaching Approach)</p>

<p>Second activity: review the usage of the idiom “break the news”</p>	<p>The activity postpones. A student interrupts me while I’m going to start the activity. As soon as he asks the questions that he faces in daily live and also in his jobs (How to say...in English?), other students ask their own questions as well. I know this is the most important part for them, so I know I should stop my lesson plan and meet their needs. (***Possible themes: Motivation; Learner autonomy; Student needs)</p>
<p>Third activity: the original second activity</p>	<p>This time I can strongly feel the power of sentence making. Students are no longer so unfamiliar with the things I taught as last time. So I quickly review the literal meaning, the denotation, and the connotation of the idiom.</p>
<p>Fourth activity: making sentence with another idiom “at least”</p>	<p>Though the idiom “at least” has the same usage in Chinese as in English, it’s until a student making a sentence like “ I have known her for at least ten years” that I realize it has two meanings in both languages.</p> <p>Fortunately, they realize this fast enough, and give me other sentences with the meaning that I want; ex: “He is not quick, but at least he is reliable.”</p> <p>But they are still struggling with the usage. The sentence like “He is hard-working, but at least he is not smart” shows their misunderstanding, though I’ve taught them that “at least” means “ the good thing is that”. Eventually, I tell them explicitly that the sentence before “at least” should be negative, while after should be positive. Next time will have an assessment of it. (***Possible themes: explicit instruction; corrective feedback; direct speech>)</p>

Pei-Hsuan Tu
02/05/2009
Journal #3

Field notes	Reflections & Analysis
<p>02/01 This week I have the following teaching steps (the first two are the same as last week) : (1) Useful expressions – ways to express “I disagree”; (2) Sentence-making with learned idioms; (3) Jumbled texts</p> <p>1. First activity: Useful expressions - Learning ways to express “I disagree”.</p> <p>① Before teaching “disagreement expression”, I helped them review the “agreement expression” that was taught last week.</p> <p>② New expressions teaching: “disagreement” expression</p>	<p>Last time I marked the top 5 agreement expressions (ex. “Exactly”, “Absolutely”, “I think so too”...) and wish by doing this could encourage students to use them on daily life. I assumed the students try their best to use the sentences and be familiar with these sentences (at least the top 5). However, I was really frustrated because I found out students were again unfamiliar with the things I just taught a week ago.</p> <ul style="list-style-type: none"> ➤ If I create a situation/ context and let them express their opinions using “agree” or “disagree” expressions, would it be better? I think more situated subject could help them learn better. I’ll try it next time! <p>(***Possible theme: CLT)</p> <ul style="list-style-type: none"> ➤ Also, I should do Needs Assessment to understand what they really want to learn. (It was a big mistake that I didn’t do this in the very first class!) I believe this would help a lot. <p>Actually, I really don’t know how much they learned. I think I will know next week. But still I need to create an activity or situation for them to use these phrases as assessment. This is my homework this</p>

<p>2. Second activity: Sentence-making with learned idioms</p> <ul style="list-style-type: none"> • Reviewed the two idioms used to practice sentence making. • Cancelled the original activity. <p>3. Third activity: Jumbled text</p> <p>Steps:</p> <ol style="list-style-type: none"> ① Review the conversation text ② Divide the class into 3 groups of 2 learners. ③ Give one envelope of jumbled text components (16 strips totally; 8 written in black to stand for the employer Bob, and the other 8 in red to stand for the boss Peter) to each group, 	<p>week.</p> <p>When reviewing, I was frustrated again. They forgot almost everything! I asked several questions to check how much they still remember, but they could not answer any of them. Was it my problem? Maybe they started to get bored with the same set of conversation? Actually, I've found the students' lack of motivation to learn English is a big challenge for me to teach. It seems like I have to teach them always the same kind of thing because they wouldn't read and review out of class; and I cannot have much expectation from them. After all, they've been here for ten years or more, and because living in the circle of Chinese, they don't really need good English.</p> <p>(***Possible themes: Motivation; Learner autonomy)</p> <p>In my lesson plan, I planned to teach mainly another or two usages of the idioms, and the reviewing session would just spend 5~10 minutes. However, I spent all of the 30 minutes to review, and I felt something wrong. I couldn't tell what it was, but the thing went strange. They just listened to me and didn't answer any questions I asked. At that moment, I decided to take out the idiom-usage sentence-making session. (The strange feeling would be figured out later.)</p> <p>Preactive planning phase: I had a little concern about the difficulty of this activity, but I didn't pay too much attention to this small voice in my heart.</p> <p>Interactive phase: I admit that I reviewed the text too quickly in order to make my students do this activity. But the time was about to run out, and I could feel the students' listlessness while I taught the same thing again and</p>
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<p>then ask the learners to read each of the pieces and place them in the correct sequence.</p> <p>④ The complete text would be the set of idiom conversation we taught.</p> <p>Two groups were much faster than the other. While the slowest group was working, I asked the finished group to try to memorize the idioms by writing and speaking at the same time.</p> <p>4. After class</p>	<p>again. However, it was obvious that they didn't learn each idiom thoroughly. Did I expect too much from them? Or the materials were too difficult? I will put these into the needs assessment next time and figure out.</p> <p>(***Possible themes: Time Management; Teaching Material Selection)</p> <p>Another thing I have to admit is that the lack of copy machine in the Church do influence my activity and materials selection. I would choose activities and materials that need fewer copies; Which is a real limitation.</p> <p>During their jumbled text activity, one group was much slower than the other two. To help the group unscramble the text, I guided them with several questions, asked them about the context, and allowed them to answer me in Chinese. However, they were totally confused under the time and peer pressure. If I can choose again, I would not put this activity this time but next time, not at the end of the class but the middle of the class.</p> <p>(***Possible theme: Student/Teacher's L1 role; How to encourage more L2 use in the classroom?)</p> <p>To be honest, the teaching sucked. Everything seemed wrong to me. While I felt frustrated, one student came and talked to me: "Teacher, I think the idioms and the conversation is too difficult for us." Then he took out an idiom book and said: "This one is good." Suddenly I knew they need easier idioms and shorter text with simple logic. This is the point! While shocking, the student went on: "I want to thank you for finding the supplements (pointing to the handout of Useful Expressions) for us, it's really good and useful. It must take you lots of time." At that moment, I felt I really like to be a teacher.</p>
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Pei-Hsuan Tu
 02/12/2009
 Journal #4

Field notes	Reflections & Analysis
<p>asses of idiom teaching jumbled text activity last gave them a needs understand their background guage proficiency and which conditions they their learning goals and whether certain activities are how they think about and the “proportion of my on and the role of L1 and my possible themes.)</p> <p>ss started, I told the class I ord today for my personal ersion about my thesis ’m going to do after ntrigued.</p> <p>ersation, I told the class do today. I wrote on the he upper-left corner):</p>	<p>1. Through writing the journal #3, I realized that I need to use the Needs Assessment to understand students’ needs and can therefore choose and design the teaching materials accordingly. At the very beginning, I didn’t think of the importance of a needs assessment, because the last teacher of the class hoped me to continue and finish the rest of the lesson in the textbook. Therefore, I almost followed the textbook and rarely thought of trying to understand the actual level of my students.</p> <p>2. It was a pleasant conversation with my students, and I really thought this great opening warmed the class up.</p> <p>3. This was my first time to show students what exactly we were going to do in today’s class. Actually, I did it almost every time when I interned in the elementary school in Taiwan. I didn’t know why I did it in Taiwan but not in America. Maybe it’s because I subconsciously believe children need more guidance than adults.</p> <p>4. I didn’t expect that the needs assessment per se could also function as a teaching material. What I thought initially regarding how to manipulate needs assessment was to</p>
<p>. All About Me! . Vocabulary (Side-by-Side)</p>	
<p>what the two activities are of each of them.</p> <p>All About Me! he needs assessment (See arted to guide the students ted to write and clarify</p>	

certain questions. We went through the questions one by one. When students asked about vocabulary in the questions, I used different ways (e.g. making lots of examples; paraphrasing; using prompts) to let them understand; when they were interested in the sentence structure of my sayings, I would write them down and explained to them. They also liked to make their own sentence just after my teaching of new vocabulary or new sentence structure, and asked me whether it was right. Occasionally, they would request me to read certain words or sentences for them to know how to pronounce them correctly (I taught them how to recognize the stressed syllable). To my surprise, needs assessments may function as a teaching/learning material.

explain certain questions and let students quickly fill in the information I need. However, soon I felt the students' eagerness to learn something new from these questions. It seemed like through answering the questions in the assessment could raise their awareness of learning situations and further enhance their motivation, autonomy, and responsibility.

So I slowed down my pace and decided to use the needs assessment well by giving up my original plan (I knew I might not have time to do the second activity). It could not only be an assessment, but also a teaching material!

We went through the non-writing portion pretty well. However, when we were continuously going down to the portion of open-ended questions, the class spent much more time than I had expected. Even though I told them it would be okay if they used Chinese (because the context is the most important thing to me), many of them still insisted to write in English.

So once more, my lesson planning was reflected in action. I changed my plan from letting them finish the writing in class to finish the writing at home, and cut off my second activity. I asked them to bring the needs assessment back next week then I can give them feedback the week after next.

After examining that the students really understood the meaning of each statement or question, the needs assessment became their assignment this week.

Appendix (02/12/2009)

Needs Assessment -- All About ME!

I. Background Information

1. My name is _____ (Chinese name).
 _____ (English name)
2. I am from _____ (country).
3. I have been here for (about) _____ years.

II. Language Proficiency and Interests

1. I think my English level is: (請在聽說讀寫四部份各勾選一個)

READING	LISTENING	SPEAKING	WRITING
<input type="checkbox"/> Low-beginning <input type="checkbox"/> Beginning <input type="checkbox"/> High-beginning <input type="checkbox"/> Low-intermediate <input type="checkbox"/> Intermediate <input type="checkbox"/> High-intermediate <input type="checkbox"/> Low-advanced <input type="checkbox"/> Advanced	<input type="checkbox"/> Low-beginning <input type="checkbox"/> Beginning <input type="checkbox"/> High-beginning <input type="checkbox"/> Low-intermediate <input type="checkbox"/> Intermediate <input type="checkbox"/> High-intermediate <input type="checkbox"/> Low-advanced <input type="checkbox"/> Advanced	<input type="checkbox"/> Low-beginning <input type="checkbox"/> Beginning <input type="checkbox"/> High-beginning <input type="checkbox"/> Low-intermediate <input type="checkbox"/> Intermediate <input type="checkbox"/> High-intermediate <input type="checkbox"/> Low-advanced <input type="checkbox"/> Advanced	<input type="checkbox"/> Low-beginning <input type="checkbox"/> Beginning <input type="checkbox"/> High-beginning <input type="checkbox"/> Low-intermediate <input type="checkbox"/> Intermediate <input type="checkbox"/> High-intermediate <input type="checkbox"/> Low-advanced <input type="checkbox"/> Advanced

2. I want to improve my (*Fill in #1~6 to show your level of desire: #1 most desire ~ #6 the least desire) (填1代表你最想進步的能力 填6表示最不需要)
 Reading Listening Speaking Writing Pronunciation Grammar

3. I usually speak English When? (With Whom? Where? Talking about What? Why?)

4. Do you have any negative encounters in America because of language? Tell a story for me! (在美國有沒有一些不好或不愉快的經驗?)

5. What are your learning goals or expectations? (*Please let me know! I'll try to help you.*) (你的學習目標是什麼？對英文有什麼學習上的目標或期待呢？)

6. Do you like the things (materials) I gave/taught you? Do you like the way of my teaching? (喜歡我給你們的教材嗎？喜歡我的教學方式嗎？說說原因吧！)

7. Recently we've learned a lot of new idioms. Do you think the idioms are too difficult for you? Do you want me to choose some materials that are easier?

8. Remember the jumbled text last week? (Two people work together to re-organize the small strips into a complete text.) Do you think it was too hard? Why or why not? (p.s. jumbled text **就是一條一條的紙, 然後我要你們拼湊成完整的對話**)

9. Among the Useful Expression (agree v.s. disagree), Idiom, and Jumbled Text, from which one do you think you can learn most? Why do you like it or why not?

10. Do you like the teacher? (You can say the teacher is VERY beautiful and has wonderful voice, something like that...^0^)

III. Details

Using the following responses, please circle the letter next to each statement, which best describes your opinion. (最認同的填1, 依次填到6; 7代表不適用)

1	2	3	4	5	6	7
Can't agree more!	Yes!	Maybe.	No opinion.	Not really.	No!	N/A

Pronunciation

- 1) Pronunciation is very important.
- 2) I want to learn how to pronounce English like Americans. (very specific learning) 1 2 3 4 5 6 7
- 3) When I speak English, people cannot understand. 1 2 3 4 5 6 7
- 4) I just want to have the pronunciation that others can understand me. 1 2 3 4 5 6 7

L1 (Chinese) v.s. L2 (English)

- 1) I think the teacher use proper proportion of Chinese and English. 1 2 3 4 5 6 7
- 2) I hope teacher can use more English. 1 2 3 4 5 6 7
- 3) I hope teacher can use more Chinese. 1 2 3 4 5 6 7
- 4) I hope I can have more opportunity to speak English in class. 1 2 3 4 5 6 7

Pei-Hsuan Tu

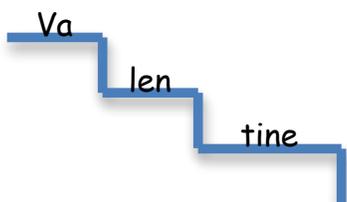
02/19/2009

Journal #5

Field notes	Reflections & Analysis
<p>02/15</p> <p>Today there's a new comer in my classroom, a beautiful young mother with a beautiful name Michelle, and everyone welcomes her.</p> <p>1. Start the class. Because the day before the class was Valentine's Day, many students greet me with "Happy Valentine's Day" and talk about whether there was a celebration yesterday. Since many of them have the pronunciation problem with "Valentine", and cannot tell the three words "Valentine", "volunteer", and "guarantee" from each other, I write them down on the whiteboard and teach them the differences among the three words in terms of pronunciation and meaning.</p> <p>*Detailed teaching steps: 1) Write down the three words on the whiteboard. 2) Tell them how to divide a word into several syllables. (the way of division is a review) For example, when teaching the pronunciation of "guarantee", I draw like this: gua ran tee (without spacing). ① ② ③ 3) Teach them two basic rules to determine the stressed syllable: ① louder voice; ② highest/er pitch. 4) I read each word several times, and according to the two rules, lead the students to determine the stressed syllable of each three words.</p>	<p>1-1 A student broaches the subject of pronunciation of "Valentine". He says he met a black man who said Happy Valen/<i>tin</i>'s Day for him. I tell him black people have their own dialect and special pronunciation (Actually I don't know whether the answer is right.), but I'm going to teach him and the other students the most frequently heard and spoken version.</p> <p>1-2 To him, "Valen/<i>tin</i>/" has a very similar pronunciation with that of "guarantee", so he asks for the correct pronunciation; rest of the class also have the same problem. (While another female student broaches the subject that the word "volunteer" is also very like the other words, almost every student says in Chinese "It seems like they are almost the same!") Here, it's obvious that the students are confused with the pronunciations between /v/ and /g/, and /l/ and /r/; also, they don't pay attention to the last syllable. So I train them the pairs first, the syllables next, and then the whole words.</p> <p>1-3 When I listen to the recording again back home, I find out the female student who said that the pronunciation of "volunteer" is like that of "Valentine" pronounced "w" instead of "v" which caused her problem to distinguish the two (because the "o")</p>

****Students' difficulty:**

They encounter difficulty the most when determining the stressed syllable of "Valentine". Therefore, besides the two rules I taught them, I draw a staircase to show the intonation graphically:



2. Homework for next week.

a) Distributing the questionnaire.

There are two parts in the questionnaire, both are excerpted from *Learner Autonomy (2000)*; first part is the questionnaire to survey students' past experiences (e.g. Did your last language teacher always explain every point to you? Did you have to guess rule/meanings yourself?); second part is the questionnaire on students' learning styles.

b) Knowing how much you already know. Purpose: building self-confidence.

- a. Ask students to find words (10~20 words) that they already know now before next class.
- b. Encourage them to choose words they think are unknown to the others.
- c. Prepare and find a way to share or teach the words to the classmates (e.g. miming, bringing pictures or objects of them). I demonstrate the task by showing a comic picture of teacher to them, and say "teacher".
- d. Tell them explicitly that the

and "a" would be influenced by the sound "w", which leads to the similar pronunciation between "wo" and "wa".) As this is one of the common problems to speakers of Chinese (Swan & Smith, 2001), I will design some activities to focus on this next time.

2-a) The questionnaire this time is to complement the Needs Assessment last time, which (this time) focuses on the students' past learning experiences and their learning styles. I assign this as a homework to save the classroom time.

Past learning experiences: It's important to know what kind of experiences they have had, because you can know what expectations they may have of you as a teacher. Also, knowing their existing attitudes towards learning a foreign language is the start point for developing responsible attitudes. (***)Theme: Learner autonomy development)

Learning styles: Knowing that a student learning style is auditory, visual, or kinaesthetic is very useful. We can design or adapt a lesson accordingly. It's also good for students themselves letting them know the way(s) they can learn things efficiently.

2-b) Actually, I don't know whether they would do the homework, because only half of the class submitted the homework last week. However, I would keep in mind the training and the students' accepting of "learner autonomy" take lots of time. Even though I cannot see the result after six

<p>purpose of this activity is to show them how much they already know to enhance their self-confidence.</p> <p>3. Starting my Learner Autonomy Development Plan. Purpose: developing learner responsibility. Because all of them are adults, telling them explicitly what I am going to do next would be more efficient and give them more security and clear goals. I tell them “You will not only learn English with me, but also some skills and techniques for learning the language, and you will find out about which of these work best for you!”</p> <ul style="list-style-type: none"> • Because students cannot understand the word “skill” and “technique”, I explain it by doing the activity called <i>Grouping Words</i>, a technique for learning new words (Scharele & Szabo, 2000): <ul style="list-style-type: none"> ➤ It contains two tasks. First, I randomly write down ten words with no grammatical or topical cohesion. Ask students to look at the board and try to memorize as many of the words as they can in ten seconds. Then, erase the words and ask them to write down as many as they can remember. A quick survey shows most of them can write down 6 words or so. (I should have chosen ten “new” words for a more obvious result.) (When I say times up, many of them are sighing slightly and want to peep through my body on the board.) ➤ Then, I give them another list where the same number of words (including the words 	<p>more weeks, I still want to discuss this with the next teacher to see whether I could do this project with him.</p> <p>3. The reason why I want to the Learner Autonomy Development Plan is that these adult students lack strong motivation to learn English (e.g. One student once told to me: “I just want to come here every week and maintain some basic English ability.”), and most of them don’t want to do extra work at home but want to improve their English. They learn English by totally relying on me! So I want to try improving their responsibility, motivation, and then autonomy. I want to let them know a success of learning depends as much on the student as on the teacher. Therefore, I decide to give my students and also myself a chance. As a new teacher, I’m going to follow the steps and suggested activities in <i>Learner Autonomy (2001)</i>, hoping to enhance their responsibility and autonomy by teaching them how to catch fish rather than giving them fish all the time, letting them realize their contribution is as important as mine in their learning processes.</p> <p>I know the learner autonomy process should be slow and gradual, so I don’t expect to gain a result of a huge change from my students. However, I will still do my best to push them towards the end of the autonomy even just a slight movement.</p> <p>The activity of <i>Grouping Words</i> is just a beginning to make them be aware that learning a language has some strategies, and the abilities to use them well can be developed.</p> <p>I didn’t plan to do this activity beforehand, but I think using this to explain what I mean by “skills” is a wonderful way. So I reflect-in-action.</p>
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<p>they know and don't know) are grouped in some logical way, and give them the same task. A quick survey shows most of them can write down 9 words or so.</p> <ul style="list-style-type: none"> ➤ Then I explain that, in theory, learners should do better on the second task, as the meaningful grouping of words helps retention. <p>4. Guessing Hidden strength (Scharele & Szabo, 2000). Purpose: building self-confidence; giving students a chance to know each other better.</p> <ol style="list-style-type: none"> a) Everyone gets a small piece of paper. b) Ask students to write down one sentence about themselves: "<u>I think I am good at ...ing.</u>" Tell them to choose a hidden strength that most others in the class do not know about. Before they write down their own sentences, I demonstrate how to use and say this sentence correctly and give them lots of verbs to arouse some ideas of their hidden strengths. For example, I wrote down "doing business", "dancing", "singing", "playing basketball"...etc. <ul style="list-style-type: none"> ➤ When they are writing their own sentences, one student asks me about the pronunciations of "I'm" and "good at". So I spend some time to teach and correct their pronunciations. c) Collect all the sentences, shuffle them, and give one to each student, and make sure that nobody is given their own sentence. d) Ask students to try and guess who wrote the sentence they got, and read it out with the sentence "<i>I think</i> 	<p>4-1 When I was planning to do this activity, I was worried about whether it would be too easy for my students because the sentence "I am good at ...ing" is taught to 5th grade students in Taiwan. But the fact is that it's totally not. More often than not, I have to be very careful when choosing materials because I tend to overestimate their English level as a result of their age. Maybe it's because I never taught students who are in the age of 40~50, most of my experience of teaching are from elementary schools and I have a stereotype about certain age should be in certain level.</p> <p>4-2 Even though I give each one of them a small piece of paper, and explicitly tell them to write down their own sentences on the paper, almost everyone still write on their notebook. Here I found out one thing: when introducing a new activity, using English only can obstacle the progress and their understanding even I think I use quite easy English. This is the place I struggle with: in an ideal situation, I wish I could use L2 more than L1, however, every time when I do this, students would have no response and no one knows what to do when starting the activities or games. Also, I believe sometimes it's more important for them to understand a concept than for the concept to be explained exclusively in target language (like the activities #3 & #5, which focus on skills of learning English). Further, I feel only use our shared L1 can</p>
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<p>_____ <i>is good at ...ing.</i>"</p> <p>e) After each guess, I would ask the possible sentence writer "<i>Are you good at ...ing?</i>" and point to the written sentence on the board (I wrote it down beforehand). Students can ask by themselves without my help after I demonstrate a few time. If the person who wrote the sentence is confirmed, then everyone has to say it together "<i>(S)he thinks (s)he is good at ...ing.</i>"</p> <p>5. Identifying difficulties in listening (Scharele & Szabo, 2000). This activity aims to help students distinguish their problems with listening.</p> <p>a. Write the following points on the board:</p> <ul style="list-style-type: none"> • Distractions • Linking (students add this one) • Speech too fast • Strange idioms • Too many new words • Background noise • Too much information • Sentence too long (students add this one) <p>b. Check if the students understand all the words, and have students copy the list of problems.</p> <p>c. Tell and demonstrate whenever they find it difficult to follow the material I read later, they should mark one of the reasons in the above list.</p> <p>d. Read the first chosen material twice. Because I find out the material is too difficult for them to mark the reasons (they don't understand almost two-third of the listening), I switch into another material in the textbook which is much easier. This time they start to</p>	<p>they enjoy my joke and can we establish rapport with each other.</p> <p>This activity is full of laughing. The students enjoy the guessing process and I can feel their confidence when saying the sentences without looking at the board at last. One paper shows the sentence "I'm good at riding bicycle" and the paper-holder guesses that John is the person who wrote it because John is a meal box deliverer. Everyone loves the guess!!</p> <p>5. When I introduce these points that result in listening difficulty, students are very excited starting to discuss these points with me and also add other two points they have. They add "linking" before I start to read the paragraph, which they say it's one of the most difficult point for them to understand American people. Even without linking, they say they cannot understand the whole sentence, let alone with lots of linking. So I tell them, the bottom line is to start with a sound file with someone speaking English in a slow pace and with moderate or no linking (e.g. VOA). Then they add the other point of "sentence too long" after my reading, no matter the material is the difficult one or the easier one.</p>
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<p>mark.</p> <p>e. After checking their understanding from the context, I do a quick check to gather the marks. The top 3 problems marked most often are “sentence too long”, “too much information” and “too many new words”.</p> <p>f. Then I share my own experience and learning ways of preparing TOEFL iBT listening section, and encourage them to start from a very short paragraph with voice file.</p>	<p>The result shows that “distraction” and “background noise” are seldom responsible for their listening difficulty, which is a surprise to me. Maybe because there exist different definition of “distraction” between them and me. When I prepared for the listening section on iBT, as long as the information is too much or the time is too long to make me concentrate on it, I usually would say: I am distracted.</p>
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References:

- Swan, M., & Smith, B. (Eds.). (2001). *Learner English: A teacher's guide to interference and other problems*. New York: Cambridge University Press.
- Scharle, A., & Szabo, A. (2000). *Learner autonomy: A guide to developing learner responsibility*. New York: Cambridge University Press.

Pei-Hsuan Tu
 02/26/2009
 Journal #6

Field notes	Reflections & Analysis																					
<p>class started, one student about the past tense of “am” he referred to the feedback assessment I just gave him: writing “were” above his He wondered why the past ’ is not “were”. I told him language is arbitrary, even speakers don’t know why, teach you how to remember</p> <p>following graph to explain member:</p> <table border="1" data-bbox="61 993 537 1289"> <tr> <td>(1) I</td> <td><i>am</i></td> <td></td> </tr> <tr> <td>He</td> <td><i>is</i></td> <td><i>was</i></td> </tr> <tr> <td>She</td> <td><i>is</i></td> <td></td> </tr> <tr> <td>It</td> <td><i>is</i></td> <td></td> </tr> <tr> <td>(2) You</td> <td><i>are</i></td> <td></td> </tr> <tr> <td>They</td> <td><i>are</i></td> <td><i>were</i></td> </tr> <tr> <td>We</td> <td><i>are</i></td> <td></td> </tr> </table> <p>” in group (1) are all rs, and when in past tense, 3 letters; in group (2) the ll of 3 letters, and they in past form.</p> <p>Useful Expressions--<i>All sing yourself—Come</i></p> <p>his activity is to teach different ways to express ask others to say things understanding breaks ple, “Come again?” ain)?” “Pardon?” “ Sorry, I</p>	(1) I	<i>am</i>		He	<i>is</i>	<i>was</i>	She	<i>is</i>		It	<i>is</i>		(2) You	<i>are</i>		They	<i>are</i>	<i>were</i>	We	<i>are</i>		<p>1. They all seemed very satisfied with this strategy to remember the form of past tense of verb “to be”. From their facial expression I could feel that there might be no other teachers teaching them to use this tip, and this could help them a lot. To be honest, I was also surprised with my immediate induction and the ability to categorize these verbs into two groups and find out its rules, because no one ever taught me this rule and I myself never use it to remember the past tense of verbs to be. So I think it’s pretty amazing that I teach them this way.</p> <p>2-1 [L1 use] When talking about the sentence “I’m sorry, I didn’t follow you”, one student asked me “Why is I ‘am’ sorry, but I ‘did’ not follow you? Why don’t we say *I <i>am</i> not follow you?” Then I told him the word “sorry” is an adjective, but “follow” is a verb. Only adjectives and nouns can follow be-verb, but the</p>
(1) I	<i>am</i>																					
He	<i>is</i>	<i>was</i>																				
She	<i>is</i>																					
It	<i>is</i>																					
(2) You	<i>are</i>																					
They	<i>are</i>	<i>were</i>																				
We	<i>are</i>																					

<p>didn't understand that/you, could you repeat that/could you say that again more slowly?" "I'm sorry, I didn't follow you/ I didn't get that."</p> <p>[Pronunciation] When teaching the sentence "I'm sorry, I didn't follow you/ I didn't get that", students had the difficulty to pronounce "get that", so I took some time to focus on it. When I asked them try not to speak out the <i>t</i> in <i>get</i>, but rather to retain the spell of time for it, no one could achieve this even though they said they understand; so I changed into a second-choice teaching way. The secondary choice is to let them get rid of the <i>t</i> in <i>get</i>, and just pronounce like <i>gethat</i>. This strategy worked. Though it couldn't get a perfect result, by focusing on the stress and intonation at the same time, I believe it met the bottom line of not influencing the intelligibility.</p>	<p>b can only be followed by e of the former's role as s. Here I use almost only 's more important for v and understand the rules what an "auxiliary" verb erb actually mean.</p> <p>onomy—learning strategy] lized that the parts of glish is still a problem for cording to my learning taught them what kinds of l be written in the notebook tering a new word. I</p>
<p><u>When reviewing the sentences of Useful Expressions, as usual, students would draw many other questions related to their own lives from certain sentences:</u></p> <p>Example #1 [Pronunciation]: When teaching the sentence "What's that?", one student said in Chinese: "The <i>what's</i> in this sentence is very hard to pronounce!" So I asked my students to think about how we pronounce "I" in Chinese: "keep the shape of the lips and hold the sound in half way, then say <i>what's</i>." Amazingly, everyone pronounced the word perfectly.</p> <p>Example #2 [Learner autonomy—Motivation]: One student said, "Number ten, right? <i>Could you speak in plain English?</i> This sentence, if I, umm, in a store, a customer come in. They, uh, want some product, but these products maybe...if there is a old woman, they say this product is, uh, before the name, but right</p>	<p>word, the transcription, the ch, and its meaning(s), memorized all together for an er from China as in the rcle of English. The egy could be a guide for nd help them be more in the language learning n understand their anxiety nglish. They didn't learn childhood, never accept formal training in nd just cram some basic re immigrating to America, t have totally different tures and values. They are ust like we as international want to give them as n to help them learn e learning strategies are arning and building</p> <p>ction] to my recording, I found nt sitting near me said</p>

<p>now not call, but they say...but...I can't say 'Could you say that in plain English?' uh, this is...(change into Chinese) Is it impolite?" After clarifying what she really means (she wanted to ask if someone comes to her office and asks for certain product but call it with an old name that people nowadays doesn't call it in the same name anymore, can she use this questions and is it polite?), I told her how to use this question under appropriate situation which is not in this one.</p>	<p>"solly" instead of "sorry". (Not surprisingly, she said "slowly" perfectly.) Because last time I realized that to differentiate /l/ and /r/ is difficult to them, the activity focusing on these two sounds would be executed later.</p>
<p>[L1 use] One student asked about the sentence "Explain it to me as if I were a five year old." He asked in Chinese, <i>Why there is no "s" at the end of the "year"?</i> I wrote down two sentences for them:</p> <ol style="list-style-type: none"> ① Explain it to me as if I were a 5 year old. ② Explain it to me as if I were 5 years old. <p>To illustrate these two sentences surely has something to do with grammar explanation, so I choose using L1 for them to have the first impression (I didn't expect them to remember the difference only after one teach).</p>	<p>→ It is when the language is intertwined with their lives can students really learn the meanings and usages.</p>
<p>3. In my lesson plan, I had two more activities to do. The time was apparently not enough, so I let students to decide our next activity.</p>	<p>3. One activity was focus on speaking, and the other one was on pronunciation. I told them clearly what they would do in each activity then put it to a vote. I let go off my power to decide the next activity meta-cognitively. I saw some of my students consider by themselves, some negotiate with classmates, and some talk about the reason why choosing one but not the other. I knew I achieved my first step "raising students' awareness" in learner autonomy development.</p>

<p>4. My students decided to continue with the activity of how to differentiate the pronunciation between /l/ and /r/ :</p> <p>① Listen and differentiate: In the handout, there were three practices of minimal pairs. The purpose of this part is to make sure if they can differentiate these two sounds by listening. In each pair, I would say each word one time, and students had to circle the third word that I said. For example, I said “lace-race-race”, then students circled the third word “race”.</p> <p>② I asked them to repeat another six minimal pairs of words and sentences. Take the first pair for example, “<i>led</i>—The person in front led. ↔ <i>red</i>—The stop sign is red.” Also, I wanted them to notice when I said “long”, the mouth was more open and longer than that of “wrong”.</p> <p>③ After teaching and practicing the six pairs of words and sentences in step ②, I asked them to do pair works, where students #1 in pairs would read one of the words in any minimal pair, and students #2 circle the word (s)he listened, and then correct each other. Next, the students in pair switched the roles and did the same task again.</p> <p>④ Contrast: /l/ Blends-/r/ Blends: Take the pair of <i>clash-crash</i> for example. When teaching <i>clash</i>, I would like them to put their tongue at the correct way first, before pronouncing the /k/ sound. So put the tip of the tongue against the alveolar ridge or the back of the upper teeth, while holding the position, pronounce /k/.</p>	<p>4. Why I chose these two sounds was according to students’ questions and performance last week (they couldn’t tell <i>Valentine</i> from <i>guarantee</i>). Also, because it was themselves who chose the activity, I strongly felt their motivation and concentration to learn things.</p> <p>After the ① activity, they were very happy to know that they actually could differentiate the two sounds, but some of them reminded others that it might be only because of the careful listening to one word at a time. I was so glad that some of them discover this, which leading them naturally to the step ②. A word is usually easy to tell on its own, but when embedded in a sentence that would be much difficult.</p> <p>During step ③, one student asked me about “life” and “knife”. The contrast /l/-/n/ would be the next focus. Also, I asked them to bring mirrors next week, to see whether their places of articulation are at the same place with me.</p> <p>In step ④, I told my students explicitly that there are two steps to pronounce the blend to help them overcome the added schwa between /k/ and /l/ or /r/. First, if you see /l/ in the consonant clusters at the beginning of a word, then pronounce /l/ first and hold the position. Second, deleting the /l/ sound but replacing it with /k/. When you see /r/ in the consonant clusters, do the same sequence.</p> <p>I found out when they pronounced according to the sequence, it sounded</p>
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	<p>perfectly. However, they had to pay much more attention to remember the how-to, or they would easily slip back to their familiar way of pronunciation.</p> <p>(Another question raised by one student: <i>prescription.</i>)</p>
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Pei-Hsuan Tu
03/05/2009
Journal #7

Field notes	Reflections & Analysis
<p>03/01</p> <p>While listening to the recording, I found out some interesting dialogues before the class started. During the time I went to the restroom, student T asked M whether she had the ten words that I asked them to prepare for the class this week. The following conversation is all in Chinese.</p> <p>Episode 1. M: Yeah, you see I have lots of vocabulary. (Other students said “Hohohoho...” which has the similar connotation when Americans say “Wow”.) I put the words here altogether. T: Remember all of them? M: No, but I see them as long as I have time. S: You’re so hardworking; I’m very lazy. M: Maybe you have no time.</p> <p>Episode 2. S: What did teacher say last week? I forgot everything. W, M, T: Find ten words that you know but others might not know. M: Actually how do we know others don’t know the words we know. So I think just find some words that you think everyone should know and then write them down. S: I forget totally. I didn’t do anything. H: I did the homework. But I forgot what I wrote. Hahahaha... M: That will be fine. We can just write on the board and the teacher would teach us, then all of us know clearly what they mean.</p>	<p>It was fun to listen to students’ conversation while I was not there. Those are the real things that could let a teacher know more about students no matter on his/her learning attitudes, today’s mood, or learning situation, etc. The conversation is precious is because as long as you as a teacher is in the same room with the students, they are not going to tell you these “secrets”.</p> <p>From the episodes, I can know that the student M is not only show higher motivation than others in class, but outside the class. She can use the strategies I taught them in class of how to remember vocabulary in her learning process. Also, from her explanation to other students about the chosen words (“...just find some words that you think everyone should know and then write them down”), it’s great to see that she totally understood me and remembered what I had said.</p>

<p>1. Activity -- <i>Words you already know</i>: Purpose: to show how much they already know, to mobilize their existing knowledge, and to encourage their contribution to classroom work:</p> <ol style="list-style-type: none"> 1) Before starting the activity, I stated explicitly why I wanted them to find some familiar words and share them with the others. 2) Sharing my own learning experience which accidentally turned out to be a listening practice: <ol style="list-style-type: none"> ① English first time (I spoke; They listened) ② English second time ③ Chinese the third time ④ English the last time 3) Ask students to write their found words on the board. Try to fill the board with words. <ul style="list-style-type: none"> ➤ When asking them to come to the board and write down their words, three of the students (who prepared for the homework) showed a little bit shy but I could see their faces smiling while writing. ➤ While waiting them to finish the words on board, I told the rest of the students that our focus today is on speaking, and later they would have lots of opportunities to speak to each other. 4) Let students teach and share the words with the whole class. <ul style="list-style-type: none"> ➤ I wanted them to share the way they remember the words and tried to imagine if they were teachers, how would they teach their students ➤ However, even though I led them and demonstrated some ways to share, they were too shy to mime when I asked them to perform and told me “I don’t 	<p>[L1 use] I wanted them to know that in fact, the words they already know are much more than they imagined. Therefore, I told them that the proportion of one’s real English knowledge to one’s oral performance is about 100 to 1, which may not be proven by theories, but from my own English learning experience, the feeling cannot be true more! In the beginning, I just wanted to share my experience with them and used this lead to the activity’s purpose (see column left), but I can always be initiated by these students and therefore think of some way to teach them more! While talking about the proportion things in English, my students used confused expression looking at me. Then I decided to say it again in English the second time. Before doing so, I asked them try to guess what I was talking about and later I would use Chinese to let them truly understand.</p> <p>[Learner autonomy] I forgot from which class, but every time as long as I told the purpose or the focus of the activity, they would be much more concentrated. Once again, during the second time of speaking, I could feel their motivation of trying their best to understand the English which was higher than that of the first time. Then, I used Chinese explaining again to let them check how much information they got, and showed how guessing as a listening strategy works. To my surprise, my students asked me to speak English again. They said “<i>One more time in English.</i>” Which to me was meaningful, because it stood for their enhanced motivation, higher learner autonomy, and own decision-making rather teacher-leading. This was a huge progress to me.</p> <p>[Learner autonomy] In step 4), I still don’t know how to deal with students’ unwillingness to perform even after encouraging. I remembered</p>
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<p>know how to teach; I'm not a teacher</p> <ul style="list-style-type: none"> ➤ So I taught them by myself because it didn't matter by miming (they're too shy to be prepared even I asked them to). <p>5) Review the words.</p>	<p>when I was little, I was just like them: too shy to perform in front of lots of people. So now I just encourage them instead of forcing them to do things they don't want. Also, I am thinking whether the incompliance such as this is a kind of learner autonomy? Because it is their choice to not learn things in this way which might make them uncomfortable.</p> <p>They should've brought simple words to share in order to get the objective of this activity totally, but out of my expectation the words they chose were too hard. Some of the words even I have never seen them before, such as "heist" and "cholelithiasis", or not sure what they actually mean, such as "gallstone" and "holdup". However, I still tried to explain every word for them but briefly since that was not my purpose to do this activity.</p> <p>[Building self-confidence]</p> <p>I told them the words they chose were at a very high level, and among 25 words, they could recognize 14, which showed they had pretty good English ability. Also, I encouraged them to stop thinking their English is poor. All they need to do is to practice more and use some learning strategies to connect the 4 domains (reading, writing, listening, and speaking) of English.</p>
<p>2. Activity – Group discussions</p> <ol style="list-style-type: none"> 1) Describe the rule of the activity and where to do it. 2) Write down the first question and its example. 	<p>To tell the truth, the activity was designed to collect the information that I couldn't get from the questionnaire. Some classmates suggested me to do an interview, but I had the time-limited concern and also I didn't want to get rid of my students' learning opportunity in class (they had no time out of class). In order to get my information and to let my students learn, I designed this integrated activity to achieve both goals.</p> <p>This activity focused on oral fluency</p>

<p>3) Review the meanings of the question and the given examples.</p> <p>4) Teach students the sentence “<i>What is your _____?</i>” In this question, it should be “<i>What is your <u>favorite class activity?</u></i>”</p> <p>5) After making sure their understanding, the activity began and I encouraged them to use English as much as they can, because it was the opportunity for them to speak.</p> <p>6) The students tried their best to speak English. Even at the very beginning they were a little bit shy and seemed be afraid to make errors, they were getting more and more involved after I kept talking to them the focus was not on grammar but on letting your classmates understand you. Also, during their conversation, I helped them clarify what their partner wanted to express when the conversation broke down.</p>	<p>practice and also to collect information on learner preferences. It aims to give them opportunity to speak with each of their classrooms, to get more familiar with each other, and also to make me understand them more.</p> <p>I was meant to let them practice four questions, but I found out that describing the activity rules, explaining the vocabulary (on the board) they don’t know, and reviewing the words which they forgot the meanings took a lot of time. Therefore, I decided to let them practice only one question this week, in which the workload was appropriate based on students’ performance and feedback.</p> <p>In step 4), I not only let them fill the words in the blank, but made sure they understand the meanings. After reviewing 2 times, all of them could answer any of my questions about the rule of activity and the meanings of examples. And this was the time that I knew I could let them start to practice the conversation.</p> <p>[Learner autonomy] I was so happy to see them not being afraid of making errors and speaking English loudly. I think letting them know what they are doing, why they have to do certain activity, and how this activity can help them improve their English are essential for adults.</p> <p>I also found out even some of them finished the activity first (asked every classmate and wrote down their answers), they still used English to chat. And even one student who was very nervous in the beginning of the activity could start to use longer sentences instead of “telegraphic words”. He said to me “I start to get the feeling!”</p>
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Pei-Hsuan Tu
03/19/2009
Journal #8

Field notes	Reflections & Analysis
<p>03/08</p> <p>1. Pre-class</p> <p>Before the class started, Tom talked to me (<i>in Chinese</i>):</p> <p>Tom: <i>Teacher, last week you asked me if I were a teacher, how would I teach my students?</i></p> <p>I: Yeah, remember last week you wrote down lots of words on the board? I was asking you about how to teach those words if you were a teacher.</p> <p>Tom: Oh, those words...</p> <p>I: So you think about this question!</p> <p>Tom: <i>Yeah, I think as long as you ask us to. Mmm...more read, more write, more listen...</i></p> <p>I: Read more, write more, and listen more, right?</p> <p>Tom: <i>Yeah, this is the way I would teach my students.</i></p> <p>Tom then expressed his own opinion as to memorizing vocabulary, which he thought lacking enough amount of vocabulary was the main reason leads to their (the rest of the classmates' and his) spoken difficulty. Also, he suggested that I give them five vocabulary after each class and test them next time. He wanted to memorize words, which according to him, would make them brainstorm and have motivation to read English even they are really busy.</p> <p>Tom: <i>We are really busy. Like I start working at 10 am every morning and when going back home it is already one or two o'clock in the morning. I don't sleep enough. But every time when I thought of your assignment, I would go to bed but wake up at three or four</i></p>	<p>1.</p> <p>[L1 use]</p> <p>Every week before the class starts and while we are waiting for other students, I would chat with my students in Chinese. Why in Chinese? Because I find out that every time when I want to chat with them in English, they are somehow afraid of talking to me. Actually this is quite a difficult situation for me to decide whether to use English when chatting with them. On the one hand, as some concepts I learned from the TESOL professional indicate, such as, that we as teachers should use target language as much as possible to create an English-immersive environment to give students the maximum opportunity of using English, or we somehow deprive them of their right of learning English.</p> <p>On the other hand, however, my students are at a very beginning level of listening ability which leads to their fear of listening to my English and then decreases their willingness to express more about themselves (their spoken ability is very limited too), and therefore it would be hard for me to understand what they really think. Like the conversation on the left, if I insistently use English, I might not know the student's effort, and his needs of memorizing words which is the way of learning English I originally thought he wouldn't like. In this situation, L1 use seems to be necessary between teacher and student.</p>

<p><i>o'clock in the morning to finish or think about the assignment. And my wife would keep asking me why I don't just go to bed. So just give us some new words to memorize, or you know, no words no sentence. It's really hard to communicate with Americans without knowing lots of words.</i></p>	<p>[Others] I was really surprised with how seriously my student took my homework, because before the talk, I never expected for it. After some students told me that they just wanted to come and recharge their "English batteries" every week, plus I hastily generalized the remarks to the whole class, I presumed they were all too busy and didn't want to have any homework at all. But at this moment, I know at least one of my students really wants to learn; no matter the motivation is self-initiated, or is influenced partly by my purposeful learner autonomy development, it encourages me to move forward to be a good and professional teacher.</p>
<p>2. In-class 2-1 I was meant to continue the activity last week Group Discussions on question #2. However, because of the daytime saving, half of the students came one hour late, which made me decide to postpone the activity and reviewed the pronunciation contrast /l/ and /r/.</p> <p>2-2 Before the reviewing, students conveyed their eagerness to me as to learning pronunciation. They also complained to me that usually Americans cannot understand what they are talking about and vice versa.</p>	<p>2. 2-1 [L1 use] Sometimes the students would ask me about how to say something in English in their daily lives. Although they would try to use English to state the situation at the beginning, after one or two sentences later they would automatically shift into L1 (see example of journal #7). Still, there are some students asking questions by using Chinese directly; these students, based on my observation, have lower English proficiency than those who have tried to use English in the beginning.</p>
<p><i>Review /l/ and /r/</i></p> <ol style="list-style-type: none"> 1) I started from the segmental sounds, and then wrote down a minimal pair (lice-rice). Both were executed through the steps of asking them how to pronounce first, and correct their sound one by one. 2) Next, I reviewed the three sets of minimal pairs in the handout to train their discriminating ability. I asked 	<p>Sheng: "你剛才打過電話嗎?怎麼說?" (How to say "Did you call me?") I: "You just call me?" Or, "Did you call me?" Sheng: "You just call me?" 有沒有加ed呢? (Is there an "ed" in the end?)</p> <p>2-2 [Pronunciation] The concept that wrong pronunciation, especially word stress, is a major reason for</p>

- them to circle the third word I said.
- 3) In the final step, each student was asked to repeat the step 2), reading one pair among the three and let others circle and differentiate the third word. (e.g. look-rook-look, then others circle the third one “look”)
- When I said it was their turn, many of them chuckled as if they assumed they would not do it well.
 - There was one student (Ch.) who had serious pronunciation problem. When it was his turn to give the differentiation question, no one could tell the sounds. Actually, even myself felt he said the three words exactly the same.

 Example:

I: Ok, Ch., could you read for us?

Ch.: /lɔk/, /lɔk/, /lɔk/.

(Whole class was laughing after one second)

(Ch. himself also laughed but a little bit embarrassed.)

I: That’s ok. Let’s try it again. /lɔk/.

Ch.: /lɔk/

I: /lɔk/

Ch.: /lɔk/

I: /ɔ/

Ch.: /ɔ/

I: /ɔ/

...(The student might not know what I said was different from what he repeated.)

 After doing lots of practice between look and rook, one student (T.) said: “說來說去我們的國際音標都讀的不準; 碰到字就會念錯啦!” (“Anyway our pronunciation of phonetic transcription is poor; so when we see a word even though with the phonetic transcription, we still pronounce it wrong.”)

Student Ch. Continuously asked me to lead them the two words (look and rook).

Interruptedly, one student (Sh.) asked me

Chinese English-learners’ listening difficulties had been addressed every time when teaching pronunciation or dealing with listening problems. One student said “Our pronunciation is really bad.” “Because of the bad pronunciation, we cannot understand Americans, and they cannot understand us either.” I believe by saying these, the student somehow grasped the main point of the concept above and realized the role of pronunciation among his language learning process. Furthermore, through discussing this concept again with the class, I believe that more students could be aware of the bigger picture of learning pronunciation, rather than focus on segmental pronunciations only.

2-2-3)

From the example on the left, it seemed like Ch. couldn’t tell the /ɔ/ from /ɔ/. However, it was not so simple.

Ch. who had serious pronunciation problem had been using his tongue tip touching the alveolar to pronounce both /l/ and /r/ in *look* and *rook*. This was the reason why he produced exactly the same sounds for the three words. Also, the wrong place of tongue tip influenced the correctness of the vowel sound, which turned out to be /lɔk/ rather than /lɔk/.

Next time I would prepare the picture with speech structures for clearly pointing out their place of articulation and that of mine. Furthermore, the difference between what he was hearing and what I was saying would be emphasized for the students.

Here I have a concern that maybe other students would think I spent too much time on correcting Ch.’s pronunciation problem which was not theirs. I had to be careful for this issue next time.

about /Q/ and /S/ who thought these two were totally the same.

Though I knew the focus was shifted from the contrast between /l/ and /r/ to vowels (actually we were totally out of track), I still decided to teach the vowels quickly to let them get the main idea according to their needs.

Getting Started with Vowels

When teaching them the difference between the vowels /Q/ and /S/, I tried to use the phonetic symbols used in Taiwan where there are some similar sounds with English transcriptions. However, to my surprise, none of my students know these symbols. Though I've heard the different systems used by China and Taiwan before, this was the first time I proved that it's true.

Then I quickly reviewed each of the vowels for them by using minimal pairs discrimination and pairing certain difficult vowels with Chinese sounds.

How Many Syllables?

- 1) Each student got a work sheet with two activities in it.
- 2) First, I gave them some examples to show what they were going to practice. I used "love", "one", "eleven", and "intonation" for them to differentiate the number of syllables.
- 3) Students group the 20 words I read according to the number (1-5) of

[L1 use]

While I tried to correct their pronunciation, I found out that I used almost L1 to explain the place and the manner of articulation. Using English would only make them more confused. I had to say that even I used Chinese to describe the differences of how I produced the sounds from theirs, they still felt abstract and hard to do the similar manners as I stated.

Also, I used L1 when expressing my empathy. For example, I told them my own experience when they almost started to feel frustrated: "他們的母音真的很不好發; 我自己也掙扎很久下了多苦功! ("The vowels are really hard to pronounce well. I myself also struggled with them for a long period of time!")

→ It was really funny when I realized that my students didn't know about the Phonetic Symbols used in Taiwan, which I had always thought that all Chinese people should use it. I told them they actually learned English very early because the Chinese Phonetic Alphabets they've been used was learned before Chinese character. My students all found it interesting and all laughed when I said this.

→ Before the syllable practicing, I told them explicitly the sequence of my pronunciation teaching, which in order is syllable, word stress, intonation of words and phrases, and vowels and consonants. Therefore, I hadn't paid too much attention on the vowels practicing.

I also told them why the sequence was like this. For example, I stated that "Don't try to focus only on the vowels and

<p>syllables. Tell them they should find the same number of words in each group and write them down on the worksheet.</p> <p>4) Check answers on the board altogether.</p> <ul style="list-style-type: none"> ➤ Make sure it was they who produced the right number of syllables and correct them while needed. ➤ Let them differentiate the word stress in each word after syllable checking. ➤ One student asked me “<i>Why the letter ‘u’ sometimes /ju/ but sometimes /S/?</i>”, which seemed was also others’ questions. <ul style="list-style-type: none"> • I taught them when the letter “u” in a word is a syllable alone, such as “university”, then it is /ju/; while “u” is followed by a consonant, such as “umbrella” or “understand”, it is /S/ . 	<p>consonants, because the main reason why Americans don’t understand you is not because you don’t have perfect pronunciation of vowels and consonants, but because that you use the intonations they are unfamiliar with. And this is the reason why I put the intonation in front of the vowel and consonants.”</p> <p>[L1 use]</p> <p>While checking the answers, one of the words was <i>magazine</i>. Though the focus here was on the syllable differentiation, I shifted from the target language to L2 to explain how to pronounce /z/ because almost everyone pronounced it as /s/.</p> <p>I said: “發這個音的時候就很像蜜蜂在嗡嗡叫的感覺; 你會感覺到舌頭震動麻麻癢癢的”(“When you pronounce this sound, it’s like the sound produced by bees, and you can feel your tongue tips vibrating and itching.”)</p>
<p><i>The Same or Different Number of Syllables?</i></p> <p>The second activity in the given worksheet.</p> <p>1) Teacher says the pair of words and students write S if they hear the same number of syllables, and D if they hear a different number. E.g. sandwich (2)- April (2): S.</p> <p>2) Discuss the answers altogether on board.</p>	<p>→ This activity was designed to train their syllable differentiation only by listening. No words were shown in their worksheet. Through this activity, I found out many of them using the number of vowels in a word to differentiate the number of syllables, because when they saw the written words on the board, they changed the original answers which were right. E.x. the word “horse”, they thought it had two syllables because it contained two vowels. (or they thought /s/ per se could be one syllable?)</p> <p>Also, sometimes they judged wrong on the number of syllables was because they misunderstand the concept of diphthong. E.x. they thought the word “museum” had only two syllables because they regarded /aʊ/ as a diphthong.</p> <p>I should keep in mind in my future teaching that ① Listening is easier than reading to tell the number of syllables.</p>

	②Diphthong matters when it comes to differentiate the number of syllables.
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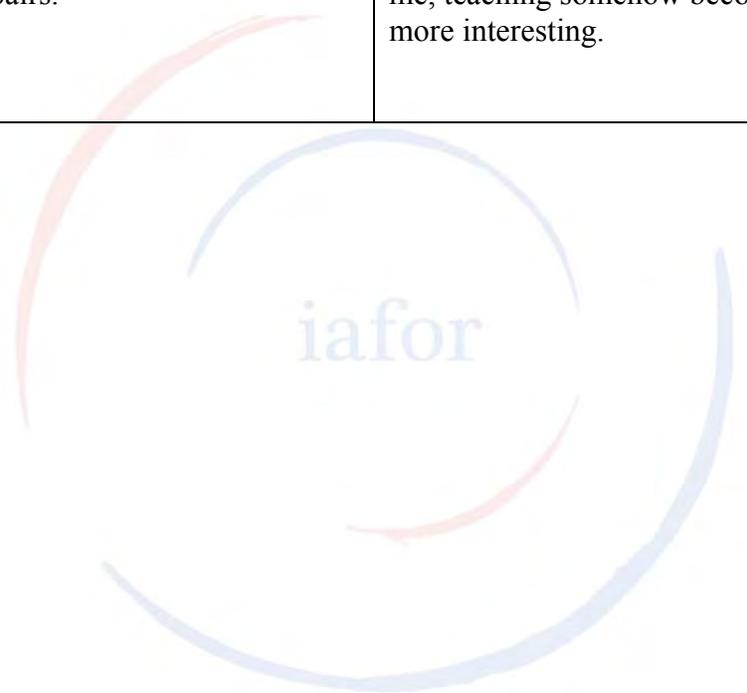


Pei-Hsuan Tu
03/26/2009
Journal #9

Field notes	Reflections & Analysis
<p>sequence of pronunciation llables→Word tence stress, and Vowels ants practice sly: (<u>tea cher</u>: two syllables); (<u>a no ther</u>)</p> <p>hat we were going to do in) Syllable differentiation Word stress; 3) Vowels ween /[^]/ and / / .</p> <p>erentiation review n to write down 1~5 on books; e pairs of words with or same number of syllables, nts write down S if they numbers are the same, D nt.</p>	<p>→ [L1 use] When reviewing the sequence, students could answer my answer correctly even I use English only; even though they had to take some time to think and understand what I said, it was good enough. Also, before I wrote down the following step, students could say it out loud before I gave them the answer.</p> <p>→ [Pronunciation teaching] Students had a problem with differentiating the syllables of <i>deer</i> and <i>horse</i>. Many of them regard <i>horse</i> as two syllables (hor+s). In order to make them much clearer how a syllable is formed, I gave them a rule of syllable elements, that is, [C]V[C]. In this rule, V means a vowel which could count for a syllable even existing alone. C means consonants in which the brackets show that both the positions of C cannot be a syllable if they stand alone without a vowel's company. Then I gave some examples to show how the rule of [C]V[C] worked. V: <i>a</i>; VC: <i>an</i>; CV: <i>to</i>; CVC: <i>dog</i>, all of these words belong to one syllable. After checking my students' comprehension, we went back to the word <i>horse</i> and tried to apply the rule to it. After writing down the phonetic transcription of the word, I started to show how the rule worked in the word. When I showed in the words <i>horse</i> / hɔrs / that /h/ corresponded to the first C, /ɔ/ to the V, and the consonant cluster /rs/ to the second C, one</p>
<p>each Reference</p> <ol style="list-style-type: none"> 1. people (2)- exercise (3) S 2. impossible (4)- assignment (3) D 3. deer (1)- horse (1) S 4. candidate (3)- pollution (3) S 5. museum (3)- Broadway (2) D <p>e answers all together and e confused words and t concepts: sonant clusters V [C] rule netic transcription</p>	

<p>4. <i>Word stress differentiation</i></p> <ol style="list-style-type: none"> 1) Teach them how to use the two rules, higher pitch and longer sound (the sound could be lengthened), to differentiate the word stress in a word. 2) Use the words in the <i>teacher reference</i> and show them how to use <i>Stress Patterns</i> (O for stressed syllable and o for unstressed syllable) and check their understanding of the application of the two rules. 3) Activity: <i>Matching words with their stress patterns</i> <ol style="list-style-type: none"> a. Distributed the worksheet (<i>See Appendix 4</i>). Writing one word in the top box on the board and demonstrating what they were going to do next. b. Students practiced the word stress on the worksheet by underlying the syllables of one word and drawing O & o above the word to show the word stress. c. Checked the answer all together and made sure their pronunciation. d. Students complete each sentence in the box with one of the words at the top that has the stress pattern indicated at the end of the sentence. 	<p>student asked me whether the ending letter <i>e</i> in <i>horse</i> belonged to another V. Here, I clarified another important thing while differentiating the number of syllables, that is, always exert the [C]V[C] rule over the phonetic transcriptions rather than the spelling letters. After the application of general rule to many other words in the <i>teacher reference</i>, students said they really understood and knew how to differentiate the syllable numbers.</p> <p>→ When applying the two rules in each example word, not only did I confirm the answer but I made sure my students know why the other syllables were not stressed by showing them the wrong pronunciation where the stressed position was misplaced.</p> <p>→ While doing the practice, even though I had warned them that each blank might have more than one answer and therefore they needed to check the stress pattern to find the correct word, they still continuously asked me why there were more than one answer. Their ignorance of the stress pattern showed their unfamiliarity of it and needed more practice to internalize.</p>
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<ul style="list-style-type: none">➤ Warn them that they can't guess the answers only from the meaning of the sentences, as there is more than one possibility each time.➤ They need to check the stress pattern to find the correct word. <p>e. Read out the answers for students to check. Students then repeat the dialogues after the teacher, before saying them in pairs.</p>	<p>→ After the class, the students told me they really learned a lot from my class and appreciated what I had done to them. For me, teaching somehow becomes more and more interesting.</p>
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The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by two large, overlapping circular arcs. The upper arc is light blue and the lower arc is light red, both appearing as thin, glowing lines.

<Group Discussions>

Worksheet 1

My name is _____; Date: _____

Your Classmate's name Question								
#1. Favorite class activity								
#2. Favorite learning way								
3. Best talent in the foreign language								
4. Ways of using the foreign language outside class								

Topic: Technology in Learning

Title: Tracing peer-feedback to revision process in a wiki supported collaborative writing

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TRACING PEER FEEDBACK TO REVISION PROCESS IN A WIKI SUPPORTED COLLABORATIVE WRITING

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Abstract

This study investigates how can peer comments lead to actual revision process in a wiki supported collaborative writing environment among primary five and six students from a Chinese primary school in Hong Kong where English is taught as a second language (L2). Students from three upper primary classes totaling 119 students from age ten to twelve and their three English subject teachers went through three months of English language writing using a wiki. Quantitative and qualitative data were analyzed from activities recorded in a wiki system, including posted edits and comments and students' group writings. The wiki page history revealed information on types of revisions that occurred, allowing a trace of how different peer feedbacks lead to actual revisions, resulting in better group writing. Findings from the study may shed light on how wikis can help provide necessary support and how peer-feedback can affect students' writing process with wikis.

Keywords

Wikis, collaborative writing, L2 writing, primary school, revision, peer feedback

Introduction

With the advancement of educational technology there has been a strong emphasis on the integration of Web 2.0 technology in language teaching and learning (Education Bureau, 2007; Richardson, 2009). New technologies have had a tremendous impact on the teaching and learning of writing in the last few decades (Goldberg, Russell, & Cook, 2003; Hyland, 2003), and there are both advantages and disadvantages in using technologies for L2 writing. Generally, the literature seems to point to web-based collaborative learning as potentially promising technology in language learning as well as in writing (Goodwin-Jones, 2003). Many studies have started to appear on the application of Web 2.0 in education involving collaborative tools called wikis. They examine the application of wikis and explore their usage potential, the effects they have on student learning, and their effectiveness when used with appropriate instructional practices. They occur across different subject disciplines, including English language, geography, engineering, and library and information science, at both the tertiary and the secondary level (e.g. (Chu, 2008; Engstrom & Jewett, 2005; Mak & Coniam, 2008; Nicol, Littlejohn, & Grierson, 2005). However, whether or not these findings are applicable to young learners at the primary school level and whether they are transferable to young L2 learners needs further investigation. This study intends to fill in this research gap.

In this study, a mixed method approach was used to explore the possible benefits of peer commenting and editing on a wiki platform to students and their teachers in local Hong Kong upper primary English language classes. The findings may help illuminate how effective peer commenting may influence revision process during collaborative writing using a wiki technology.

Literature Review

Much research has examined revision in student writing both in English taught as a first language (L1) (Faigley & Witte, 1981; Fitzgerald & Markham, 1987) and L2 writing (Berg, 1999; Min, 2006; Paulus, 1999; Tsui & Ng, 2000; Yang, Badger, & Yu, 2006). These studies examined whether incorporated revisions in the final text are of content or form changes and looked at how peer-feedback and teacher-feedback influenced students' revision process. Content changes involve global level changes on idea, content and organization while form changes consist of copy-editing operations including spelling, grammar, and punctuation. By examining how inexperienced writers revise differently from expert writers, Faigley and Witte (1981) developed a revision taxonomy which has been widely used in revision analysis. Fitzgerald and Markham (1987) have adapted the taxonomy in their study investigating how direct instruction with the revision process affects knowledge of revising and leads to further revision efforts with primary school students. Majority of revisions made by American university students whose English is a second language (ESL) were found to be surface level revisions but the revisions resulted from peer and teacher feedback tend to be meaning-level changes (Paulus, 1999). However, Yang (2006) found that with Chinese ESL university students teacher feedback brought about surface-changes and highlighted how students involve in self-correction when they doubt or have reservations about peer feedback since teacher feedback is believed to be correct and will not lead to further self-initiated correction. Similarly, Hong Kong secondary school L2 learners were found to favour teacher comments which were incorporated more compared to peer comments but peer feedback enhanced a sense of audience, raised their awareness of their own strength and weaknesses, encouraged collaborative learning and fostered ownership of text (Tsui & Ng, 2000). Other studies (Berg, 1999; Min, 2006) examined how trained peer responses, in contrast to non-trained peer responses, affect revision types and quality of writing. In these studies meaning-type revisions occurred with higher rate among trained students than untrained students implying that training students with certain response skills to writing is essential for effective peer response.

Studies have appeared on the effect of technologies on revision process through use of track changes in computers (Liu & Sadler, 2003), on-line peer tutoring (R. H. Jones, Garralda, Li, & Lock, 2006), wiki based collaborative writing (J. Jones, 2008; Kessler, 2009; Mak & Coniam, 2008). Liu and Sadler (2003) found that university students working in technology-enhanced group work using MOO and Microsoft Word editing tend to have larger number of comments with larger percentage in revision-oriented comments leading to more overall number of revisions compared with students in traditional group discussing face-to face during peer commenting and using pen and paper for revising. A local study compared on-line use of ICQ and face-to-face peer-tutoring for L2 writers and found that students felt at ease when communicating through their familiar domain of online chat, rather than a formal atmosphere of a face-to-face situation, where tutors tended to direct the course of discussion focusing more on grammar, vocabulary, and style (R. H. Jones, et al., 2006). Jones (2008) investigated revision patterns of revision histories in Wikipedia articles and found that contrary to Faigley and Witte's (1981) findings with inexperienced and expert writers, the articles that were not nominated for its highest quality had more content revisions and fewer surface revisions. Studies have found that students tend to attend more to the content revisions than grammar revisions using a wiki collaborative writing platform for non-native speaker of pre-service English teachers from Mexican university (Kessler, 2009) and with Hong Kong ESL secondary students (Mak & Coniam, 2008). Mak and Coniam (2008) observed that the collaborative nature of wikis helped students enhance the quality of their collaboration by expanding, amending, reorganizing and correcting during the editing process and highlighted the usefulness of wikis' tracking function as pedagogically valuable in revealing the evolution of students writing over time.

Objectives of the study

Although some studies with technologies have shed a positive light in the area of revision, very few studies have been conducted with primary school children using technologies such as wikis to compose and revise text. Wikis may help to scaffold students' collaborative writing through a platform of sharing, peer-commenting, and co-constructing (Richardson, 2009). To address the research gaps, the following research question was proposed: How does the use of wiki's features such as posting comments and edits help L2 writers during collaborative writing in an upper primary English language classroom? Three sub-questions helped to guide data collection: What kinds of comments are being posted? What kinds of revisions are being done on the wiki platform? How do the posted comments lead to actual revisions to improve students' writing?

Methodology

This study used mixed method design using the strength of both quantitative and qualitative approach (Creswell, 2008) to investigate how peer comments lead to actual revision and improve their writing performances in a collaborative writing using a wiki technology.

Participants

Students from two primary five and one primary six classes totaling 119 students, aged from ten to twelve years (mean age 11.6, 59 boys and 60 girls), and their three English subject teachers were selected by purposeful sampling. The school was selected from Chinese primary schools of mid to high level in terms of students' ability to write in the English language. This was to ensure that the primary five students of ages from ten to twelve years were able to write a minimum of 100 words in English so that a sufficient quantity of writing could be produced to examine the effect of the collaboration using the technology.

Intervention Programme

The students and their teachers participated in an intervention programme for approximately three months, only during their English writing lessons. The intervention programme was designed with the integration of a wiki tool called PBworks (<http://pbworks.com/academic.wiki>) in their existing English language curriculum (HKCECES, 2008) in collaborative writing. To scaffold them in their writing, students were asked to co-construct their writing on PBworks pages created for each group, and exchange constructive feedback and comments through its platform guided by teacher provided wiki rules. The students worked collaboratively in mixed ability and gender groups of four to produce two non-fiction texts on topics of their choice and illustrate their work with photos and graphics. The lessons were planned for both face-to-face learning situations in the classroom or the computer laboratory, and online learning outside their normal classroom. The programme was refined based on a pilot study (Woo, Chu, Ho, & Li, in press). The teachers helped scaffold students' writing by providing a genre framework and timely feedback which included teaching skills such as critically evaluating and extracting appropriate information from the internet, and encouraging students to paraphrase and summarize main ideas. For ethical reasons, the intervention programme was offered to other classes and their English teachers on a voluntary base. However, this study focused only on three classes.

Data Collection and Analysis

Qualitative and quantitative data were collected and examined through a triangulation method using multiple sources of evidence, including evaluation of students' group writing, students' comments posted on wiki platform and editing information recorded in the wiki's history page.

Students' group writings were evaluated using the analytic method adapted from Tompkins' (2004, 2010) scoring rubrics for assessing young writers, which has also been used to assess Hong Kong primary five students composition writing (Lo & Hyland, 2007). Group writings were analyzed in three areas of content and organization, language, and visual graphics and photos. Each area was divided into further subscales except for the last scale on visual graphics and photos, which was included since as part of their writing instructions, students were encouraged to insert graphics and photos from Internet. To reflect the aspects of genre in their writing, item 4 in organization; 'Appropriate use of genre and its conventions' and item 5 in language; 'Use of imagery, simile or metaphor' have been added to the list. Each item was then given scores according to, excellent-5, good-4, average-3, below average-2, poor-1, and components not used-0. There were total of 13 items, with full score being 65. See Appendix A for details.

Comments posted on the wiki platform were analyzed based on Liu and Sadler's (2003) categories of comments used to examine the types of comments made through technology-enhanced peer discussion. Peer comments were divided into two areas of global: feedback related to idea development, audience and purpose, and organization of writing, and local: comments related to copy-editing, such as wording, grammar, and punctuation. They are further divided into four types of comments: evaluation that comments on features of writing, clarification that probe for explanations and justifications, suggestion that points out the direction for changes, and alteration that provides specific changes. These comments were categorized into those that are likely to lead to revision, revision oriented and those that do not, non-revision oriented. Two other categories were added, comments on management level that aimed at managing group work or wiki technology and any other comments that did not fit the above categories or were irrelevant to the writing topics. Refer to Appendix B for rubrics.

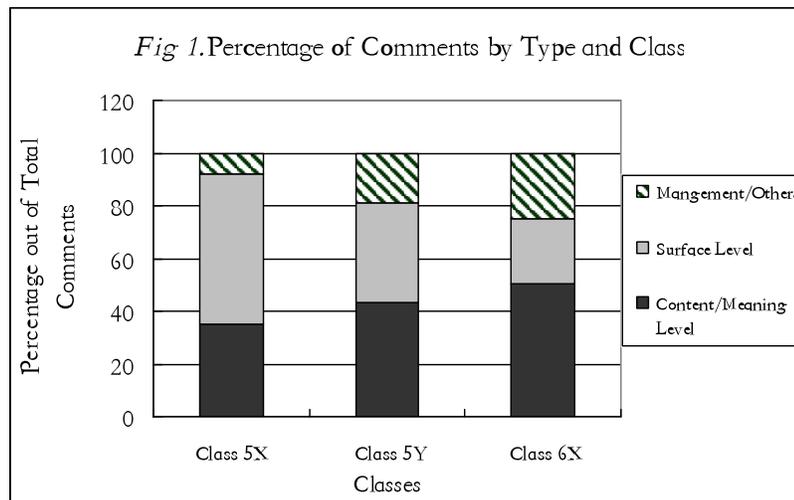
Editing information generated by different groups as recorded in a wiki's history page was sorted by types of revision based on adapted version of Faigley and Witte's (1981) revision taxonomy. The taxonomy has two broad categories of content or meaning changes with subcategories of macrostructure and microstructure changes and surface changes with its subcategories of meaning-preserving and formal changes. Formal changes consists of changes in spelling, grammar, abbreviations, punctuation, and format, while meaning-preserving changes consists of changes as in additions, deletions, substitutions, rearrangements (permutations), expansions (distributions), and consolidations. Both macrostructure and microstructure changes are further categorized into the same sub-categories of meaning-preserving changes. Refer to Appendix C for rubrics.

To assure the inter-rater reliability of the coding methods, 25% of data from group writing evaluation, peer comments and revisions were double rated and their correlation computed. The correlation coefficient of main items from group writing evaluation; analytical score grand total, content and organization, language and visual graphic and photos averaged .942 (range .969 to .892, $p < .001$). For main items of comments analysis, content and meaning level, surface level and management and other non-related comments, the correlation coefficient averaged .980 (range .993 to .962, $p < .001$). For main items of revision analysis, content and meaning changes, surface changes and total overall revision, the correlation coefficient averaged .933 (range .914 to .955 $p < .001$). These correlation coefficients indicate a very high degree of inter-rater reliability. Quantitative data were analyzed using SPSS (Window version 17.0) to examine correlation of variables and paired sample t-test for significant differences among the variables. The data were checked for normality, linearity and homoscedasticity and none of the major assumptions were violated.

Findings and Discussion

Types of Comments Posted on Wiki Platform

With an exception of one primary five class (5X), both classes 5Y and 6X had significantly higher percentage of content and meaning level than surface level comments as shown in Fig. 1. This was also supported by Liu and Sandler (2003) with university students.



As shown in Table 1, to address the research question one, the results were recorded in percentage of occurrence out of the total categories except for total categorized comments and posted comments, which are shown in frequency of occurrence by topics and classes. More categories of comments were recorded compared to actual comments posted since a comment may consist of few categories. For example, “Good! The picture is beautiful. But you can add more word to say your feeling!” was recorded as both surface non-revision oriented and content and meaning revision oriented.

More percentage of revision oriented comments were found in both content and meaning level and surface level for all classes except for 5X, in which case there were more non-revision oriented comments in their content and meaning level comments. This is a good sign noting that more meaningful comments are being posted despite the fact that teachers may not have had time to give specific instruction and emphasize the quality of peer feedback especially in primary five classes. Paired sample t-test showed significant differences as shown in Table 1 where * indicates significance at $p < .05$ and ** significant at $p < .001$.

For primary five classes, there were much more comments posted during the second topic and this could be due to students becoming familiar with their wiki and realizing the benefit of communication with peers, thus more increase in management and other non related comments.

Table 1. Types of categorized comments by topics

Types of Comments	Percentage out of Total Categorized Comments % (SD)								
	5X			5Y			6X		
	Topic I N=10	Topic II N=10	Total N=20	Topic I N=10	Topic II N=10	Total N=20	Topic I N=10	Topic II N=10	Total N=20
Content/Meaning Level Overall	37.99 (18.61)	32.29 (15.68)	35.14* (17.0)	45.5 (23.74)	41.12 (22.72)	43.29 (22.73)	57.39 (11.83)	43.46 (19.15)	50.43* (17.06)
➤ Revision oriented	13.87 (14.26)	3.77 (5.85)	8.82* (11.80)	31 (22.88)	18.2 (14.52)	25.58 (19.77)	49.31 (10.56)	39.39 (19.92)	44.35** (16.33)
➤ Non-Revision oriented	24.12 (16.42)	28.52 (15.46)	26.32* (15.68)	14.49 (18.21)	22.92 (14.58)	18.7 (16.63)	8.08 (4.79)	4.07 (4.25)	6.08** (4.86)
Surface Level Overall	59.96 (18.85)	53.96 (21.76)	56.96* (20.05)	46.76 (28.84)	29.31 (24.49)	38.03 (27.54)	17.30 (11.67)	31.6 (21.85)	24.45* (18.56)
➤ Revision oriented	38.29 (21.98)	34.68 (28.28)	36.49 (24.72)	34.36 (18.78)	17.61 (19.12)	25.98* (20.35)	15.31 (9.16)	30.25 (22.03)	22.78** (18.12)
➤ Non-Revision oriented	21.67 (13.42)	19.28 (17.29)	20.47 (15.11)	12.4 (16.08)	11.7 (16.29)	12.05* (15.76)	1.99 (3.10)	1.35 (2.87)	1.67** (2.92)
Management/Other non related comments	2.05 (4.73)	13.75 (15.41)	7.9 (12.61)	7.79 (15.62)	29.58 (22.04)	18.68 (21.69)	25.31 (16.39)	24.94 (17.18)	25.12 (16.34)
	Frequency of occurrence								
Total Categorized Comments	118	183	301	100	182	282	766	283	1049
Posted Comments	90	154	244	77	172	249	714	273	987

- Content/Meaning Level Overall % + Surface Level Overall % + Management/Other non related Comments % = Total Categorized Comments (100 %)
- *significant at $p < .05$ and ** significant at $p < .001$.

5Y had more content and meaning level comments than surface level comments except in the first topic where the difference between two levels of comments was very slight. There seems to be more revision oriented comments in both surface level and content and meaning level. In contrast, 5X had more surface level comments compared to content and meaning level comments for both the topics. There tend to be more revision oriented comments on surface level while non-revision oriented comments to be dominant in content and meaning level. Although there were quite a difference in the number of comments posted during the second topic for both classes, proportion of the percentage of these categories remain rather consistent between two topics except for management and other non related comments which increased during the second topics and this could be due to different type of genre. The second topic required students to write a poster in how to keep healthy, thus involving more instructional management and formatting. It could be also due to students becoming familiar with comment posting and realization of the benefit of open forum between classes, which is seen by an increase in other non-related playful comments. Table 2 shows excerpts illustrating students' excitement in communicating through this platform. All the italics in the excerpts indicate the commenter, group name, time, and date.

Table 2. Excerpts of posted comments from 5Y

Posted comments (5YIIGMarie)	Types of comments
Vincent (Marie)/11:26 am/Feb 1, 2010 Vinci,can u see me?	Other non related
Vinci (Marie)/11:27 am/Feb 1, 2010 Yes,ok	Other non related
Vinci (Marie)/11:27 am/Feb 1, 2010 HI I am Apri . l	Other non related
Vincent (Marie)/11:28 am/Feb 1, 2010 Vinci!	Other non related
Vincent (Marie)/11:30 am/Feb 1, 2010 We should consenstrate on our work!Do not play toooooooooooooooooohappy!!!!!!!!!!!!!!!!!!!!!!!!!!!!	Management
Jeffrey (Little Monster)/11:31 am/Feb 1, 2010 GOOD!!!!!!!!!!!!HARDWORKING!!!!!!!!!!!!	Content non-revision oriented-evaluation
Vincent (Marie)/11:31 am/Feb 1, 2010 VINCI VINCI VINCI VINCI VINCI VINCI!	Other non related

Contrary to primary five, 6X's comments decreased during the second topic and this may be due to the difference in genre. First topic being general description involving Internet search to collect information, needed brainstorming ideas and second topic being narrative with a story framework provided involved less discussion. For 6X, there seem to be more content and meaning level comments than surface level comments especially in the first topic where the difference between the two levels of comments is distinct. There seems to be more revision oriented comments in both the surface level and the content and meaning level, which shows that this class of 6X students is engaging in quite a meaningful peer feedback that are of revision oriented quality. Although there are quite some differences in number of comments posted during the second topic, again the proportion of percentage of these categories remain rather consistent between two topics. Although management and other non related comments were recorded more compared to primary five, they were more on task and brainstorming ideas as in examples below. Primary six students had experienced using a wiki during the previous year in a pilot study (Woo, et al., in press) and it was noted that they have sustained their engagement with the technology even after the effect of novelty (Hawthorn effect) has worn off. This group of students exchanged their ideas through comments before they actually started to write on the wiki platform.

Table 3. Excerpts of posted comments from 6X

Posted comments (6XIDMCR&B)	Types of comments
Charis Ann (MC in R&B)/12:15 pm/Jan 20, 2010 So... what's the topic	Management
Mandy (MC in R&B)/12:16 pm/Jan 20, 2010 ?	Other non related
Charis Ann (MC in R&B)/12:16 pm/Jan 20, 2010 i need topic so i can write	Management
Rachel (MC in R&B)/12:16 pm/Jan 20, 2010 i don't think it's a gd idea to write air pollution because our class writing is air pollution	Content non-revision oriented-evaluation
Bessie (MC in R&B)/12:16 pm/Jan 20, 2010 no, i don't agree!! We can't write a lot if we write land pollution!!	Content non-revision oriented-evaluation
Charis Ann (MC in R&B)/12:16 pm/Jan 20, 2010 plz topic	Management
Rachel (MC in R&B)/12:17 pm/Jan 20, 2010 i don't think it's a gd idea to write air pollution because our class writing is	Content non-revision oriented-

air pollution already
 Bessie (MC in R&B)/12:17 pm/Jan 20, 2010
 But I think there will be a lot of groups will write ap

evaluation

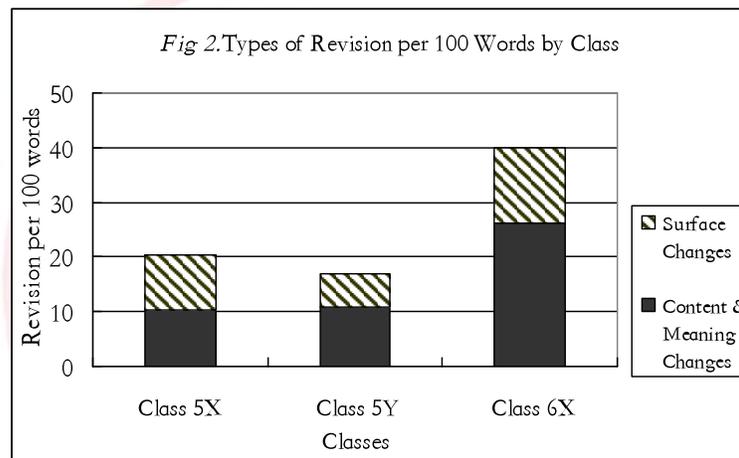
Content non-revision oriented-
 evaluation

Charis Ann (MC in R&B)/12:17 pm/Jan 20, 2010
 TOPIC!!!!!!!!!!!!!!

Management

Types of Revisions Posted on Wiki Platform

As in Fig.2, generally in all three classes, more than half of total categorized revisions per 100 words that each class made were of content and meaning changes in nature which is a good sign that meaningful editing is taking place on content level rather than mainly on surface level as supported by other studies with wikis (Kessler, 2009; Mak & Coniam, 2008). This was significant for primary six at $p < .001$ level. As in Table 3, to answer the research question two, the results were recorded in amount of revisions per 100 words except for number of posted edits and comments, which are shown in frequency of occurrence.



There were significantly more macrostructure level changes than microstructure level changes on the content and meaning level changes, while on the surface level changes there seem to be more formal changes rather than the meaning-preserving changes as shown in Table 4 with paired sample t test * indicating significance at $p < .05$ and ** significant at $p < .001$. In each three classes, there was more number of comments posted than posted edits since not all comments were revision oriented that would lead to actual revision.

Examining the data in detail by topics confirms that for most topics except for 5X's second topic, close to half of the revisions and more than half in case of primary six were content and meaning changes than surface changes as shown in Table 4. There were more editing posted depending on types of genre as in the first topic for primary five and the second topic for primary six. Primary five's second topic was to write a poster, which required less editing but needed more discussion on formatting and its presentation while primary six was on narrative with a story framework provided thus involving less discussion. Following excerpt from primary six data addresses research question three as it sheds light on how the content and meaning level revision oriented comments can lead to revision on content and meaning level changes.

Table 4. Types of categorized revisions by topics

Types of Revisions per 100 words (SD)									
Types of Revisions	5X			5Y			6X		
	Topic I N=10	Topic II N=10	Total N=20	Topic I N=10	Topic II N=10	Total N=20	Topic I N=10	Topic II N=10	Total N=20
Content/Meaning Changes Overall	9.18 (6.08)	11.22 (4.94)	10.20 (8.79)	6.02 (4.80)	15.86 (18.30)	10.94 (13.96)	31.54 (14.16)	20.72 (10.05)	26.13** (13.18)
➤ Macrostructure	7.85 (5.56)	8.36 (1.77)	8.11** (5.44)	4.72 (3.82)	12.94 (5.52)	8.83* (13.0)	23.19 (12.47)	12.25 (5.35)	17.72* (10.9)
➤ Microstructure	1.32 (1.44)	2.86 (2.42)	2.09** (2.1)	1.30 (1.26)	2.92 (1.95)	2.11* (1.8)	8.35 (5.69)	8.47 (5.94)	8.41* (5.66)
Surface Changes Overall	7.8 (7.76)	12.55 (9.52)	10.20 (5.49)	3.92 (4.38)	8.18 (7.97)	6.05 (6.63)	15.24 (6.86)	12.15 (8.43)	13.69** (7.65)
➤ Meaning Preserving	1.44 (1.99)	.96 (1.29)	1.20** (1.65)	.80 (.97)	2.0 92.99)	1.40* (2.25)	2.29 (2.07)	2.67 (2.83)	2.48** (2.42)
➤ Formal	6.42 (5.95)	11.58 (9.44)	9.0** (8.12)	3.12 (3.48)	6.18 (5.86)	4.65* (4.94)	12.94 (6.08)	9.48 (6.82)	11.21** (6.54)
Total Categorized Revisions	17.04 (12.75)	23.77 (9.52)	20.41 (11.48)	9.94 (2.72)	24.04 (23.28)	16.99 (18.55)	46.78 (19.26)	32.87 (14.49)	39.82 (1.81)
Frequency of Occurrence									
Posted Edits	108	98	206	83	104	187	314	327	641
Posted Comments	90	154	244	77	172	249	714	273	987
➤ Content/Meaning Changes Overall per 100 words + Surface Changes Overall per 100 words= Total Categorized Revisions per 100 words									
➤ *significant at p< .05 and ** significant at p< .001.									

Table 5. Excerpts of posted comments & edits from 6X

Posted comments (6XIALittleWriters)	Types of comments
Tiffany (The Little Writers)/12:26 pm/Jan 21, 2010 Water pollution Sometimes, you will see much rubbish in the sea .Why?? Because of us. We shouldn't throw rubbish in the sea. In order to decrease discharge oil in the sea, we need to take fever ship, boat or ferry...And we shouldn't take land from the sea because the animals will not have enough places to live.	Content revision oriented alteration
Posted edits (6XIALittleWriters)	Types of revisions (frequency)
Thu Jan 21, 2010 (12:30:54pm) to Thu Jan 21, 2010 (7:28:32pm) Boating Solution: Throw garbage away from the sea Take public trasport instead of ferry Results: Animals become lifeless. Sea water willbecome dirty. If people drink the dirty water,they will get sick. The ocean will turn as black as night. Air Pollution Causes: Too many people smoke People use a lot of paper Stop pollution:	Macrostructure substitution (2) Macrostructure addition (4) Microstructure substitution Macrostructure deletion

Air pollution is getting serious,

Results:

The temperature will rise because of global warming.

The fumes of cars cause acid rain.

Acid rain can damage not only plants and animals, but also ourselves

For a better life, come and protect the environment ! Pass the message above to your family!

Designer: T.L.W. Government Readers: Primary students

Microstructure addition

Microstructure consolidation

Correlation between Comments and Revisions

Table 5 shows a positive correlation between posted comments and different types of revisions recorded. Both for primary five and six, there were significant positive correlation between the number of comments posted and the total categorized revisions per 100 words indicating that more the students tend to post comments, more different types of revision were recorded per 100 words (5X: $r = .449$ 5Y: $r = .459$, 6X: $r = .561$ $p < .05$).

Table 6. Pearson Correlation Coefficient between number of posted comments and types of revisions by class

Types of Revisions	Class	Content/Editing Changes Overall	Pearson Correlation Coefficient between Number of Posted Comments and Types of Revisions by Class (p value)					Total Categorized Revisions
			Macrostructure	Microstructure	Surface Changes Overall	Meaning Preserving	Formal	
Posted	5X	.054 (.820)	-.08 (.737)	.350 (.130)	.552 (.012)*	.044 (.855)	.589 (.006)*	.449 (.047)*
Comments	5Y	.425 (.062)	.419 (.066)	.267 (.255)	.388 (.091)	.520 (.019)*	.284 (.255)	.459 (.042)*
	6X	.384 (.095)	.225 (.344)	.463 (.040)*	.663 (.001)*	.267 (.256)	.678 (.001)*	.561 (.010)*

➤ Figures with * indicate significance at $p < .05$.

The number of comments posted had positive correlation with all types of categorized revisions for both primary five and six except macrostructure changes for 5X, which had slight negative correlation but not significant. Those with significant correlation were microstructure ($r = .463$), surface changes ($r = .663$) with formal changes ($r = .678$) for primary six $p < .05$. Primary five varied with significance shown in surface changes ($r = .552$) with formal changes ($r = .589$) for 5X and with meaning-preserving changes ($r = .520$) for 5Y $p < .05$. Formal changes involving spelling, punctuation, grammar were most common revisions seen among Hong Kong students' revision process as shown in the following excerpts from posted comments by primary six students.

Table 7. Excerpts of posted comments & edits from 6X

Posted Comments (6XIIISJJ)	Types of comments
Ivy (SJJ)/2:41 pm/Feb 2, 2010 "Dad, I want to move to a new flat!!! Ummm... villa is the only flat which fit me!" said Ashley. "This sentence is strange."	Content revision oriented-evaluation
Stephanie (SJJ)/2:42 pm/Feb 2, 2010 live---lived wants--wanted	Surface revision oriented-alteration
Ivy (SJJ)/2:42 pm/Feb 2, 2010 I think we can change it into "villa is the only type of house which is my favourite!"	Content revision oriented-alteration

[Janice \(SJJ\)/2:48 pm/Feb 2, 2010](#)

And at that moment, Ashley's brother came back with mum. I think that "and" is unnecessary

Surface revision oriented-alteration

[Janice \(SJJ\)/2:51 pm/Feb 2, 2010](#)

Don't you feel delight?!"said Ashley. It should be "delighted"!!

Surface revision oriented-alteration

Posted Edits (6XIISJJ)

Types of revisions

[Tue Feb 2, 2010 \(2:42:56pm\)](#) to [Tue Feb 2, 2010 \(2:44:09pm\)](#)

Moving To ANew Flat

Formal grammar

parents live in Causeway Bay. One day, when Ashley came home from school, she told her father that she wants to move to a new flat.

'Dad, I want to move to a new flat!!! Ummm... villa is the only flat which fit me!' said Ashley.

Microstructure substitution

'Move? why? Is the building going to be rebuilt?' Ashley's father was surprised.

'Definitely not!' replied Ashley.

[Tue Feb 2, 2010 \(2:44:09pm\)](#) to [Tue Feb 2, 2010 \(2:45:14pm\)](#)

Moving To ANew Flat

Microstructure additions

Ashley and her parents lived in Causeway Bay.

the only house which is my favour!' said Ashley.

Formal spelling

'Move? why? Is the building going to be rebuilt?' Ashley's father was surprised.

'Definitely not!' replied Ashley.

Table 8 shows correlation between subscales of both categorized comments and revisions.

A clear indicator with primary five is a negative correlation between the surface level comments at non-revision oriented in nature with content and meaning changes at macrostructure changes which were significant for 5X ($r = -.455$ & $r = -.520$, $p < .05$). This assures that less surface level comments at non-revision oriented in nature the more revision changes at content and meaning of macrostructure changes in nature. However, a puzzling phenomenon occurred with primary six where these two categories have significantly positive correlation, content and meaning changes at macrostructure changes ($r = .501$ & $r = .541$, $p < .05$). This means that even when surface level at non-revision oriented comments were produced there were increase in content and meaning revisions at macrostructure in nature. Primary six also had significant correlation between this surface level at non-revision oriented nature with surface change especially with formal changes ($r = .616$ & $r = .576$, $p < .05$).

Table 8. Pearson Correlation Coefficient between comments and revisions by class

Categorized Comments/Revisions	Pearson Correlation Coefficient between Categorized Comments and Revisions by Class (p value)						
	Class	Content/Meaning Changes Overall	Macrostructure	Microstructure	Surface Changes Overall	Meaning Preserving	Formal
Surface Level:	5X	-.455 (.044)*	-.520 (.019)*		-.012 (.959)		-.003 (.991)
Non-Revision oriented	5Y	-.271 (.248)	-.253 (.288)		-.067 (.978)		.074 (.756)
Management/Other non related comments	6X	.501 (.024)*	.541 (.021)*		.616 (.004)*		.576 (.008)*
	5X			.475 (.034)*		.242 (.304)	
	5Y			.664 (.001)*		.372 (.106)	
	6X			.145 (.542)		.602 (.005)*	

➤ Figures with * indicate significance at $p < .05$.

Following excerpts from primary six student show how surface level non-revision oriented comments lead to revision on content and meaning changes at macrostructure and surface changes at formal changes. An interesting observation was a flurry of activities that occurred after a teacher posted comment. This maybe due to encouraging remarks that may not necessary be revision oriented or students realizing that they are being monitored. Either case a teacher feedback spurred a wide range of revision followed by several formatting which were omitted due to limited space.

Table 9. Excerpts of posted comments & edits from 6X

Posted comments (6XIIFCSuperfantasticfour)	Types of comments
<p><i>Miss Lee/10:50 am/Jan 21, 2010</i> good research! I like the pictures, but you have to cite the sources of the pics as well.</p>	<p>Surface non revision oriented-evaluation Surface revision oriented-alteration</p>
Posted edits (6XIIFCSuperfantasticfour)	Types of revision (frequency)
<p><u><i>Thu Jan 21, 2010 (10:43:41pm)</i></u> to <u><i>Thu Jan 21, 2010 (10:55:28pm)</i></u> Our Dirty Earth Super Fantastic Four are going to design a poster for all secondary schools students in Hong Kong. Every Day WATER POLLUTION are harming us And the Earth...We need to protect our Earth and ourselves!Let's think about what we can do for the environment!! CleanWater,Sea Better!!! Water Pollution in Hong Kong Causes: produce sewage and chemical. They are discharged to the rivers and pollute the water. ... 3. People throwrubbish to the rivers. They pollute the water. for building. Solutions: andsewage in the rivers. Problems: 1. There are a lot of germs in the polluted water. If people drink this water,it will cause different kinds of illnesses. be endangered. 3. We can't swim in the sea anymore because the water is dirty. If we swim in the dirty and polluted water, we will hurt our skin. (http://www.airheadsscuba.com/kayesite1/wtrpoll.html) (http://www.flickr.com/photos/marells/2215563719/)</p>	<p>Formal punctuation Microstructure addition-4 Microstructure substitution-2 Formal grammar-2 Meaning preserving substitution Microstructure deletion</p>
<p><u><i>Thu Jan 21, 2010 (10:55:28pm)</i></u> to <u><i>Thu Jan 21, 2010 (11:00:03pm)</i></u></p>	

Water Pollution in Hong Kong

Causes:

the water.

2. Tankers sometimes have accidents. At that time, plenty of oil leaks out of the tankers. The animals that live in the water become lifeless.

3. People throw rubbish to the rivers. They pollute the water.

.....

Solutions:

1. Don't throw the rubbish and sewage into the rivers. Problems:

1. There are a lot of germs in the polluted water. If people drink this water, it will cause different kinds of illnesses.

2. The animals that live in the water become lifeless. They will be less and less.

3. We can't swim in the sea anymore because the water is dirty. If we swim in the polluted water, we will hurt our skin.

.....

(<http://home.gwu.edu/~annacre/pollution.htm>)

(<http://www.flickr.com/photos/mareilles/2215563719/>)

Macrostructure rearrangement-4

Microstructure substitution

Microstructure consolidation

Thus even non revision oriented comments at surface level can elicit variety of revisions. In contrast to revision done after when the text is finished, the activities on the wiki platform revealed a complex collaborative process involved during the composition and not just review of a completed text. This maybe also be related to an unexpected significantly positive correlation of management and other non-related comments with content and meaning changes at microstructure for primary five (5X: $r = .475$, 5Y: $r = .664$, $p < .05$) and surface changes at meaning preserving changes for primary six ($r = .453$ & $r = .602$, $p < .05$). As shown in excerpts from 6X and 5Y's posted comments, posting management and other non related comments seem to play some role in establishing communication in team-building and other affective domain promoting social interaction. This may point to further research on how online communication can help enhance affective domain, a prerequisite in collaborative group learning (Kutnick, Ota, & Berdondini, 2008).

Outcome of the Writing Performances

To address research question three, all four group writing by different topics from 2 normal group writing written before the introduction of wiki technology and 2 wiki group writing collected after three months of wiki intervention were analyzed. As recorded in Table 7, for all three classes, wiki group writing mean scores improved compared with the normal group writing except for 5Y's visual graphics and photos which recorded a slight but non significant decline. Significance level from paired sample t test is shown on the most right hand column with * indicating significance at $p < .05$ and ** significant at $p < .001$.

Table 10. Group Writing Evaluation of Normal and Wiki Group Writing by Class

Items Evaluated	Class	Group Writing Evaluation by Class (p value)		
		NGW	WGW	P value of Significance
Analytical Scores Grand Total	5X	35.01 (5.13)	37.55 (6.13)	.181
	5Y	34.03 (6.45)	37.0 (7.52)	.060
	6X	34.0 (5.5)**	41.25 (4.55)**	.000
➤ Content/Organization	5X	20.63 (3.86)	21.1 (4.85)	.732
	5Y	18.81 (3.98)	21 (5.7)	.078
	6X	20.8 (3.29)*	24.45 (3.02)*	.001
➤ Language	5X	12.53 (1.95)	13.3 (1.92)	.236
	5Y	12.32 (2.56)	13.35 (1.27)	.055

➤ Visual Graphics	6X	11.8 (2.07)**	14.15 (1.76)**	.000
	5X	1.86 (1.07)*	3.15 (1.42)*	.001
	5Y	2.9 (.64)	2.65 (1.35)	.437
	6X	1.5 (1.0)*	2.65 (1.69)*	.022

- NGW=normal group writing, WGW= wiki group writing
 ➤ significant at $p < .05$ and ** significant at $p < .001$.

For primary five, paired sample t-test did not yield any significance except for visual graphics and photos in 5X. This maybe due to small sample sizes of 20 pieces of group writing in each class. Thus 5X and 5Y were combined (N=40) which resulted in statistically significant improvement for items on total analytical scores, from 34.52 (SD=5.78) to 37.28 (SD=6.77), language, from 12.42 (SD=2.25) to 13.33 (SD=1.61), and visual graphics and photos, from 2.38 (SD=1.02) to 2.9 (SD=1.39) $p < .05$. On the other hand for primary six, all the figures showed significant improvement with wiki group writing.

One cautionary note is that students' writing performances tend to increase with time and it alone will not indicate the success of revision process. Further research on association between the subscales of both categorized comments and revisions may help find the effect of revision process on writing performances.

Conclusion & Implications

In this study, out of three upper primary classes involved in the wiki collaborative writing, two classes recorded more content and meaning level comments than that of surface level comments and these comments tend to be revision oriented in nature. Similarly, in all three classes there tends to be more content and meaning level changes than surface changes with the types of revisions students engaged in. There tends to be more macrostructure changes than microstructure changes in content and meaning changes while for surface level changes, there were more formal changes involving spelling, punctuations, grammar and formatting. Although number of comments and revisions varied depending on topics and genre of the writing, generally the distribution of percentage of types of categories remained consistent between two writing tasks for both comments and revisions except for one primary five class which had a slight variation.

Correlation analysis showed that in all classes more the students tend to post comments, more types of revisions were recorded per 100 words. Significant positive correlation was also seen with microstructure and surface changes of meaning preserving and formal changes. Although there were more content and meaning revision than surface changes recorded, there were strong indications that the students continued to correct grammar, spelling and punctuations at the surface formal level as well. Closer examination with qualitative data showed that even surface level non revision oriented comments may spur revision process. Although group writing evaluation alone cannot determine the outcome of the revision process, a significant improvement with wiki group writing compared with students' normal group writing before the introduction of a wiki has been noted.

Due to small sample size, strong statistical support and generalization beyond these classes were difficult and further research with larger sample size may provide more complete picture. However, unexpected positive association of management and other non related comments with few types of revision have point to further research on how certain comments can promote team collaboration possibly through an affective domain.

As other researchers have shown on trained peer response (Berg, 1999; Min, 2006), explicit teaching instructions encouraging peer comments of revision oriented in nature both at content and surface level help enhance effective peer feedback for meaningful revision to take place. At the same time providing timely and constructive teacher feedback tends to spur various revision activities which has also been supported by other studies (Paulus, 1999; Tsui & Ng, 2000).

Tracing peer comments and revisions on the wiki platform revealed a complex collaborative process involved during the actual composition of writing and not just during the reviewing process of an already completed text. Wiki's history pages and its tracking function provide a window of information on how students co-construct and co-revise during their composing process and helps teachers assess the development of their group writing process, a task that may be difficult to monitor in traditional group writing. This can help teachers decide on the kind of support to be given, and provide immediate feedback when necessary to support the writers during the course of writing and not at the end when the product is finished.

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Appendix A: Analytic scale in evaluating group writing. Adapted from Tompkins, G. E. (2004). *Teaching writing: balancing process and product* (4th ed.). Upper Saddle River, N.J.: Pearson/Merrill/Prentice Hall.

A. Content & Organization
1. Original and creative ideas
2. Well developed and elaborated ideas with details
3. Consideration of audience and purpose(s)
4. Appropriate use of paragraphs to organize ideas
5. Logical presentation of ideas
6. Appropriate use of connectives to give cohesion to the text
7. Appropriate use of genre and its conventions
C. Language
1. Good choice of vocabulary
2. Variety of phrase and sentence patterns
3. Appropriate use of language (grammar: tense agreement, articles, pronouns, prepositions, etc.)
4. Correct spelling and punctuation
5. Use of imagery, simile or metaphor
D. Visual Graphics & Photos
E. Grand-Total

Excellent-5 Good-4 Average-3 Below Average-2 Poor-1 Not used-0 13 items x 5 =65 (full score)

Appendix B: Types of comments. Adapted form Liu, J., & Sadler, R. W. (2003). The effect and affect of peer review in electronic versus traditional modes on L2 writing. *Journal of English for Academic Purposes*, 2, 193-227.

Level	Content/Meaning Level: comments aimed at global area with regards to development, audience and purpose, and organization of writing.		Surface Level: - comments aimed at local area with regards to copy editing, rewording, grammar and punctuation.		Management Level: Comments that are related to management of wiki technology or operational level.	Other Comments: Any other comments that are unrelated to writing and not fit into above categories.
Nature	Revision Oriented: will likely lead to revision	Non-Revision Oriented: will not likely lead to revision	Revision Oriented: will likely lead to revision	Non-Revision Oriented: will not likely lead to revision	Non-Revision Oriented: will not likely lead to revision	
Type						
1. Evaluation: comments on either good or bad features of writing.						
2. Clarification: probes for explanations and justifications						
3. Suggestion: point out the direction for change.						
4. Alteration: provide specific changes						

Appendix C: Types of revisions. Adapted from Faigley, L., & Witte, S. (1981). Analyzing Revision. *College Composition and Communication*, 32(4), 400-414.

Level of changes	<i>Meaning Changes:</i> Involve adding of new content or the deletion of existing content.		<i>Surface Changes:</i> Changes that do not bring new information to a text remove old information.	
Sub-categories	<i>Macrostructure Change:</i> Major change that would <u>alter the summary of a text</u> . Alter the overall direction and gist of the text. Will affect the global meaning of the text and influence the summary and interpretation of the content.	<i>Microstructure Changes:</i> Meaning changes that would <u>not affect the overall summary, gist, or direction of the text</u> . Simple adjustment or elaborations of existing text and would not affect the overall interpretation of the text. May involve the use of cohesive ties, causing sentence sequences to be understood as consistent and parallel connected discourse.	<i>Meaning-Preserving Changes:</i> Paraphrase the original concepts in the text by making them implicit or explicit, <u>without altering the meaning</u> . No new information is brought to the text. Primarily syntactical or lexical changes.	<i>Formal Changes:</i> C involving conventio copy-editing operat
1. Additions	If the ideas are added or elaborated that will change the summary of the text.	If the ideas are elaborated with additional ideas but not big enough to change the summary of the text.	When word or phrases are added without changing the meaning of the concept or the idea.	Spelling: Any corre in spelling Grammar (tense, nu & modality): verb to agreements, singula plural changes, mod e.g. will, be, can, sh etc. Punctuation: change capitalization, perio commas, etc. Abbreviation: repla forms of abbreviatic numbering & bullet Format: any spacing between lines, word letters, punctuations Any visits indicated wiki as formatting t place.
2. Deletions	When ideas are deleted and change the overall summary of text.	When word or phrases are deleted and change the meaning of the concept or idea but not big enough to change the summary of the text.	When word or phrases are deleted without changing the meaning of the concept or idea.	
3. Substitutions	If existing ideas are replaced by different ones and change the overall summary of the text.	If existing words or phrases are replaced by different ones to change the meaning of the original ideas.	If existing words or phrases are replaced by different ones without changing the meaning of the ideas.	
4. Rearrangements	If existing words or phrases are reordered, reorganized, re-sequenced, deleted but appear again in other parts and change the meaning of the original ideas enough to change the summary of the text.	If existing words or phrases are reordered, reorganized, re-sequenced, deleted but appear again in other parts and change the meaning of the original ideas but not enough to change the summary of the text.	If existing words or phrases are reordered, reorganized, re-sequenced, deleted but appear again in other parts without changing the meaning of the original ideas.	
5. Expansions	Distributional changes occur where what has been compressed into a single unit now falls into more than one unit. The change will affect the summary of the text.	Distributional changes occur where what has been compressed into a single unit now falls into more than one unit and changes the meaning of the ideas but not enough to change the summary of the text. Examples are when ideas are being elaborated with additional ideas.	Distributional changes occur where what has been compressed into a single unit now falls into more than one unit. If the same ideas are elaborated then treat it as expansion of existing ideas without changing the meaning of the original ideas.	
6. Consolidations	Opposite of expansion where two more units are consolidate into one unit. Examples are sentence-combining and when some summarization are occurring and changes the direction or overall gist of the text.	Opposite of expansion where two more units are consolidate into one unit and change the meaning of the ideas but not enough to change the summary of the text. Examples are sentence-combining but will not affect the original summary of the text.	Opposite of expansion where two more units are consolidate into one unit. Examples are sentence-combining without changing the meaning of the text.	

Arabs Citizens Perspective Regarding the Impact and Motivations of the Western Countries Initiatives to Promote Democracy in the Arab World Countries

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Abstract

This research aimed to identify the impact and motivations of the western countries initiatives and projects to promote democracy in the Arab countries from the Arab citizens' perspective. The research used a qualitative research approach based on using the interview as a research tool. Accordingly, an interview with each subject of the study sample, (60) Arab citizens, was conducted.

The findings of the research were analyzed according to the research main question. The findings of the main question revealed that, from Arab citizens perspective, western initiatives has affected Arab societies in different ways, some Arab citizens believed that such initiatives have affected Arab societies negatively; others believed that those have affected them positively. The negative effect of the western initiatives appears in the following aspects: these initiatives were directed to the Arab countries according to the western national interest regardless of the Arab countries national interest. These initiatives support the western culture which is in contrary with the Arab countries culture, they also aim to colonize Arab countries under the name of democracy. More over, many Arabs regard these initiatives as being not fair for many Arab countries because to the multi-scale policy with Arab and non Arab countries in the region, especially Israel, In contrast with the Arab citizens' negative perspective towards the impact of the western initiatives to promote democracy in the Arab countries, some Arab citizens believe that these initiatives affected the Arab societies positively. The positive effect of the western initiatives appeared in the following aspects: these initiatives support free elections in the civic society organizations such as schools, clubs, societies, universities and trade unions. In addition, these initiatives promote Arab citizens participation in decision making directly and indirectly, and they help Arab countries to benefit from the western countries in the treatment of many problems like poverty, unemployment, and favoritism.

In the light of the findings of this research, a set of recommendations has been suggested by the researcher for a better understanding of the impact of western initiatives on the Arab societies.

Keywords: Arab citizens, democracy, western, initiatives.

Introduction

The notions of democracy, freedom, liberty, human rights, are among the most important concepts discussed by Arab citizens and politicians since the Eighties of the last centuries. People from different backgrounds talk about the importance of democracy as a way of life due to the long history of most Arab countries with suppression, colonialism, dictatorship, military leadership, and one_ person or one_ party regime. The features of such a history of Arabs changed during the last fifteen years as many Arab political systems changed their political style of ruling. Many Arab countries witnessed major changes regarding democracy at the political and social level. This is referred to the importance of democracy, as democracy means "government by the people in which the supreme power is vested to the people and exercised directly by them or by their elected agents under a free electoral system" (Merriam Webster, 2007). Also the notion of democracy means: government in which power and civic responsibility are exercised by all citizens, directly or through their freely elected representatives; a set of principles and practices that protect human freedom (Sovereignty, 2007). Democracy is among the most elusive concepts in the vocabulary of political theory, it is about equality and freedom, rights, and justice at every site of human interaction, whether the household, the workplace, or social associations (Chandhoke, 2009). The concept of democracy is based on simple principles and ideas that most people believe it to be essential in the practice of democracy. The most important principles of democracy are: people have a right and a duty to participate in government and in civil society. Public participation includes standing for elections, voting in elections, becoming informed, holding and attending community meetings, joining civil and/or political organizations, paying taxes, protesting and petitioning. Also, the principle of equality which means that all people should be treated equally, treated without discrimination be given equal opportunities. The principle of tolerance that means the majority of people rule in under democracy, and the rights of minority groups are also protected. Everyone should be allowed to express their opinions and join the political, religious or civil groups of their choice. In addition, there is the principle of accountability that means government must be accountable to the people for its actions, including the laws passed and how these laws are implemented. The principle of transparency in which government must be open to the public in regard to its actions as it must allow the public to give input before laws are passed. Also, regular, free and fair elections, in this sense election must be conducted freely and in a fair way, without intimidation, corruption and threats to the public before or during the elections. Elections should also be held regularly, every few years. The principle of economic freedom in

which people under democracy should be allowed to have some kind of private ownership of property and business and they should be allowed to choose their own type of work and join labor unions. Human rights of individuals and groups should be protected, All rights and freedoms are protected from abuse. Multi party system which means more than one political party must be allowed to participate in elections and play a role in government. Also, the principle that believes in the Rule of law in which no one is above the law, including the leader of the country as everyone must obey the law and be held accountable if he/she breaks it. The law must also be equally, fairly and consistently enforced (Streetlaw, 2007).

According to the fruits of democracy on individuals and societies, many western countries adopted democracy long time ago and these countries have now mature democratic systems. Since the Eighties, democratic western countries tried to import their democratic styles to other countries, them being the countries of the Middle East. Western countries have used many procedures and methods to transfer their model of democracy to the region. Some of these methods used the political pressure, sending experts in many fields, technological aids, and economic aids. For instance, The Treaty with European Union that entered by force in November 1993 made it explicit that "it is one of the main objectives of the common foreign and security policy to develop and consolidate democracy and the rule of law, and respect all human rights and fundamental freedoms. By the same way, European Community development co-operation policy shall contribute to the general objective of developing and consolidating democracy and the rule of law, and to that of respecting human rights and fundamental freedoms". Throughout the 90s, this approach began to emphasize democracy in the EU's external policy more strongly. The 1997 Treaty of Amsterdam Proclaimed human rights to be a cornerstone of EU external policy, and the Nice Summit in December 2000 launched the EU Charter of Fundamental Rights and called for more coherence between the EU's external and internal policies. According to The European Union's role in Promoting Human Rights and Democratization in the Third World Countries" (as of 8 May 2002), promoting human rights and democratization became a main concern of EU's external relations. That is to say, any assistance or enhancement programs related to the Third World Countries were given high priority (Solonenko, 2007, pp. 59). The western motivations to transfer their democratic model to the middle east countries and other countries is referred to the western countries belief that they are the most responsible members of the international system, and that promoting democracy is the most effective long-term measure for strengthening international stability, reducing regional conflicts, countering terrorism and terror-supporting extremism, and extending peace and

prosperity (Samii, 2006). Despite this belief of the western countries, citizens of Arab countries have different views regarding the western motivations behind promoting democracy in their countries, some of these views stated that western countries concern is wealth and oil rather than human right; and that they use democracy to control the wealth of other countries; In contrast to this view, there is another view that stated that western countries have honest motivations to promote democracy in other countries. As a result of these contradicted views, this paper has tried to clarify the views of Arab citizens concerning the western countries motivations behind promoting democracy in Arab countries.

The Problem

Arab citizens are divided into two groups according to their views regarding the western countries initiatives, projects, and motivations to promote democracy in the Arab countries. Some Arab citizens have a suspicious view which denied and refused such initiatives; on the other hand, there are some Arab citizens who accept and find them so beneficial to Arab societies. In order to clarify the reasons and justifications behind the two views, this research was carried out during the period of the June-October 2007.

This research attempted to answer the following main question:

- What are the impact and motivations of the western countries initiatives and projects to promote democracy in the Arab countries from the Arab citizens' perspective?

Significance of the Research:

This research is considered important for the following reasons:

- It is a new research area in Arab countries, and it is the first research that deals with the concept of western initiatives to promote democracy in Arab countries.
- It is the first one of its kind that deals with the Arab citizens' ideas, views and thoughts on the western initiatives to promote democracy in their countries.
- It is expectable for the findings of the research to be valuable for both Arab and western countries if they adopt the research recommendations.
- It uses the qualitative research methodology, which gives details of accurate and objective information on the subject and the dimensions of the research.

Aims of the Research:

This research aimed to find out the impact and motivations of the western countries initiatives and projects to promote democracy in the Arab countries from the Arab citizens' perspective.

Definition of Terms:

Democracy: Type of government in which power and civic responsibility are exercised by all citizens, directly or indirectly through their freely elected representatives; a set of principles and practices that protect human freedom.

Arab countries: the countries that speak Arabic language and share some sort of common culture, traditions, customs, and they are members of the Arab league.

Western countries: the countries of Europe, United States of America, Australia, Canada and they have certain initiatives to promote democracy in the Arab countries.

Western initiatives: the western countries projects in the Arab countries that are connected with their aim to promote democracy in these countries.

Research Limitations:

- This research is restricted to the Jordanian citizens from different social, economic, and educational backgrounds.
- This research is restricted to the period of June-October 2007.

Methodology and Procedures:

This research used the qualitative research approach which is based on conducting interviews with Arab citizens (Jordanians) from different social, economic, and educational backgrounds during the period June-October 2007. The data collected from the interviews were analyzed qualitatively to examine the Arab citizens' views about the impact and motivations of the western initiatives on the Arab societies.

Population and Sampling:

The population of this research is compromised from Arab citizens (Jordanians) from different social, economic, and educational backgrounds. Arab citizens were randomly selected and interviewed. The simple random sample technique was used to select citizens from the selected school, universities, shopping centers, civic society's organizations, and political parties. Some Arab citizens who were selected apologized as they had no time or they were not interested in the topic, or had no idea about the western initiatives. In qualitative inquiry, sample size depends on what you

want to know, the purpose of the inquiry, and what will be useful; so in-depth information from a small number of people can be very valuable, especially if the cases are information-rich (Patton, 2002). The research sample consisted of (60) citizens, (30 males and 30 females) from those who were randomly selected, were willing to be part of the research and had interest in the topic.

The Research Tool

The research adopted the interview as a research tool. The interview questions were designed and formatted and then its validity was checked by interviewing three citizens from outside the research sample. This research interview is a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information. The interview focused on the content specified by the research objectives by using the methods of systematic description, prediction or explanation. To get substantial information about the research questions, face-to-face interviews were conducted by the researcher with the Arab citizens. Each interview with each citizen lasted for one hour in average. The frequencies of the Arab citizens' answers on each question were calculated and presented according to the research question.

Findings and Discussion

The findings of the interviews with Arab citizens are presented below according to the research question, as follows:

Findings and discussion of the main question: What is the impact and motivations of the western countries initiatives and projects to promote democracy in the Arab countries from the Arab citizens' perspective?

The findings of the interviews with (60) Arabic citizens from different backgrounds showed that Arab citizens have two contrasting views regarding the western initiatives to promote democracy in the Arab World. The first view confirmed that western initiatives motivations and behind promoting democracy in Arab countries are totally artificial for many reasons, table (1) explains this view of Arab Citizens towards the Western initiatives to promote democracy in the Arab World.

Table (1)**The negative Impact of the Western initiatives to promote democracy in the Arab World**

Num ber	The Impact of Western Initiative to promote democracy in Arab world	Freque ncies
1	These initiatives are directed to the Arab countries according to the western national interests regardless of the Arab countries national interests.	9
2	These initiatives support the western culture which is in contrary with the Arab countries Islamic culture.	8
3	These initiatives aim to colonize Arab countries under the name of democracy.	7
4	These initiatives are not fair with many Arab countries because of the multi-scale policy they use with Arab and non Arab countries in the region, especially Israel.	7
5	These initiatives are used to control the political and economic decisions of the Arab countries.	6
6	These initiatives aim to milt the cultural character of the Arab countries with the western one.	5
7	These initiatives are used as a weapon against Arab countries from time to time once the western benefits are threatened.	4
8	These initiatives are very weak and fake ones looking to their fruits on the Arab citizens and societies.	4
9	These initiatives are part of the western countries strategy to dominate the world, especially the rich countries.	3
10	These initiatives mainly attempt to establish secure and safe countries around Israel.	3
11	Western democracy initiatives brought war, killing, poverty, and disasters to many Arab countries.	2
12	There is no real and true initiative to promote democracy in the Arab countries as long as we see war in Iraq, conflict in Darfur, war assassinations in Lebanon, conflict in Somalia, occupation of Palestinian lands.	2
Total		60

Table (1) shows that some Arab citizens have negative attitudes and views regarding the western initiatives to promote democracy in the Arab countries for various reasons. Seventeen Arab citizens stated that “these initiatives are directed to the Arab countries according to the western countries national interest, regardless of the Arab countries national interests”; this is referred to the fact that some initiatives does not match the high priorities for Arab citizens; as there are other things that should to be improved and developed and the western countries need to focus on them. Sixteen Arab citizens stated that “These initiatives support the western culture which is in contrary with the Arab countries Islamic culture”; this is because of the actual differences between the Islamic and Western culture as the latter is much

more open than the Islamic culture which is conservative and has its own characteristics, for instance, some initiatives focused on woman empowerment to foster their abilities to participate in the state and society leadership; and that, for some citizens, opposes the Islamic culture which requires women to be far from leadership. Fifteen Arab citizens stated that “these initiatives aim to colonize Arab countries under the name of democracy”, and thirteen Arabs stated that “these initiatives are used to control the political and economic decisions of the Arab countries. This is concluded from the impact we noticed of the war on Iraq; as the United States of America and its allies announced that this war will establish peace and democracy by getting rid of Saddam’s regime in Iraq, but Arab citizens witnessed a massive destruction, corruption and killing instead of democracy in Iraq. Also, the situation in Palestine for more than fifty years is still getting worse and worse as there is no real initiative from western countries to establish peace and democracy for people who are occupied and face severe humiliation and deprivation from their basic rights. Also, Arab citizens believe that it is not credible that the western countries do spend all of these billions of dollars just to bring democracy to the Arab world. For many Arabs, promotion of democracy is just a title for a hidden occupation of the Arab wealth. Fourteen Arab citizens stated that “These initiatives are not considered fair with many Arab countries because of the multi-scale policy with Arab and non Arab countries in the region. This is referred to the fact that Arabs do not see real promotion of democracy in their countries through the western initiatives as some Arab countries witness the absence of democracy and human rights although their political systems are in agreement with western countries, so there is pressure from the western countries on such Arab countries to promote democracy into their systems. Twelve Arabs stated that” These initiatives aim to change the cultural character of the Arab countries and replace it with the western one”, this view of Arabs is growing since the 11th of September as the number of the western initiatives increased, especially the initiative that aimed to modify or change some aspects of the educational system in some Arab countries. For example, some Arab countries changed their curricula in Islamic education, history, and geography. So, some Arab citizens believe that these changes took place because of real pressure set upon them from certain western countries. Eleven Arabs stated that ”these initiatives are used as a weapon against Arab countries from time to time once the western benefits are threatened”, this is referred to the fact that many Arab countries have not changed or modified their ruling systems or promoted democracy according to their national interests but rather according to the external interests.

In contrast to the Arab citizens’ negative perspective towards the impact and motivations of the western countries initiatives to promote democracy in

Arab countries on the Arab societies, some Arab citizens believe that western initiatives affected the Arab societies positively. The positive impact and motivations of the western countries initiatives to promote democracy in the Arab countries on the Arab societies is explained in table (2):

Table (2)
The positive Impact of the Western initiatives to promote democracy in the Arab World

No.	Perspective	Frequencies
1	These initiatives enhanced women empowerment	12
2	These initiatives support free elections in the civic society organizations such as schools, clubs, societies, universities and trade unions.	11
3	These initiatives promote Arab citizens participation in decision making directly and indirectly.	10
4	These initiatives give Arab citizens the opportunities to cope with the development in the field of information and communications	8
5	These initiatives promote the awareness of Arab citizens of the culture of human rights, tolerance and dialogue.	7
6	These initiatives forced Arab governments to foster the transformation process towards democracy.	6
7	These initiatives discouraged the one-political-party regime in some Arab countries to give other political parties the freedom to appear.	5
8	These initiatives brought into practice many universal values such as freedom of thought, equality and justice.	4
9	These initiatives help Arab countries to benefit from the western cultures in the treatment of many problems like poverty, unemployment, and favoritism.	3
10	These initiatives help many Arab countries to be open to the investments from other countries.	2
11	These initiatives support the Arab states accountability towards their citizens.	2

Table (2) showed that twelve Arab citizens stated that western initiatives enhanced women empowerment and supported free elections in the civic society organizations such as schools, clubs, societies, universities and trade unions. This is due to the fact that Arab citizens noticed from their personal experience that western initiatives focused on the enhancement of women role, participation, and efficiency in their society life. Many changes in the woman role in Jordan occurred during the last ten years; women

participation in the local council's elections, and women participation in the parliament elections. Women of Jordan entered these councils not according to the open competition with men, but rather according to the new legislations that are based on the certain quota for women. Also, many forms of political participation were activated during the last ten years in Jordan with the support of some western countries, for example, some initiatives aimed to enhance the understanding and the level of academic freedom among academics in Jordan. These initiatives were carried out in cooperation with some local civic society organizations.

Ten Arab citizens stated that these initiatives promote Arab citizens participation in decision making directly and indirectly. This is due to the western countries pressure over some Arab national governments to enhance the political participation of their citizens.

For eight Arab citizens, these initiatives give Arab citizens the opportunities to cope with the developments in the field of information and communications. While for seven Arabs, these initiatives promote the awareness of Arab citizens with the culture of human rights, tolerance and dialogue, and also they brought into practice many universal values such as freedom of thought, equality and justice. This is referred to the fact that many Arab countries were very conservative and closed societies in terms of their relation with other cultures and in the degree of openness. But through the western initiatives many changes in the level of openness became part of the Arab citizens' life. These changes brought the culture of tolerance, human rights, and dialogue to the daily life of Arabs though the original Arabic culture is very rich with such notions, yet without the western pressure some Arab countries were not willing to switch from conservative or closed societies to open and tolerated ones.

Six Arab citizens stated that these initiatives forced Arab governments to foster the transformation processes towards democracy, and five Arabs stated that these initiatives discourage the one-political-party regime in some Arab countries to give other political parties the freedom to appear. This is clearly noticeable after the 11th of September as many Arab countries moved toward democratizing many aspects of their citizens' life, such as the citizens participation in decision making at the local and national levels.

For three Arab citizens, western initiatives helped Arab countries to benefit from the western cultures in the treatment of many problems like poverty, unemployment, and favoritism. This is clear in the Arab governments' way of dealing with such problems, as Arab citizens witnessed new innovations from their governments in dealing with them. It also appears from the

announcements on the Arabs media that encourage young citizens to enroll in certain jobs with the support of certain western agencies.

Two Arab citizens stated that western initiatives help many Arab countries to be open to the investments from other countries and support the Arab states accountability towards their citizens. This is referred to the influence of the western economic and political systems on the Arab countries. These systems have become the only ones that dominate the world including the Arab World.

Conclusion and recommendations:

The research concludes that western initiatives to promote democracy in the Arab countries from the Arab citizens' perspective affected Arab societies negatively in the following aspects:

- These initiatives are directed to the Arab countries according to the western national interests regardless of the Arab countries national interests.
- These initiatives support the western culture which is in contrary with the Arab countries culture.
- These initiatives aim to colonize Arab countries under the name of democracy.
- These initiatives are not considered fair with many Arab countries because of the multi-scale policy used with Arab and non Arab countries in the region, especially Israel.
- These initiatives are used to control the political and economic decisions of the Arab countries.
- These initiatives are very weak and fake ones looking to their fruits on the Arab citizens and societies.

Furthermore, the research concludes that western initiatives to promote democracy in the Arab countries from the Arab citizens' perspective has affected Arab societies positively in the following aspects:

- These initiatives support free elections in the civic society organizations such as schools, clubs, societies, universities and trade unions.
- These initiatives promote Arab citizens participation in decision making directly and indirectly.
- These initiatives give Arab citizens the opportunities to cope with the developments in the field of information and communications.
- These initiatives forced Arab governments to foster the transformation processes towards democracy.
- These initiatives discouraged the one-political-party regime in some Arab countries to give other political parties the freedom to appear.

- These initiatives help Arab countries to benefit from the western cultures in the treatment of many problems like poverty, unemployment, and favoritism.

In the light of the findings of this research, the research recommends the following:

- The western countries are asked to convince the Arab citizens that they want to promote democracy in the Arab countries according to the Arab countries national needs.
- It is urgent for the western countries to deal with the conflicts in of the region on a base of equality between the all parties.
- It is essential for the Arab countries to benefit from the western initiatives and experiences in the field of political participation, especially in decision making.



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INVESTIGATING DIVERSITY IN BABY GESTURES IN A DAY CARE CENTRE MALAYSIA

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Abstract

Communicating with babies should be a two-way interaction so that parents and caregivers could understand their babies' needs and know what to offer them. Previous research shows that the use of symbolic gestures could enhance language development among babies (Acredolo & Goodwyn, 2000). Thus, using symbolic gestures with babies can be an effective two-way communication method, as it provides meaningful information that babies cannot yet express verbally. Naturally, babies are able to use symbolic gestures even before they produce their first words. This study intends to investigate the diversity of gestures used among babies (infants and toddlers), parents and caregivers in Malaysia. Participants were 30 babies (between 6 to 28 months) in a work-place child care, 15 parents of the babies and 5 of their caregivers. Gestures used by babies, parents and caregivers were videotaped and observed to determine the different categories of the gestures used, such as requests, yes/no and adverbs. Most of the babies are found to use symbolic gestures, and 20% (n=6) of these babies are found imitating their parents gestures in specific events. Parents and caregivers also show several categories of gestures during their communication with the babies. These results show that babies, parents and caregivers tend to use symbolic gestures in their communication in creating a more meaningful interaction. The use of symbolic gestures among babies could thus be enhanced through a series of sign training.

1.0 Introduction

When people talk about language, it is commonly referred to speech or a particular language that people of the culture speaks. Not many realized that as people deliver their speech or when they speak casually, they also produce facial expressions and gestures spontaneously. However, there is a growing awareness that the movement of arms and hands are intertwined with language production (e.g., Iverson & Thelen, 1999); Krauss, 1998; McNeill, 2006; Thompson, Cotnoir-Bichelman, McKerchar, Tate & Dancho, 2007), and the gestures that are used vary greatly among contexts and cultures

(Billingshurst, 2009; Morris, Collet, Marsh & O'Shaughnessy, 1980). According to Iverson & Thelen (1999), the linkage of the vocal expression of language and the arm movements produced with it are an expression of the embodiment of thought.

Gestures production during speech could also produce an ease of expression (Billingshurst, 2009) and probably it could express one's conformation and clarification of their speech. The use of gestures are commonly seen among adults, since they tend to deliver more speech; either formally or socially. However, Acredolo & Goodwyn (1988; 2000) has found that even infants have started to use gestures as part of their communication, just with lack of physical skills to produce various types of gestures.

Studies have found that the use of symbolic gestures could enhance language development (Goodwyn & Acredolo, 1988, 2000; Iverson & Goldin-Meadow, 2005) and support bilingualism (Iverson, Capirci, Volterra & Goldin-Meadow, 2007; Mayberry & Nicoladis (2000). Thus, several researchers have recommended that the use of gestures should be taught to typically developing children during their first 2 years of life (Acredolo & Goodwyn, 1996; Garcia, 1999; Thompson et. al., 2007). As every baby acquires the skills of using symbolic gestures, it could then create a two-way interaction between babies and parents. Gestures could provide meanings to the babies and it provides a way for them to communicate information that they cannot yet express verbally (Iverson & Meadow, 2005). With such interaction parents will be able to understand what their babies want; need or feel and the child could as well understand what the parents are offering them. Gradually, with such interactive communication, it could help babies decrease their frustration, help them talk sooner, enriched parent-child relationship and increase babies intellectual development (Acredolo & Goodwyn, 2001; Acredolo, Goodwyn & Moore, 2001).

However generally, there are two types of gestures; non symbolic and symbolic gestures. Non symbolic gestures are practically gestures produced spontaneously during speech (Krauss, 2001), and symbolic speech are more structured and each gesture convey a particular meaning (Acredolo & Goodwyn, 1998). For parents to be able to have a two-way communication with their babies, a series of symbolic gestures need to be produce by babies, in order for parents to understand them. This is because symbolic gestures have specific conventionalized meanings to it, which is usually used to substitute speech in a conversation. Thus, this study intent to investigate the diversity of gestures and the frequency of gestures shown among babies (infants and toddlers), parents and caregivers at a daycare setting in Malaysia.

1.1 Type of Gestures

Gestures are part of a communicative behavior where it can be presented alone (without speech) or it can be accompanied by the movements of the hands, arms and fingers which are produced when speech is delivered. The use of gestures in speech can be seen as either a spontaneous act or an intentional movement of the hand and arms. According to Vallotton (2008), gestures are intentional motor actions, usually intended by children as communicative cues. It is part of a communicative behavior where it can be presented

alone (without speech) or it can be accompanied by the movements of the hands, arms and fingers which are produced when speech is delivered. The use of gestures in speech can be seen as either a spontaneous act or an intentional movement of the hand and arms. Either one, generally gestures can be seen as a universal feature of human communication. It is produced by all speakers in every culture (although the extent and typology of gesturing may differ), tightly timed in speech (McNeill, 1992) and it conveys important communicative information to the listener (Iverson & Thelen, 1999). Besides, Haviland (2005) defined gestures as a conventionally formed shapes and movements of hands and arms, with specific shared meanings, sometimes paraphrasable in words (through the paraphrases are by no means functional equivalents if the emblems themselves as they are ordinarily used), and notably culturally variable.

A common type of gesture is the non-symbolic gestures or known as the conversational gesture, whereby it does not represent any meaningful communication but just a spontaneous movement of our hands and arms as speech is delivered. According to Krauss(2001), a conversational gesture is an unplanned, articulate hand movements that accompany spontaneous speech which is to be a medium for conveying semantic information, the visual counterparts of words. One type of the conversational gesture which is the lexical gesture has been found to help a speaker to retrieve a word if the gesture were initiated after the word has been articulated and it could facilitate the production of fluent speech by affecting the ease of difficulty or retrieving words from lexical memory (Krauss, 2001). Another type of gesture which represents a particular meaning in a conversation is referred as symbolic gesture. Looking at an earlier phase of gestures production in a study by Iverson & Goldin-Meadow (2005), there are three categories of gestures used by infants and toddlers; *deictic gesture*, *conventional gesture* and *ritualized reaches*. Deictic gestures indicate referents in the immediate environment, which can refer to events rather than objects, through the act of (a) *showing*; holding up an object in the listener's potential line of sight, (b) *index point*; extending the index finger toward a referent, and (c) *palm point*; extending a flat hand toward a referent. McNeill (2006) listed four specific gesture types which are usually used in a conversation; *gesticulation*, *pantomime*, *emblem* and *sign language*. Gesticulation is language-slotted gestures but with a different timing relation, which replace speech rather than synchronize with it to coincide with a vacant grammatical slot. Pantomime is dumb-show and occurs without speech at all. Sign languages are full socially-constituted languages which are based on manual, facial and postural signs. An emblem is more structured in its hand configurations and has specific conventionalized meanings to it, which is usually used to substitute speech in a conversation. It is the most language-like of gestures which is tied to language formally, functionally and even ideologically. It is an integral part of language, learned as part of language socialization, subject to local standards of well-formed and appropriateness, and temporally integrated with the speech stream – sometimes overlapping talk, sometimes inserted into inter-talk gaps, and sometimes simply replacing talk (Haviland, 2005). Looking at the overall context of gesture, the function of conversational gestures should be distinguished from symbolic gestures as it serves different purposes. However, both involve timing (see McNeill, 2006), the immediate spatio-temporal environment in which it occurs, linked to the

physical surround and at times in stylized ways involving virtual objects (Haviland, 2005).

2.0 Methodology

Participants

Participants were twelve typically developing infants and eighteen toddlers (age between 6 months and 26 months), fifteen parents (13 mothers, 2 fathers) and five caregivers (3 infant room, 2 toddler room) at a work-place childcare setting at Putrajaya. There are only 15 parents involved in this study as only one parent of each baby are seen at the childcare center. This is either because the other parent is working at a different, or they work in a different sector. The participants were all from middle- to upper-middle-class bilingual Malay- and English- speaking families. The main language used at home and center is Malay, but English is also frequently used by both parents and caregivers when communicating with the babies. Babies, especially the older toddlers are heard to use both Malay and English in their communication at the center.

Procedure

Each child, parents and caregivers were videotaped and observed during normal program routines (activity time, meal time, bath time, parent visit and drop-off) at the center. Videotapes and observations of infants and toddlers and their caregivers were collected for approximately two times in a month and parents were videotaped and observed two times in a month. Participants were videotaped and observed in their classroom and at the dining area during toddler's mealtime.

Infants. Each infant were videotaped in two sessions for approximately 60 minutes each time during playtime with their caregiver and 15 minutes during parent visits in the afternoon. During drop-off, bath time and meal time, infant were observed twice for approximately 10 minutes on each activity in each session. All of the activities were videotaped and observed in the infant's room. These routines were chosen for data-collection because participants were communicating actively as they engaged in their activity. On average, each infant was filmed a total of 150 minutes (2.5 hours) and was observed at a total of 60 minutes (1 hours), with an overall total of 210 minutes (3.5 hours).

Toddlers. Each toddler were videotaped in two sessions for approximately 60 minutes each time, during playtime with their caregivers and 5 minutes during drop-off at their classroom. During meal time, each child was videotaped for 15 minutes for each session at the dining area. Observations were only made for 10 minutes in 2 sessions during bath time. On average, each toddler was filmed a total of 160 minutes (2.6 hours) and was observed at a total of 20 minutes, with an overall total of 180 minutes (3 hours).

Parents. Each parent was observed for approximately 10 minutes in two sessions during drop-off and videotaped for approximately 60 minutes in two sessions during visits in the afternoon. All of the activities were videotaped and observed in the classroom. On average, each parent was filmed a total of 120 minutes (2 hours) and was observed at a total of 20 minutes, with an overall total of 140 minutes (2.3 hours).

Caregivers. Each caregiver was videotaped for approximately 60 minutes during playtime (for both infants and toddlers caregivers) and 15 minutes during toddler's meal time. Observations were made for approximately 10 minutes during infant's meal and bath time (for both infants and toddlers). On average, each infant caregiver was filmed a total of 120 minutes (2 hours) and was observed at a total of 40 minutes, with an overall total of 160 minutes (2.7 hours). Each toddler caregiver was filmed a total of 150 minutes (2.5 hours) and was observed at a total of 20 minutes, with an overall total of 170 minutes (2.8 hours).

Coding Gesture

All videotaped episodes were coded unless there were technical problems rendering the behavior of the children, parents and caregivers unrecognizable.

Gesture content. Gestures were defined as intentional and communicative motor behaviors performed in the context of interaction. Since gestures were performed largely the same way across participants, only the concept represented by each gesture is acknowledged rather than describing the form of the gesture. To be sure children gestures were indeed meaningful rather than random motor behavior, only gestures in the context of an interaction with a parent or a caregiver as indicated by body positioning and eye contact is recorded.

Categories of gestures. Each recording will be analyzed in real time and performed gestures among participants will be identified and analyzed in seven (7) categories: *Actions* on events (pointing or producing a symbol representing to a particular person, behavior, events or scenario), *Adverb* (producing a symbol representing when, where, why, or what), *Feelings* (happy or sad), *Object* (pointing to a particular object or producing a symbol representing an object), *Request* (usage of either index point, palm point or symbols requesting an object or behavior), *Reject* (producing a symbol of rejecting an object, behavior or request given to the person), *Yes/No* (agree or disagree to a particular behavior or suggestion). Non symbolic gestures will not be observed as it does not fall under the categorized gesture and it does not represent any meaningful information.

3.0 Results

Based on our observation and coding video tapes, most infants and toddlers are seen to show several symbolic gestures in their interaction with the adults (parents and caregivers) and vice versa, even at our first attempt observing and recording the participants. This shows that infants and toddlers, parents and caregivers use symbolic gestures naturally to communicate with each other for a better understanding of their needs and other feelings. However, it is found that not all parents and babies use gestures in their communication, except for the caregivers (n=5). Only 10 infants, 12 toddlers and 10 parents are found to use gestures. This is probably due to limited observation and videotaping of their interaction with each other. Another interesting result that has been documented is the imitation of symbolic gestures by infants and toddlers, demonstrated

by the parents and caregivers. These infants and toddlers (n=10) are found to repeat the gestures produced by their parents and caregivers instantly. These imitated symbolic gestures are of those frequently used gestures (such as pointing when requesting, referring to object, rejecting, disagreement and saying goodbye) used in their daily activities.

Gesture	Infants	Toddlers	Total
Actions on events	1	1	2
Adverbs	0	0	0
Feelings	5	1	6
Object	7	10	17
Request	2	0	2
Reject	0	0	0
Yes/No	0	2	2

Table 1.0 shows the types of gestures used by infants and toddlers during activity time with their caregivers in the classroom. Five types of symbolic gestures are recorded during activity time; actions on events (gestures on pointing towards an object and raining (n=2)), feelings (happy (n=6)), object (pointing to refer to an object used by caregivers and interested objects in the classroom (n=17)), request (to be picked-up (n=2)) and no (n=2)). Infants were recorded to use gestures when interacting with their caregivers and toddlers were recorded to use gestures when interacting with their caregivers and other toddlers.

Gesture	Infant Caregivers	Toddler Caregivers	Total
Actions on events	2	2	4
Adverbs	1	0	1
Feelings	0	0	0
Object	2	1	3
Request	2	2	4
Reject	1	1	2
Yes/No	2	0	2

Table 1.1 shows the types of gestures used by infant caregivers and toddler caregivers during activity time with the babies. Six types of symbolic gestures were recorded; actions on events (pointing to infants and hello (n=4)), adverbs (asking where (n=1)), object (pointing to a book and toys (n=3)), request (requesting babies to come here (n=4)), reject (rejecting a request from babies (n= 2)) and no (disagree to a behavior (n=2)). All gestures recorded are part of the interaction with the infants and toddlers.

Gesture	Infants	Toddlers	Total
Actions on events	0	8	8
Adverbs	0	0	0
Feelings	2	2	4
Object	0	0	0
Request	2	0	2
Reject	1	0	1
Yes/No	0	0	0

During meal time (Table 2.0) infants and toddlers were seen to demonstrate four types of gestures; actions on events (toddlers pointing to dining area and other toddlers eating (n=8)), feelings (happy (n=4)), request (requesting to be picked up (n=2)) and reject (rejecting meal (n=1)). Infants are seen to use gestures when interacting only with their caregivers and toddlers are seen to use gestures when interacting with their caregivers and other toddlers. Toddlers are seen to use more gestures during meal compared to infants probably due to their motor ability to produce more gestures.

Gesture	Infant Caregivers	Toddler Caregivers	Total
Actions on events	2	1	3
Adverbs	0	0	0
Feelings	0	0	0
Object	2	0	2
Request	0	2	2
Reject	0	0	0
Yes/No	2	1	3

During infant and toddler meal time, caregivers were recorded to see any gestures used with the babies (Table 2.1). Only four caregivers were recorded during meal time as one of the infant caregivers were not scheduled to feed the infants during all of the recording sessions. However, infant caregivers are seen to use more types of gestures compared to toddler's caregivers probably. Four types of gestures were demonstrated by the caregivers; action on events (pointing to the dining area and eating gesture (n=3)), object (pointing to food (n=2)), request (requesting to sit on a particular chair (n=2)) and no (disagree to a behavior (n=3)).

Gesture	Infants	Toddlers	Total
Actions on events	0	0	0
Adverbs	0	0	0
Feelings	0	2	2
Object	0	0	0
Request	2	0	2
Reject	2	0	2
Yes/No	0	0	0

Gesture	Infant Caregivers	Toddler Caregivers	Total
Actions on events	0	0	0
Adverbs	0	0	0
Feelings	0	0	0
Object	0	0	0
Request	0	1	1
Reject	0	0	0
Yes/No	0	1	1

Not many gestures are seen during bath time by infants, toddlers and their caregivers (Table 3.0 and Table 3.1). This is probably due to lack of communication during bath time where bath time were very brief for infants, and toddler caregivers are seen to exhibit firm instructions with the toddlers. In total, only three types of gestures are seen among infants and toddlers and only one type of gestures are seen among caregivers.

Toddlers are seen to demonstrate gestures on feeling (happy (n=2)) and infants are seen to demonstrate gestures on request (requesting to be picked up (n=2)) and reject (rejecting a behavior by caregiver (n=2)). Only one toddler caregiver are seen to use gestures during bath time, to demonstrate request (request to step in shower (n=1)).

Gesture	Infants	Toddlers	Total
Actions on events	0	5	5
Adverbs	0	0	0
Feelings	0	1	1
Object	0	1	1
Request	4	4	8
Reject	0	0	0
Yes/No	0	0	0

Gesture	Infant Parents	Toddler Parents	Total
Actions on events	4	8	12
Adverbs	0	0	0
Feelings	0	1	1
Object	0	1	1
Request	0	3	3
Reject	0	0	0
Yes/No	0	0	0

Table 4.0 and 4.1 shows the types of symbolic gestures used during drop-off by infants, toddlers and parents. Results shows that infants and toddlers demonstrate four types of gestures; action on events (goodbye (n=5)), feeling (happy (n=1)), object (pointing to an object in the classroom (n=1)) and request (to be picked up and requesting an object (n=8)). The same type of gestures were observed and recorded among infant parents and toddler parents; action on events (goodbye (n=12)), feeling (happy (n=1)), object (pointing to a toy (n=1)) and request (request for bottle and things held by child (n=3)). Our recording on toddlers drop-off shows that some of the toddlers (n=5) tend to respond to their parents (n=5) “goodbye” gestures, by producing the same “goodbye” gesture.

This result shows that babies do have the ability imitate and use the gestures shown by adults, which could be beneficial to them if they were taught more symbolic gestures.

Gesture	Infants	Total
Actions on events	0	0
Adverbs	0	0
Feelings	5	5
Object	0	0
Request	3	3
Reject	0	0
Yes/No	0	0

Gesture	Infants	Total
Actions on events	0	0
Adverbs	0	0
Feelings	5	5
Object	0	0
Request	3	3
Reject	0	0
Yes/No	0	0

Only parents of the infants were observed during parent's visit to the center in the afternoon as no toddler parents were seen during their (the parent's) lunch time. However only five parents and five infants were observed during the afternoon visits as no other parents were seen at the center during all of our observation sessions. Based on the observation, infants and their parents were seen to demonstrate the same gestures; feeling (happy (n=5; n=5)), request (want to pick up and request to be picked up (n=3; n=3)). Infants were observed to respond to their parent's request gestures by demonstrating the same gestures. Again, this shows that both infants and parents could communicate effectively through the use of symbolic gestures, whereby infants could understand parent's request and parents could understand their infant's feelings and could respond to what their infant's want.

4.0 Discussion

The results clearly show that infants and toddlers do demonstrate several types of gestures, either with their parents, caregivers or with other babies in the room. Several of the gestures used are results of imitation of their parent's gestures, and others are probably gestures produced to show their needs, feelings or interest. Most of the gestures used by infants are deictic gestures, whereby in this study most of the deictic gestures are though the act of index point, such as when referring or requesting to an object and palm point, such as requesting to be picked up. However, toddlers are seen to show a slight variation in their gestures compared to the infants where toddlers tend to produce more understandable gestures, such as waving goodbye, and gesturing a "block". This is probably due to their motor ability which is more developed than the infants, and also they might have been introduced to a number of gestures by their parents.

Looking at the data collected, it is also found that some of the infants (n=3) and toddlers (n=6) are seen to demonstrate several types of gestures during a specific activity. Two of the infants are seen to demonstrate two types of gestures during activity time; happy and pointing towards an object and the other infant was seen to demonstrate gestures on raindrops and pointing towards an object. During other activities, none of the infants were seen to produce more than one type of gestures, which is probably due to lack of interaction between caregivers, parents and the infants. Toddlers however, are seen to use more than one type of gestures in several activities. Three toddlers were seen to demonstrate more than one type of gesture during activity time. Two of the toddlers were seen to demonstrate two types of gestures; pointing towards a toy and showing a "no" gesture to another toddler in rejecting a behavior, and pointing towards a toy and a requesting a toy. The other toddler were seen to demonstrate three types of gestures during activity time; showing smelly poop gesture, pointing towards an object and showing a "no" gesture to one of the caregivers. During meal time, two toddlers were seen to produce more than two types of gestures; pointing towards dining area and showing happy gestures when food was served. These two toddlers were seen to use gestures when interacting with other as they walk and sit at the dining area. During drop off only one toddler were seen to demonstrate more than one gesture; waving "goodbye" and requesting to be picked up. No other toddlers were seen to produce more than one gesture, as parents tend to have a "brief drop-off" with the toddlers.

The collected data also shows that some of the infants (n=1) and toddlers (n=2) were seen to produce gestures in several activity sessions. The infant were seen to produce gestures during activity time and mealtime and both toddlers were seen to demonstrate gestures during activity time, meal time and drop-off time. This shows that infants and toddlers do produce gestures in their interaction with another person (either adults or child). Looking in detail on the interaction between parents, caregivers and infants, our data shows that infants (n=1) and toddlers (n=5) were seen to imitate and produce the same gestures used by parents and caregivers. The infant were seen to demonstrate raindrops gestures with the caregiver, and all five toddlers were seen to demonstrate "goodbye" gesture as their parents' wave goodbye. With these results, it is suggested that infants and toddlers could be introduced to symbolic gestures training and they should be given proper training on

symbolic gestures as proposed by Acredolo & Goodwyn (2000) as it could enhance parent-child and caregiver-child interaction, and increase meaningful communication.

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A Construction of Guitar Classic Instruction Video CD for Music and Arts Programs Student, Loei Rajabhat University

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ABSTRACT

This experimental research aims to (a) study into effectiveness of Video CD Guitar Classic instruction developed for students in the music and arts program at Loei Rajabhat University, based on the effective standard level of 80/80, (b) compare classical guitar practical skills between the students taught through Video CD Guitar Classic instruction and those taught by conventional teaching, and (c) determine whether the students' attitudes towards Video CD Guitar Classic instruction represent a higher level of satisfaction or not. Assigned randomly, a sample group is the first year students in the academic year of 2009 in a music and arts program at Loei Rajabhat University. Ten students in an experimental group are taught through Video CD Guitar Classic instruction, while the other ten in a control group are taught by conventional teaching. The tools employed to collect the data are a pre-test, a post-test, and a questionnaire. The data obtained is, then, analyzed, by using percentage, standard deviation, and a t-test method. The results showed that (a) the effectiveness of Video CD Guitar Classic instruction reaches the standard level of 88.50/86.00, (b) classical guitar practical skills of the experimental group are higher than those of the control group to the significance level of 0.05, and (c) the experimental group showed a higher level of satisfaction with Video CD Guitar Classic instruction.

Background

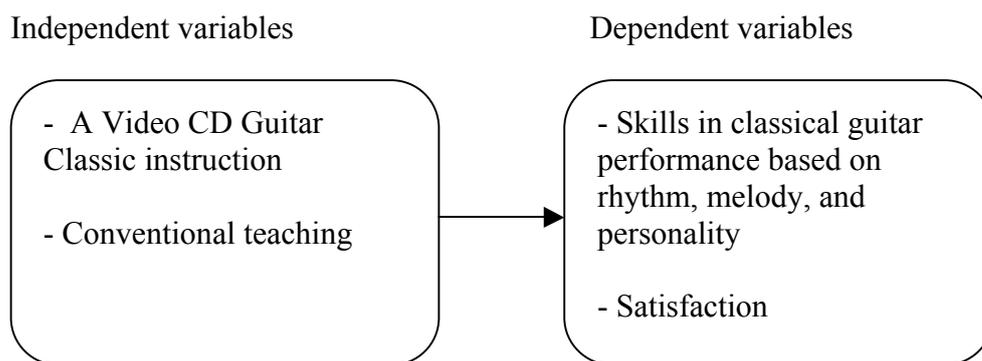
The National Education Act, 2542 B.E., and amendment (2nd Edition), Chapter 1: General Provisions: Objectives and Principles, Section 6 prescribes that education aims at the full development of the Thai people in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live happily with other people. The Ministry of Education sees importance of student development in ethics, aesthetics, rationalization, and appreciation of arts, nature, environment, as well as cultures inherited from the collected wisdom of people in the nation, of the capability to discover their interests, which is a foundation for education or art profession enhancement. Therefore, students will develop skills such as imagination, creativity, confidence, and self-awareness in a constructive way. As a result, they will be more responsible for their works, and can work with others professionally, thus contributing to social and environmental development (Department of Education. 2547:1). An educational management framework needs to emphasize that all students can learn and develop by themselves, and are the center of a process. A process of educational management has to promote natural development of students with their full potential, in both formal and informal learning. An open education has to focus on knowledge, ethics, a learning process, and integration in accordance with appropriateness of each educational level through empirical activities and practices, and to encourage production and development of academic books, print media, materials, and technologies for education, as well as monitoring and assessment of such technologies so as to create efficient utilization required for a learning process of Thai people (The Office for National Education Standards and Quality Assessment, Public Organization. 2547:38)

Technological development for education is of importance for all instructors as the world has become a learning society, in which it is connected to the digital era. Information technology and the internet become more involved in daily life and education, thus playing an important role in educational development. The development of practical materials required for the national educational system, which emphasizes on students' ability and skills to optimize their knowledge, as well as proper and efficient use of technologies, is, therefore, a responsibility of instructors to pay attention to, and to apply in a subject in order to create full benefits to students through practices and workshops. These activities will, in turn, help students to gain first-hand experience of problem solving and seeking knowledge as a group. Thus, students can learn from both theories and practices (The Office of Education Council. 2550:4). Creativity is an ability to see things from different aspects, or to act in a unique way, that is, a creation of something from unrelated matters (Torrance. 1962:37). He comments on the promotion of creative thinking that development of creativity takes time, and is incremental. He believes that everyone can be trained to enhance creativity. However, training requires a consistent process, which is in line with educational activities to develop multiple intelligences. Instructors should carry out various types of activities in order to improve a specific intelligence, and to develop multiplication for students, based on a consistency of their potential, talent, interest, and an activity. A learning activity for multiple intelligence development in music should include: 1) a music creation, 2) music performance, 3) musical instrument learning, and 4) learning through musical sounds. (Pimpan Dachakup. 2551:63). Teaching is a process in the educational system, which is dependent upon a medium to transfer knowledge to learners. Therefore, instructional media is a crucial factor for both instructors and learners (Jittima Senachai. 2550:2).

A vision of Loei Rajabhat University is to be a leading university of a learning organization and integrating local and international disciplines. The university aims to strengthen the teaching profession, and to produce and equip educational personnel with high qualification and standards. Recently, it offers a music and arts program in the curriculum, but still lacks effective teaching media. Recognizing such a problem and being aware of the impact education has on student development in gaining knowledge and vision, and in valuing both Thai and international arts and cultures, is important for people to be able to apply knowledge to their day-to-day living. (A Student Guide: General Education Chapter, Loei Rajabhat University 2551: 141). The researcher, therefore, developed Video CD Guitar Classic instruction for students in the music and arts program at Loei Rajabhat University, with an aim to improve students' capability of music performance, and to establish a proper understanding, as well as musical skills, so they can transfer their knowledge to others, with internationally recognized standards.

Concept and relevant literatures

In order to develop and assess the effectiveness of Video CD Guitar Classic instruction, the researcher conducts a study on several literatures, these being: Torrance's conceptual researches, teaching method emphasizing on a development of practical skills of Simpson, Harrow, and Davien, and learning activities to develop multiple intelligences in music of PimPhan Daechakup, as they are in line with Section 24(2)(3) of the National Education Act, 2542 B.E., in regard to empirical learning management by practicing, the Office of Education Council Ministry of Education. The concept can be concluded as follows:



Objectives

1. To develop Video CD Guitar Classic instruction for students in music and arts program at Loei Rajabhat University, and determine its effectiveness, based on the effectiveness standard level of 80/80.
2. To compare classical guitar practical skills of the students taught through Video CD Guitar Classic instruction and those taught by conventional teaching.
3. To compare satisfaction of the students who are taught through Video CD Guitar Classic instruction and the criteria of satisfaction at a high level.

Hypotheses

1. The effectiveness of Video CD Guitar Classic instruction for students in a music and arts program is in accordance with the criterion of 80/80.
2. The students who are taught through Video CD Guitar Classic instruction have higher performance skills than those who are not.
3. The students who are taught through Video CD Guitar Classic instruction are satisfied with a medium at a high level.

Specific definition

1. "A Video CD Guitar Classic instruction" means an instructional medium designed for a classical guitar instruction via a presentation on a monitor or through an LCD player.
2. "The effectiveness of Video CD Guitar Classic instruction under the effectiveness standard level" means a creation and an experimental teaching by employing Video CD Guitar Classic instruction in order to find effective instruction through an experiment on a sample group in the actual environment and a performance test during the class. The information obtained is, then, improved for another experiment in order to reconfirm the results, and to pass the effectiveness standard level of 80/80.
 "The 80 in the front" refers to the total performance score of the students who are taught through an instructional medium during the class, accounting for 80%.
 "The 80 in the back" refers to the total performance score of the students who are taught through an instructional medium after the class, accounting for 80%.
3. "The students' satisfaction" means the satisfaction with Video CD Guitar Classic instruction, measured by a questionnaire.
4. "Skills" mean the ability to perform musical instruments, comprising of rhythm, melody, and personality.

5. "Rhythm" means a musical movement marked by the regulated succession called a common time, comprising of three elements as follows:
 - 5.1 Beat is a time unit created by successive strokes and an accent, and can be divided into 1) double time, 2) triple time, and 3) quadruple time.
 - 5.2 Tempo is the speed or pace of a given piece, indicated by a beating device called "metronome".
 - 5.3 Rhythmic pattern is a pattern of a rhythm created for music, and can be divided into three groups, which are 1) double rhythm, a pattern of March, 2) triple rhythm, a pattern of Waltz, and Quick Waltz, and 3) quadruple rhythm, a pattern of Slow, Tango, Bolero, Cha Cha Cha, etc.
6. "Melody" means a linear succession of musical tones in the horizontal axis, indicated by a time signature. Its main elements are;
 - 6.1 Three-directional motion, comprising ascending, descending, and repeated movements.
 - 6.2 Melodic coordinates, comprising of length and range.
 - 6.3 Shape, created by movement of melodies
 - 6.4 Melodic rhythm, a rhythmic pattern indicated by a difference of length of sound in melodies
7. "Personality" means personality and a proper posture in performing music.

Methodology

First step: The researcher develops Video CD Guitar Classic instruction, and assesses its effectiveness. Then, five experts study into the results in order to determine consistency of the lessons, by using the Index of Item-Objective Congruence method (IOC). An assessment of the experts results in 15 lessons, with IOC value ranging from 0.50 to 1.00.

Second step: A comparison of learning achievement between the experimental group and the control group is carried out, after the researcher implemented an instructional medium in classroom, and conducted a post-test with both groups, by using the pre-test, a 20-question examination based on 16 hours of instruction.

Third step: The researcher compares the satisfaction with Video CD Guitar Classic instruction, by using a t-test analysis (One-sample test for the mean)

Results

1. Effectiveness of Video CD Guitar Classic instruction under the effectiveness standard level of 80/80
The researcher compares the means obtained from performance of the students who are taught through Video CD Guitar Classic instruction during and after the class by using a statistical method, and the result is shown in Table 1.

Table 1. Effectiveness of Video CD Guitar Classic instruction under the criterion of 80/80

Units	Subject	Criterion: 80/80	
		E ₁	E ₂
1-15	Classical guitar	88.50	86.00

According to the Table 1., the effectiveness of Video CD Guitar Classic instruction is 88.50/86.00, which is in line with the first hypothesis.

2. The results from a comparison of learning achievement between an experimental group and a control group, based on the means before and after class of both groups. After implementing Video CD Guitar Classic instruction, and conducting a post-test on both groups with the same 20-question pre-class test, the research analyzed both test scores by using a t-test method in order to find the differences of the means obtained before and after class, and the results are shown in Table 2.

Table 2.

A comparison of the means of the scores before and after class between the experimental group and the control group

Group	N	k	\bar{X}	S.D.	t	p
Experimental group	10	20	17.20	2.10	4.49*	0.00
Control group	10	20	13.20	1.87		

According to Table 2., the means of the experimental group and the control group are different to a statistical significance level of 0.05; Video CD Guitar Classic instruction is more effective than regular teaching, thus in line with the second hypothesis.

3. A comparison between the satisfaction with Video CD Guitar Classic instruction and the criteria of satisfaction with learning at a high level ($\mu= 4.00$), by using a t-test analysis (One-sample test for the mean)

The researcher uses a score of each question to determine a mean, standard deviation, and compares the data with the criteria. The results are shown in Table 3 and 4.

Table 3.

An analysis of the satisfaction with Video CD Guitar Classic instruction medium

No.	Question	\bar{X}	S.D.	Interpretation
1	The medium allows the students to go through a lesson by themselves	4.60	0.70	High
2	The medium allows students to select any lesson they prefer.	4.70	0.48	High
3	The medium provides an understandable step-by-step approach.	4.70	0.48	High
4	The medium is well arranged with extensive contents.	4.60	0.70	High
5	The medium contains graphics in a form of notation, thus providing easy learning.	4.80	0.42	High
6	The medium can encourage students to learn other lessons.	4.70	0.48	High
7	The medium facilitates the students with out-of-classroom learning.	4.90	0.32	Highest
8	The medium allows students to select any practice unit they prefer.	4.80	0.42	High
9	The medium helps the students to create their own pace of learning.	4.20	0.63	High

10	The medium causes the students to have more interest in music.	4.80	0.42	High
11	The medium improves students' music performance.	4.80	0.42	High
12	The medium helps students to gain better learning experience.	4.70	0.48	High
	Total	4.69	0.43	High

From Table 3, it is clear to see that the three most popular reasons to study with Video CD Guitar Classic instruction are:

The medium facilitates the students with out-of-classroom learning ($\bar{x}=4.90$);

The medium contains graphics in a form of notation, thus providing easy learning, the medium allows students to select any practice unit they prefer, the medium causes the students to have more interest in music, the medium improves students' music performance ($\bar{x}=4.80$);

The medium helps the students to create their own pace of learning ($\bar{x}=4.20$), respectively, with the standard deviation ranging from 0.32 to 0.70.

In addition, the overall picture demonstrates that the students' satisfaction with a VCD-based classical guitar instruction medium is at a high level ($\bar{x}=4.69$), with the standard deviation of 0.43.

Table 4.

A comparison between the satisfaction with Video CD Guitar Classic instruction medium and the criteria of the satisfaction with learning at a high level ($\mu =4.00$)

N	\bar{x}	S.D.	μ	T	P
10	4.69	0.43	4.00	5.05	0.00

Table 4 shows that that students satisfied with the instructional medium are happy with the teaching at a high level (to the statistical significance of 0.05), which is in line with the third hypothesis.

Discussion

According to the results of the research entitled "A development of Video CD Guitar Classic instruction for students in the music and arts program at Loei Rajabhat University", there are two issues to be discussed as follows:

1. A comparison of the means after class between the experimental group and the control group shows the different means to a statistical significance level of 0.05, that is, Video CD Guitar Classic instruction is more effective than conventional teaching as its presentation contains extensive materials, covering form sitting posture, hand positioning, to music performance, which students can select any practice unit they prefer, and go through a lesson by themselves, thus creating interaction between students and a computer. Each practice unit includes music notation in the captioning, and sound during a performance. This helps students to enjoy the learning experience, which is consistent with a study of Jittima Saenachai, 2550, who states that Video CD Guitar Classic instructional medium is a way to purposely change students' behavior as it helps to create tangible contents. This is also consistent with a research of Lee, 2001 on teaching through an interactive video at the University of Mississippi in a fall semester in 2000. He states that a video or Video CD Guitar Classic instruction is a medium

which can help to transfer varieties of knowledge in all subjects to students in all levels, naming formal, informal, and open and distance education.

2. The students, satisfied with Video CD Guitar Classic instruction, have stated satisfaction with learning at a high level as the medium includes graphics and contents in a form of notes that promotes easy learning through a selection of a lesson, thus creating better motivation and interest in music performance.

Conclusion

1. A statistical analysis of the means obtained from students' performance via Video CD Guitar Classic instruction during and after class found that the effectiveness of the medium is 88.50/86.00.
2. A comparison of learning achievement between an experimental group and a control group, based on the means before and after class of both groups, after an implementation of Video CD Guitar Classic instruction and a post-test showed that the means are different to the significance level of 0.05, and that Video CD Guitar Classic instruction is more effective than conventional teaching.
3. A comparison between the satisfaction with Video CD Guitar Classic instruction and the criteria of satisfaction with learning at a high level ($\mu= 4.00$), by using a t-test analysis indicated that students, satisfied with the teaching medium, has the satisfaction with the learning at a high level to the significance level of 0.05.

Recommendations for a use of the results

1. According to the research, Video CD Guitar Classic instruction is a medium which helps to improve students' learning achievement. This is in line with the current education in which universities value E-learning and modern subjects. In addition, students are able to create their own self-learning in terms of both theory and practice.
2. This research still has some flaws due to an editing of graphics and sound, or a short presentation of the western musical notation contained in the caption. However, a consideration of the medium implementation should focus on a balance of learning period in each semester.
3. A Video CD Guitar Classic instruction may result in a lack of a relationship between students and their instructor. Therefore, the medium should not entirely replace instructors since it is merely a means of communication through a VCD.

Recommendations for further studies

1. As Video CD Guitar Classic instruction developed for students in a music and arts program contains the western musical notation, a type of language that is used to communicate throughout the world, the research, therefore, has an idea to translate the Thai caption into another language, such as English, so people or international institutions, offering a music program, will acknowledge educational management based on Video CD Guitar Classic instruction, and implement in the musicological study.
2. In regard to this instructional media research, especially Video CD Guitar Classic instruction, the researcher aims to share knowledge and experience with both local and international universities that offer a classical guitar performance program in order to enhance the quality of teaching, as well as benefits to students through an internationally recognized standard.

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Scenarios for Mobile Learning across Contexts

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Abstract: Mobile learning has been described as learning across various contexts, but the situated potentials of different contexts for learners and resulting requirements for learner-centered system design have rarely been considered. We discuss design challenges and opportunities of portable technologies to support learning activities inside the classroom and outside across various contexts.

A functional software prototype for interactive whiteboards, and pen-tablets and PDAs has been implemented in order to support learning activities in the classroom, at home, and in the wild. Futures workshops have been conducted to sketch out additional scenarios for mobile learning applications, named Pattern Collector, Natural Ideograms, Contextual Windows, Augmented Tourguide, Mobile Library, and Wiki School. Drawing from psychological and pedagogical theory we explore their unique potential to support learning across contexts. Their contrastive discussion indicates different notions of context and indicates new directions for designing learner-centered systems.

Keywords: Educational Technologies, Mobile Learning, Learner-Centered System Design, Interaction Design Patterns, Scenario Prototyping, Learner-Generated Context

1 Introduction

Mobile learning has been described as learning across various contexts, but the situated potentials for learning in different contexts, and resulting requirements for learner-centered system design have rarely been considered. Besides research and development of educational technologies has mostly focused on online and mobile media rather than on an integration of classroom, mobile and online media involving different instructional methods. This paper focuses on theoretical challenges in the development of educational technologies to support problem-oriented and collaborative learning activities inside the classroom and outside across various contexts.

Form factors and technological capabilities of new systems and devices need to be matched with educational theory and didactical concepts to provide suitable support for learners. Different scenarios for the application and extension of these patterns within mobile systems and their integration with online and classroom activities are being described and illustrated. The initial Pattern Collector, a system to learn ideograms in their natural environment, windows and a mobile tour guide to augment sights with contextual information, a mobile library providing a comfort zone for mobile learners and a wiki-school providing an open source for educational media and instructors. Their comparative and contrastive discussion indicates different notions of context, design challenges and didactical affordances for mobile learning.

2 Related Works

Other than user-centered design learner-centred design has the goal to support learners in developing a better understanding of a yet unknown practice. Tools not only need to support completion of a given task but to enable the acquisition of knowledge for diverse audiences and changing scaffolds. With respect to mobile learning portable devices have been discussed as a valuable means to support the context-dependent construction of knowledge (e.g. in Jippling et al. 2001). Especially their ability to collect data, work collaboratively and location awareness are suited to create uniquely new learning opportunities (Patten et al. 2006). Handhelds have been described as 'flexible tools that can be adapted to suit the needs of a variety of teaching and learning styles' (Curtis et al. 2002). But usage of portable devices does not suffice for mobile learning.

In the learning sciences peripheral participation in professional communities of practice has become a definition of "situated" learning (Lave & Wenger 1991). Taking part first peripherally in such professional communities participants learn while subsequently growing into more central positions. In (Vavoula 2004), informal learning is described as a process of learning that occurs autonomously and casually without being tied to highly directive curricula or instruction. The same work presents a typology based on the presence of and control over the goals and the process of learning. In supporting informal learning situations, handhelds have been used to collect data in the field (Scanlon & Waycott 2005), and to consult information from a remote server or a nearby data-source, as is the case of using PDAs in museums.

Different notions of context are most crucial for any discussion of mobile learning, and its educational methods and media. "Mobile learning is not just about learning using portable devices, but learning across contexts" (Walker 2006). Various constructs of learning context in mobile HCI (such as socio-cultural factors, location, and activity, content and user context) have been briefly summarized in research by Winters and Price (2005). Besides the classroom setting informal learning environments with peers within natural environments and individual learning sessions are being considered.

Within our own research on educational technologies inside and outside the classroom, we developed a system for touch-sensitive mobile devices that allows for the collection, annotation and collaborative exchange of visual and written data, and for transferring these field notes for further elaboration at home or discussion in the classroom (Breuer et al. 2007). Its interaction principles such as gesture-based interaction on touch-sensitive devices apply the same design modules as we already implemented for pen-tablets and whiteboards inside the classroom, allowing for a seamless transition between formal and informal learning environments.

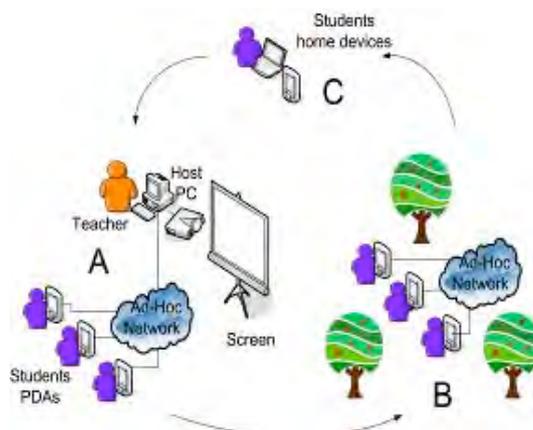


Figure 1. PDAs provide for a unique interface and a seamless transition between the learning environments of the classroom, outside "in the wild," and at home.

3 From Patterns to Scenarios

In order to allow students to focus on learning activities within these different settings an interaction design pattern language has been developed and implemented on different portable devices: PDAs, interactive Whiteboards, pen-tablets and tablet computers. On each of these devices students start with an open space to generate, collect and exchange resources for learning. Gesture-based interaction allows them to flexibly create and organize content within a hierarchical semantic. Individual and group awareness widgets support communication and collaboration between peers and teachers. Considering the potentials of defining patterns on levels of increasing generality, the outline of the pattern language differs between the levels of didactics, curricula, activities, actions and operations (Breuer et al. 2007).

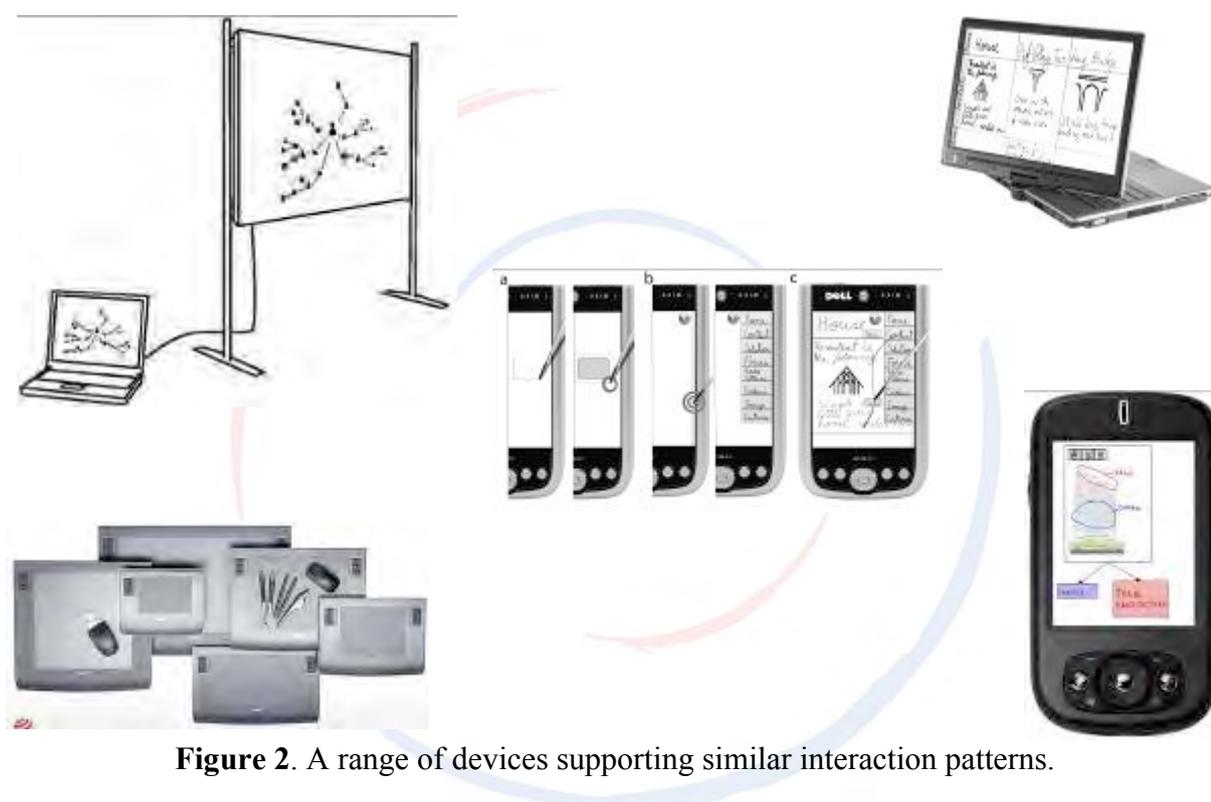


Figure 2. A range of devices supporting similar interaction patterns.

The system was enriched by a set of templates that allows students to collect examples and observations of interesting design solutions using PDAs and documenting them as potential design patterns with a name, problem description, solution, example (as found in the field) and reference to other patterns. These potential patterns may then be transferred home or into the classroom for further investigation and discussion. In order to specify application fields the following usage scenario for a “Pattern Collector” has been developed:

Within the classroom, students and teachers work together on a particular subject like modern architecture using the Pattern Collector. The teacher may prepare an initial presentation introducing the field and point out some problem, like the conflict between the planning of a static structure and the inhabitants’ appropriation of that space, which may be defined in terms of usage patterns. Afterwards students are asked to collect examples of best practices in the city regarding an illustrating topic such as “entrances and exits”. Students then explore their neighborhoods, taking pictures of felicitous examples of door design, with the functional and aesthetic context of the door, the door itself and its component details. Subsequently, they may comment upon what they see using the pattern format and adding extra (e.g. online)

material and references at home. In case of doubt if a certain appropriation of space represents a usage pattern, they may connect to other students in their group debating their point of views. Communication functionalities and a shared view on the handheld provide a common anchor for reference. Back in the classroom, each group sends their findings to the interactive whiteboard and discussions continue. Moderated by the teacher, students evaluate their propositions and discuss the hierarchy, its distinctive levels, and the relations between the patterns they intend to work with in order to collaboratively create their own pattern language. Design and architecture students would then go on to apply their own patterns by building models that represent ideal representations of these patterns and pattern languages for a specific context. In the end, they will not only have learned how to extract and work with patterns, but will have also addressed critical issues and trade-offs in the specific field.



Figure 3: Pattern Collector (Breuer et al. 2008)

Illustration and application of theories are commonly considered to be essential for developing a thorough understanding. Furthermore, exercising appears critical to define the scope and boundaries of theoretical approaches. In traditional classroom settings extensive exercises are rarely conducted. Two factors may contribute to this phenomenon. Firstly, individuals differ greatly in the amount of exercise needed and tolerated. Thus, while some students may appreciate the opportunity to exercise others get bored more easily. Secondly, it is very time-consuming for a teacher to collect diversified materials that maintains students' interest. The scenario outlined avoids both problematic issues. Taking into account differing needs, it allows students to decide individually how much exercise they need, e.g. by commenting more or less frequently on their peers' solutions posted in online forums. Furthermore, the photographs gathered by students are likely to be much more diverse and to address issues more relevant for individual comprehension than photographs preselected by the teacher.

4 Scenarios

The usage scenario previously described provides a starting point to dive deeper into futures scenarios for mobile learning that have not yet been implemented. As speculative design scenarios provide a first references to explore and advance design alternatives. In our case they are situated on a plane of imagination, where alternative syntheses of desirability and feasibility are being projected in order to provide orientation. They may serve as provide "just-enough prototypes" and references to explore, discuss and contrast potential directions and implications of the development of learner-centered mobile systems. According to Alexander (2004) they describe sequences of actions at the starting point of systems design on various levels of granularity. Within strategic foresight and management scenarios have been

widely used to inform decision making and trigger organizational learning (Fink et al. 2000). Scenarios contain rich descriptions of potential developments.

The following scenarios have been created within futures workshops on mobile communication and learning. In principle, a futures workshop can be interpreted as a catalyser for reducing the discontent with the current situation and for showing positive development possibilities for the future (Jungk & Müller, 1987). A futures workshop typically includes domain experts from separate fields and consists of phases for critique, utopian imagination and realization. The scenarios are described with a name, a didactical approach, the media & features applied potential application fields, a short scenario story and a context.

4.1 Natural Ideograms (Breuer & Matsumoto, 2008)

This scenario aims at self-directed learners in informal learning environments. A mobile device with camera and access to sign recognition is needed. Some intelligence on behalf of the system is required for identification, disambiguation and translation.

A user may read signs or text written in foreign languages as input via a mobile camera. Software within the portable device translates the sign into the users' native language offering an interpretation of its contents. If we consider that the purpose of public informational signs is to provide both information and orientation, we may even propose a system that does not only utilize sign recognition and translation capabilities of a mobile system, but public signs providing a unique identifier (like a QR-Code or Bokode) that is unambiguously detectable by a mobile system.

A picture of the sign and its surrounding context may then be saved together with the translation, creating a personal history of the users' encounters with new signs. This information can then be collected on a file card and be used later for studying the translations. In fact, hints related to the meanings of pictures may be included on file cards so that users can exchange information with other users, contributing to a kind of quiz game (introducing an aspect of social mediation). Similarly, a teacher may invite students to collect pictures for a vocabulary competition in class.



Figure 4. Natural Ideograms (Breuer & Matsumoto 2008)

This scenario may not only support people who visit a foreign country to learn the respective language but may also imitate these conditions for people who are in their native country. Learning occurs almost automatically in natural contexts. Progresses are made more rapidly since contextual embedding of vocabularies facilitates recollection. To associate new vocabularies with personally significant information strengthens memories even more. Additionally, contextual embeddings safeguard against misinterpretation of literal translations. According to a well documented phenomenon retrieval of information is facilitated if the context in which a lesson has been learned is reinstated (e.g. Godden & Baddeley, 1975,

1980). Thus, pictures of a situation encountered should provide useful hints for recalling the respective word, encouraging the learner in turn. All in all, the scenario is considered particularly useful for language acquisition. In contrast to traditional vocabulary exercises situated personal meaningfulness should contribute to an enjoyable learning experience. Certainly, there are standard vocabulary exercises that provide contextual information to the learner, such as presenting a photograph of a bank along with a list of financial words. These exercises allow applying mnemonic techniques (e.g. by encoding spatial arrangements, however, time information is usually not provided) and to derive hints for rehearsal as well (like “what was the boy taking out of his wallet?”). However, these standard exercises differ in two ways from the scenario suggested. Firstly, the learner may not decide by himself which vocabularies he considers useful to learn. Additionally, the contextual information (i.e. the picture or photograph) does not relate personally to the learner. Within the scenario on the other hand personal relevance is mediated by contextually situated usefulness.

4.2 Mamama – Multimodal Chinese

Suitable for formal training as well as for edutainment games another tool for language acquisition was lined out in an ideation workshop on use cases for 3D gesture recognition by means of a magnetic ring (Ketabar et al. 2010). A starting point was the difficulty to learn tonal languages. In Chinese tones are distinguished by their shape and pitch range, and many words are differentiated solely by tone. Other languages like Japanese make use of pitch accents or phonemic tone to give prominence to syllables within words changing their meaning. Thus, applying the right tones is quite important language acquisition. In Chinese for example a “ma” may signify “mother”, “horse”, or a “question mark” in Chinese, depending on a rising, declining or bilateral intonation. The scenario utilizes physical gestures of the hand (e.g. wearing a magnetic ring with a mobile device) for foreign language phonetics acquisition. Thus, another kinesthetic modality of learning vocabularies is made accessible. This allows learners to either select one mode of presentation (acoustic, verbal or gestural) according to their own preferences or to use all likewise leading to an in-depth processing to achieve a mnemonic advantage. If anything “context” is here the tonal system.

4.3 Augmented Tourguide

Suitable for the same didactical approaches and media like the natural ideograms scenario the augmented tourguide augments objects and sights in natural settings. Its basic technology for visual search is already available as prototype developed by Google (<http://www.google.com/mobile/goggles>). The augmented tour guide provides visual and audio information on places and objects you see or target with your mobile device. One mode may be a “timemachine”, with which a user can visually travel back and forward in time to access documented material about his or her surrounding or to get information about upcoming events. A metadata visualizer adds content provided by others, e.g. on what is happening inside a building. Interactive online games mix the real and the digital world.



Figure 5. Scenario for an Augmented Tourguide (Illustrations by Gabriele Heinzl)

The augmented tourguide may be used as a supplement of GPS-guided tours that are published on www.geocaching.com by way of example. By now, more than a million caches have been hidden worldwide for this treasure hunting game. One target group may be tourists who visit an unknown place. They may follow the tour recommendations posted by geocachers who know the area quite well and carefully elaborated a tour that guides strangers alongside notably places. Guidebooks provide similar services to the well-prepared traveler. However, reading about a place or object distracts from inspecting it. Furthermore, utility might be impaired if guidebooks are out of date or of low quality which is usually not noticeable to strangers. In contrast, the augmented tourguide is easily updated and evaluated by users who elaborate and comment on information and recommendations. Additionally, it may meet the special needs of people on a business trip who did not plan their journey beforehand but unexpectedly find themselves to have a few hours of spare time to spend. Relying on GPS makes it possible to start the tour at any location without looking for a starting point first.

4.4 Contextual Windows

Whereas the previous scenarios address individual learners with their portable devices the next one utilizes public screens of transport systems to convey information and learning content. Travelers within public transportation systems, such as riders on trains and trams, may be unobtrusively provided with contextual information on a half transparent screen within the coach. The display screen could be implemented by an organic light-emitting display (OLED) or the Quick Response - Liquid Powder Display (QR-LPD). Images on the screen with silhouettes of buildings or objects would not replace the views of the real objects, but add a layer with “contextual” information on local reference points, such as the history of the passing neighborhood or building, current political issues that relate to the place, aesthetic highlights, obscure anecdotes, etc. Via touch screens or settings on their mobile devices, travelers may select from different kinds of information. Alternatively, some general information about currently popular exhibitions and events in the vicinity may be retrieved.

As a scenario we may imagine passengers seeing the abstracted picture of the entrance to a large Berlin church on the window as they are passing by. Listening to their audio handsets, they may hear something such as the following: “On the right you see Gethsemanekirche. In the peaceful revolution of 1989, this was a central meeting point for the East German opposition ...” If they want to retrieve further information, the handset allows them to browse related online content. This again might be shown on the public screen or saved together with an image of the scenery on the mobile device for in depth follow-up study. Connecting such systems to already existing recommender systems and social networks may contribute to reunite the separate worlds inside and outside the classroom.

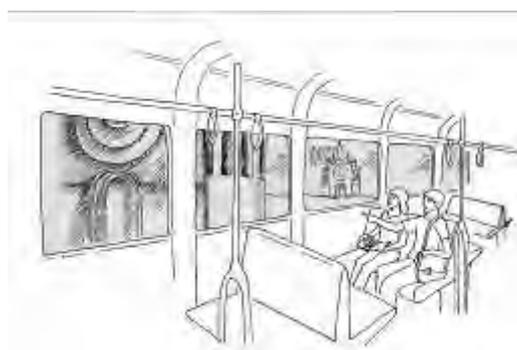


Figure 6. Natural Windows (Breuer & Matsumoto 2008)

Whereas infotainment screens positioned in metro stations offer updated informational services to passengers they provide all passengers with the same news. In contrast, the scenario outlined allows passengers to navigate the display screens deciding whether and which information they would like to get (e.g. by choosing one of different categories, such as general information, architecture, culture, history). As a positive side effect, passengers sharing a suite are encouraged to interact, since they need to find consent on their informational requests. Exchange with social partners may be facilitated further through a community board function that allows passengers to add comments and leave their own traces.

4.5 Mobile Library

The mobile library preserves aspects of formal learning environments within mobile settings and intends to support self-directed learning activities during commuting times. It utilizes tablet computer with camera and gyro sensor in order to create a personal or shared space for learning.

Within a futures workshop at the University of Applied Sciences Potsdam current obstacles and utopian futures of mobiles learning laid the grounds for envisioning new systems to support mobile learning for public transport. The necessity of a “comfort zone” for learner became a central topic during the workshop. During commuting times people often find themselves in stressful states, coming across crowds of people, alternating between natural and artificial daylight when using the metro, potentially encountering loud noises and malodors. A certain limit of sensory information is exceeded awkward sensations result. Many people cope with this stimulus overload by secluding themselves, blending out the environmental changes, e.g. by wearing earphones. Another way to restore comfort might be to provide familiar cues associated with a relaxed context. Thus, the envisioned system provides a personal library with spaces, books, desks to sit down and write and read on, staff to ask how to advance, and other rich resources organized by physical location. A gesture-based handling of tablet computers was proposed in order to create an adaptable and comfortable personal learning environment with individually adaptable and familiar modules. Moving the tablet or pad to one side yields access to books whereas a horizontal posture provides for a desk with notebooks, pens and brushes.

Such a system might be interesting to all commuters who would like to exploit traveling times for work but do have problems to concentrate or just do not feel comfortable due to stimulus overload. Inducing some sense of familiarity is expected to have positive and relaxing psychical effects. Furthermore, all work materials are still accessible and they do not need to be rearranged to adapt to the new environment. Thus, this scenario could provide more agreeable and more efficient working conditions. Its motto: Bring your own context!

4.6 Wiki School / Wikiversity

The last scenario addresses any kind of didactical approach and media. While the previous scenarios mainly delivered content the generation of such content and its didactical formation becomes an essential element here. The idea was developed within a futures workshop on use cases for mobile communication. Websites like Wikischoll or Wikiversity (<http://www.wikischool.de/wiki/Hauptseite> for students, http://en.wikiversity.org/wiki/School_education_for_teachers) provide similar information but no advanced functionality or interactive learning environments.

The idea was motivated from the utopian ideation demanding universal knowledge access, self-directed education, freely available modular (open source) systems, and completes transparency within situated learning activities. The realization was described as a combination of modular online resources for students and teachers with real local facilities e.g.

in remote areas. Everyone interested to participate or contribute can access live and stored online classes and share educational materials in similar ways that Wikipedia provides free encyclopedic knowledge. But such wikischools would not only contain uploaded textbooks and interactive role-playing games, but also provide actionable knowledge, either for teachers to prepare courses for classroom or wildlife settings or for students interested in completing a given task (like building a house with limited resources). Furthermore, recommendations for systematic self-studies (e.g. curricula) may be delivered and remote-tests could be scheduled to get respective certificates. Thus, the Massachusetts Institute of Technology (MIT) publishes its academic course contents on the web (OpenCourseWare, OCW, <http://ocw.mit.edu/courses/>). Short lessons might be available for mobile learning, but the scenario aims at the ubiquity of knowledge and didactics.



Figure 8. Scenario for a WikiSchool (all illustrations by Gabriele Heinzl)

Similarly to distant learning universities wikischools may be of special interest to students who are not able to visit a school or university regularly (due to physical disabilities, to time constraints caused by another job, to a bad infrastructure etc.). Moreover, all teachers should feel attracted to sharing thoughts and exchanging materials for class, since rapidly changing and nationally predetermined learning goals require much tedious work in adapting materials.

Excellent resources not only including power point slides but instructions for exercises in class, references to multimedia resources, and questions to discuss as well are already provided by publishing companies (e.g. Houghton Mifflin, Bergmöser + Höller: www.zahlenbilder.de) and national institutions (e.g. Bundszentrale zur politischen Bildung). However, wikischool is supposed to integrate and provide free access to all contents allowing users to evaluate and elaborate on these materials. Experience-based feedback may enhance the utility of contents causing a considerable advantage over costly standard solutions. To illustrate this point, teachers planning practical exercises or highly controversial and emotional discussions in class have to be prepared for escalating conflicts. Some manuals may offer guidelines how to handle such difficult situations (e.g. Houghton Mifflin). However, for predicting outcomes systematic evaluation of experiences needs to be conducted. Thus, wiki school users may complete short surveys giving feedback about success and failure of recommended exercises. Subsequent statistical analyses will allow finding out “when and why escalations happen” enabling more useful and context-specific recommendations. Consequently, quality of materials is expected to increase with taking into account teachers’ and students’ experiences.

5 Conclusion: Contrasting scenarios with theoretical notions

The scenarios have been proposed and refined as results from futures workshop in order to transcend discontent with currently available and known educational technologies. The propositions have then been enriched with reference to psychological theory and research results. Looking back across all scenarios different notions of mobile learning and its contexts show up.

Within scenarios like the pattern collector portal devices allowed an **import of natural environments** and a detachment of learning activities from formal settings of education. Collecting data out in the field findings from natural environments were brought into the classroom, and – as in the case of the pattern collector prototype – data exchange enabled an integration of the formerly separated learning environments of the classroom, the home, and informal settings. Accordingly the unique ability of portable devices to collect data has been appreciated (e.g. Patten et al. 2006). Due to their communication features also new forms of collaborative learning and sharing of learning resources have been utilized. Together with the portability of educational technologies and location awareness features context gained importance for the design and experience of learning activities. Still, within most of these scenarios sensory and communicative features do not require “intelligent” information processing.

At the next stage such processing is indispensable for mobile educational technologies. On the one hand learner models are required in order to enable scaffolding. On the other hand technologies like visual search and visual or auditory pattern recognition are needed in order to augment aspects of the natural environment. Scenarios like mamama, natural ideograms, and the augmented tourguide fit into that category. The later systems intend to support **situated learning** and growing understand enabling increased participation. In order to reveal educationally relevant context-dependant information both need to identify aspects of the environment in order to provide for valuable content like background information on sites or translation of written words or signs for means of language acquisition. Even for limited domains like Chinese characters substantial effort is needed to enable systems to decipher sensory (here visual) input in correct ways and to provide the matching content.

The notion of learner-generated context (Luckin 2008) provides a hint how to develop such systems by means of user participation. Focusing on educational resources Luckin (2008) defines learning contexts as ecologies of resources. Ecology of resources is “a set of inter-related resource elements, including people and objects, the interactions between which provide a particular context“.

On a third stage we envision a world enriched with **ubiquitous learning** opportunities. Not only pieces of content and single resources may be embedded unobtrusively into everyday settings. Whole lessons, courses, curricula or even development programs may be seamlessly integrated into real world settings. At this stage context is neither something external to be represented internally by some computational model, nor is it the real world context into which a self-directed learner strives to expend his or her participation (Breuer & Matsumoto 2008), but context becomes the learning environment itself as it emerges from the joint engagement of the community of learners. The Wiki-School scenario is an example and metaphor for such an open platform.

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**Confronting Difference in Japan through Curriculum Reform
The Case of the Integrated Curriculum**

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Confronting Difference in Japan through Curriculum Reform The Case of the Integrated Curriculum

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Abstract

In the midst of significant social and global change, Japan has embarked upon its most significant education reform since the immediate post-WWII period. In 2002, the Ministry of Education (MEXT) enacted the Integrated Curriculum (*sogoteki na gakushu*), a decentralization effort intended to empower teachers and schools with the autonomy to create and implement curriculum to take students beyond the walls of the schools and the boundaries of their textbooks.

This paper is based on a multi-site case study conducted in Japan over a period of 17 months between 2003 and 2005, at which time I analyzed government and school documents; interviewed teachers, administrators, scholars, and leaders of NPO/NGOs; and observed integrated curriculum activities in 60 public schools. Based on this data, I uncovered three approaches to the integrated curriculum that confront students with Japan's changing social and cultural context, and geo-political role: 1) the human rights education approach; 2) the cultural co-existence approach; and 3) the international understanding education approach.

Introduction

Japanese society is confronting unprecedented educational challenges¹ with significant implications for the nation's cultural traditions and global role. Many Japanese students are lashing out violently against the school system in ways heretofore un-imagined, or refusing to attend altogether.² Corporate leaders complain that new recruits are *shiji machi ningen*,³ lack incentive and motivation, and are unable to state their opinions or form judgments. Under pressures of globalization, Japanese teachers struggle to maintain alliances among family, region, and nation, while preparing students to work and live in a multi-cultural world.⁴

The population continues to age,⁵ stressing the employment and social security system.⁶ An influx of foreign workers⁷ is forcing Japan to re-consider its self-declared cultural homogeneity, and in turn, the way that it is preparing its youth for global citizenship. The presence of foreign children⁸ in Japanese public schools creates tension with traditional modes of teaching and learning that have well served the Japanese population but seem under equipped to handle the large influx of non-Japanese children.

In addition, the international community (particularly the United States) is pressuring Japan to share a greater burden in multi-national peace-keeping operations to help 'fight the war on terror.'⁹ At the same time, China and Korea are weary of Japan's perceived attempt to re-militarize as evidenced by anti-Japanese protests in China during the spring

of 2005. Japan's Overseas Development Aid (ODA) is second only to the United States, a position that garners significant international clout.¹⁰ However, Japan's attempts to capitalize on its international position, such as its bid for a spot as a permanent member of the United Nations Security Council, have been rejected by most nations.

In times of public uncertainty, the Japanese public and politicians alike have historically called upon the education system to counter disrupting trends. According to Christopher Hood, "It may be the case that Japan used education more than many other countries to help form suitable characteristics in its people."¹¹ This overt attempt to socialize children through schooling is embedded in the curriculum in moral education lessons, and in the role of *shudan seikatsu* or group life, a concept that guides early childhood education in Japan.¹² Hence, the expectation that children will learn to function benevolently in a complex modern society through lessons imparted at school means that teachers are held responsible for solving local problems such as youth violence, and global problems such as rescuing the national economy from its stagnation. For all of these reasons, Japan provides an optimal case to examine the tensions between national and global educational aims.

In the following paragraphs, I will discuss briefly the parameters of this curriculum reform and the changing social, cultural, and political context in which it is taking place. In addition, I will provide a few cases studies to illustrate why I have concluded that, at least in many of the schools that I observed, Japanese teachers have utilized the autonomy provided via this curriculum reform, to engage their students in considerations of these social, cultural, and political change.

The Policy

While international scholars have praised the Japanese education system for its egalitarianism¹³, and high achievement levels as measured on international assessments¹⁴, Japanese scholars, the public, and policy makers have not been so kind. In the 1970's, the Central Commission for Education (CCE) complained of the oppressive nature of the examination system.¹⁵ In the mid-1980s, then Prime Minister Yasuhiro Nakasone appointed a National Commission on Education Reform (NCER). The preamble of the NCER's first report, "we find the nation's system of education in a grave state of desolation, and this has led to the call for education reform, which is the task of this Council."¹⁶ This quotation clearly expresses dissatisfaction with the education system.

In 1996, the CCE again reiterated many of the previous concerns and recommended drastic change including a 30% reduction in the content of the core curriculum, and the implementation of the integrated curriculum, the focus of this study. The CCE also defined two concepts that are the current buzz words in Japanese education reform: *yutori* education (education with room to grow) and *ikiru chikara* (zest for living).

The term *yutori* education (translated roughly into English as education with room to grow) has circulated within the Japanese education world since the 1970s. In the late 1980's the term gained greater prominence as criticisms of the examination system grew and politicians and educators searched for ways to make Japanese education more

responsive to the individual needs of students. The 1996 CCE Report provides the most extensive definition of *yutori* education: “to have psychological and physical space; to reflect and think about things; to be able to participate in and experience a variety of activities.”¹⁷

The definition of *ikiru chikara* (zest for living) implies the qualities and abilities to solve problems for oneself even in situations encountered for the first time; the ability to think independently; a spirit moved by nature and beautiful things; a mind for justice and fairness; respect for human rights; the ability to sympathize with and think from another person’s point of view; learning for self-realization along with demands to meet the needs of a changing society; stress on the irreplaceable nature of individuality, personal and creative growth of each individual child; a spirit of self-reliance; individual responsibility; co-existence with others and; tolerance towards differences.¹⁸

In April 2002, the Japanese Ministry of Education (MEXT) implemented the new Course of Study. With this document, MEXT implemented many of the recommendations of the 1996 CCE White Paper such as a five-day school week, a 30% reduction in the content of the core subjects, and the integrated curriculum.

The Integrated Curriculum

MEXT defines the integrated curriculum as environmental and social experience based on observation, experimentation, research, problem-solving, and real-life learning. The purposes of the integrated curriculum are stated as: 1) foster student’s ability to find a theme, think, judge, and solve a problem on their own; and 2) nurture in students the ability to discover their own way of learning and thinking, and an attitude to discover topics with creativity and individualism.¹⁹ To accommodate this reform initiative, the Japanese Ministry of Education has provided schools 3 hours per week for the local, school-site cultivation of the integrated curriculum.²⁰ With the goal of cultivating *ikiru chikara* (a zest for living) among students, individual schools generate integrated curriculum plans together with instructional policies and pedagogic practices.

MEXT issued broad guidelines to schools, recommending that they might implement activities that focus on one of five areas: 1) environmentalism, 2) volunteerism; 3) information technology; 4) health and welfare; and 5) international understanding education. The Course of Study suggests that students might experience the manufacturing process of goods, interact with people of different ages such as the elderly, and study English as well as interact with foreign cultures as part of international understanding education.²¹

MEXT encouraged schools to seek the cooperation of social education-related organizations to expand and improve experiential activities including volunteer activities and other social service learning activities. In addition, MEXT urged schools to make the integrated study periods related to classroom knowledge: in other words, activities should complement the content of textbooks.

Given these broad parameters, each and every school in Japan has created and implemented a unique integrated curriculum. The content and methods of instruction that I observed even in the context of my limited case study are too numerous to name and beyond the focus of this paper. Soon after the reform was announced in December 1998 (to be implemented at the beginning of the 2002-2003 school year: April 2002), textbook publishers worked overtime to fill the void created by the fact that MEXT had not provided any textbooks nor training to teachers concerning the integrated curriculum. Motani²² points out that progressive educators/scholars took advantage of the integrated curriculum initiative to forward their own particular agendas. For example, Nagao of Osaka University suggested a human rights education-based integrated curriculum;²³ Sato of Tokyo Gakugei University promoted international understanding education;²⁴ while Tanaka of the Development Education Association and Research Centre encouraged schools to incorporate a development education (*kaihatsu kyouiku*) focus to the integrated curriculum.²⁵ A MEXT survey administered in 2004-2005 indicated that most elementary schools focus on the following curriculum: international understanding education (79.2%); environmental education (75.3%); health and welfare (71.6%); and information technology (70.6%). While it is not possible to discern from this data the nature of the learning events taking place in these broad categories, it is safe to say that some patterns have emerged over time in the way the integrated curriculum is implemented.

Discovering Dimensions of Difference: Three Approaches to the Integrated Curriculum

As indicated in the introduction, this study focuses on three approaches to the integrated curriculum: 1) human rights; 2) cultural co-existence; and 3) international understanding. In the following paragraphs, I will provide one example of each of these approaches. However, it is important to note that these approaches have historical precedence in the context of Japanese education policy and practice.

Human rights education in Japan emerged in the 1950s and 1960s, the result of the struggles of educators in the greater Kansai area to help minority children achieve in school, and rid Japanese society of bias and prejudice against the *Burakumin*²⁶ and permanent resident Koreans in Japan (*Zainichi Kankoku/Chosen Jin*).²⁷ The National Dowa Educators Association (*Zenkoku Dowa Kyouiku Kenkyu Kyogi Kai: Zendokyo*) formed in the 1950s and remains active in the pursuit of equality of opportunity for all children who attend Japanese schools. The City of Osaka is now at the forefront of human rights advocacy and education in the Asia-Pacific Region.

Interest in education for cultural co-existence (*tabunka kyousei*) among Japanese scholars and educators evolved in reaction to the increasing numbers of foreign children attending Japanese schools. The first 'systemic' attempt to consider the implications of education for cultural co-existence (what we would call multicultural education) in Japan came about in 1981 with the formation of The Intercultural Education Society of Japan (IESJ) (*Ibunkakan Kyouiku Gakkai*).²⁸

International Understanding Education emerged after WWII as Japan sought to re-establish its reputation in the international community of nations. The Japanese Fundamental Law of Education (1947) stressed the importance of international exchange and cooperation. The reports of the Central Council for Education (CCE) throughout the post-war period have focused on the importance of international understanding, cooperation, and exchange.²⁹

In the following paragraphs, I offer one example of each approach I observed during my site visits in hopes that it provides a glimpse of the types of learning taking place in Japan's classrooms in the context of the integrated curriculum.

1) The Human Rights Approach: The *Ijime* Issue: Bullying in Japanese Society: A Human Rights Violation

The *ijime* or bullying problem in Japanese schools has been an issue of concern for Japanese educators since the 1980s. According to the Ministry of Education, reported cases of bullying peaked in 1995 with 60,000 reported cases, and have since declined to 23,000 cases in 2003.³⁰

In 1999, a Non-Profit Organization, the Gentle Heart Project³¹ formed and dedicated itself to the elimination of bullying and other forms of violence from Japanese schools and society. The Gentle Heart Project describes bullying as an act of despicable violence. As a result, many children with kind hearts who would never say a word to harm another person, take their own lives. The Gentle Heart Project's public information pamphlet depicts *ijime* as a tragedy for the entire society that sometimes results in the terrible loss of life. The Gentle Heart Project defines *ijime* as a small war.

Teachers throughout Japan have requested the services of the Gentle Heart Project. Ms. Komori, the organization's CEO, travels extensively to talk with students of all ages about the harmful effects of bullying, and provides students with strategies to avoid being the aggressors, or victims of, bullying.

In February 2005, I observed Ms. Komori engage a group of fifth grade students at an Elementary School in a discussion on bullying. Ms. Komori talked extensively about her daughter, painting a portrait of her as a happy child with many friends. She described in detail the last few days of Kasumi's life, talking about the anguish she felt over losing her daughter. She also displayed pictures and introduced other Japanese students who had taken their own lives, the victims of bullying. She asked students to recall and write down instances in which they had suffered from the insensitive comments of others, or inadvertently said something that hurts another's feelings. She used students' comments to illustrate that all people fall victim to the hurtful comments of others from time and time, and furthermore, that most of us say things to others that are hurtful, often without realizing the harmful nature of our comments. In reaction papers, students commented that this exercise made them realize that bullying is not only physical in nature, in fact, it is more often verbal.³² Ms. Komori closed the lesson by telling students that she would

be happy today if they remember two things: 1) it is never OK to hurt someone's feelings: and 2) that it is OK to be different.

The implementation of the *ijime* issue in the context of the human rights approach to the integrated curriculum confirms that teachers view the problem as a human rights violation. The homeroom teacher of this fifth grade class felt that student-to-student relationships form the basis of human rights, the first step to recognition and appreciation of human difference in all its forms. His point strengthens the case for the implementation of the *ijime* problem within the context of a human rights education-based integrated curriculum, a starting point in the journey towards the recognition of, and respect for, the human rights of all.

2) The Cultural Co-existence Approach: Brazilians in Japan: A Case of Repatriation

Between 1908 and 1940, approximately 190,000 Japanese immigrated to Brazil—another 60,000 departed in the immediate post-war period.³³ Many of the immigrants were farmers suffering from poverty and declining agricultural prices, others were second or third sons who would not inherit the family land under the traditional Japanese *ie* system.³⁴ In addition, the Japanese government encouraged migration to relieve overpopulation in the rural areas.³⁵

The factors, both political and personal, that sent hundreds of thousands of Japanese to the South American continent until the early 1960s, has brought some of them back to Japan in search of work and their ethnic heritage. The economic difficulties in Brazil in the 1980s coupled with Japan's booming economy and changes to the Immigration Law opened the doors to Japan for these blood relatives, and many took advantage of this opportunity.

I observed the following lesson at junior high school. 2004 was the first year of the cultural co-existence through human rights integrated curriculum at this junior high school. One focus of this curriculum is the study of the foreign population of the city. Teachers used the following inquiry to help guide students' exploration into this issue: Why do foreigners live here? How and why did they come? and, Why do they attend this school?

Based on these simple questions, teachers decided to engage their students in the study of Japanese overseas migration as one component of the integrated curriculum. Students began their inquiry by first learning about the history of Japanese overseas migration from the experience of a teacher who was born in Brazil. To follow up this activity, students visited the Japanese Overseas Migration Museum in Yokohama³⁶ to continue their study of Yokohama's historical international connections.

When I visited this junior high school, a Brazilian-born teacher discussed her life history with students. She began the presentation with a picture of herself as an elementary school student in Brazil and asked the students to think about why she was there. She

talked briefly about the history of Japanese migration, why many Japanese went to North America in the 1800s, but that by the 1900s, most migrated to South America, especially Brazil.

She relayed the story of her grandfather, the oldest son in a large family whose father had died. At the time, Japanese were encouraged to migrate. Advertisements encouraging immigration to South America were common and promised the possibility of life in a “dream-like country.” At fourteen, her grandfather left the port of Yokohama for the sea journey to South America. He arrived in Brazil in 1936. The Brazilian government provided all immigrants a plot of land when they arrived, but the land was jungle and the process of clearing it for farming was difficult, taking several years.

This teacher explained her grandfather’s struggles and successes as a Japanese immigrant in Brazil. She told students about going to school in Brazil, and her experiences after she returned to Japan in 1990.

She closed her talk by reminding students that over 140,000 Japanese Brazilians have returned to Japan. She complimented them on their behavior with foreign students, telling them that although there were a significant number of students in the school from other countries, she does not hear of any discrimination at the school.

Students shared their comments on the teacher’s presentation. One student wrote of her surprise when she heard that this teacher had experienced such hardship when she returned to Japan at the age of ten. “During club activities, she always tells me, ‘You can do it if you try.’ I now understand the deep meaning of this comment. My grandfather was an immigrant and I discovered many similarities with my family. My mother was born in Okinawa. I now have developed a burning interest to learn more about immigration as a result of hearing about her experiences.”³⁷

3) The International Understanding Approach: Anti-Japan Demonstrations in China: International Relations through Discussion and Debate

A sixth grade class in Tokyo’s takes a unique approach to the integrated curriculum. For about forty hours of the integrated curriculum time, students investigate an issue of their choice determined in consultation with the homeroom teacher. Each class period begins with a short 5-10 minute presentation in which a student explains the issue and presents questions for discussion. Following this, the floor is open to debate. Students direct the discussion and the teacher intervenes on occasion. Research subjects are diverse and vary from violent crime to environmental issues. Many of the themes are international in nature.

On the day that I observed, a female student addressed the issue of Japan-China relations. In the spring of 2005, there had been a series of anti-Japan protests in China, some that resulted in vandalism to Japanese-owned businesses and the Japan Embassy in Beijing.

To begin the class, a student presented 7 pages full of hand-written text on large sheets of paper that were attached to the blackboard with magnets. She read through the text which described the issues and her thoughts and opinions. Her research theme was entitled, “Anti-Japanese Demonstrations: Japan-China Relations.” She mapped out the issues, stating that China’s anger with Japan was due to Prime Minister Koizumi’s visit to *Yasukuni Shrine* (dedicated to Japan’s war dead), the history textbook issue, and Japan’s bid to become a permanent member of the United Nations. She felt that the anti-Japan actions in Chinese were an over reaction, and that Prime Minister Koizumi’s visit to *Yasukuni Shrine* was a private matter, the right of every citizen in a free country. She closed by stating that the research project had taught her the importance of the heart, that each person’s heart is embedded in the society that he/she lives.

An animated debate followed. Students expressed their opinions and challenged the arguments of others. The discussion centered on the role of the *Yasukuni Shrine* and Japan’s war history in the context of the current tensions with China. Some students felt that Prime Minister Koizumi’s visit to *Yasukuni* as a private citizen was justified, while others felt that it was ill-conceived and reckless. Many students felt that their textbooks should be more forthcoming with Japan’s past war record, but also felt that the chances of another major military battle between the two nations were so remote as to render China’s reaction mute. The teacher prompted students with questions throughout the debate, at one point asking students why the Chinese were not angry with the English and the Germans, both nations that had colonies in China. Students also wondered why Japan was able to maintain positive international relations with the United States, a country that also suffered casualties at the hands of the Japanese military, while international relations with China continue to be volatile. While one group of students understood China’s anger and thought that Japan needed to apologize to China for past atrocities, another group was strongly opposed to further apologies. Students were unanimous in the necessity of dialogue between the two nations to reconcile past differences, but were skeptical about reaching a solution to the political standoff.

Conclusion

As the title implies, the purpose of this paper was to illustrate how schools have utilized the autonomy provided via the integrated curriculum engage students in the process of confronting difference. The examples provided above evidence that this is taking place, at least in a number of schools in Japan. However, it is not possible to determine whether these models (human rights, cross-cultural co-existence, and international understanding) are dominant throughout the country. While data from MEXT mentioned indicate that nearly 80% of schools implement international understanding education in the context of the integrated curriculum, in many cases, this may constitute English language instruction rather than considerations of the growing diversity within Japan.

As an epilogue, it is important to point out that while I was conducting this study, public sentiment has turned against *yutori* education. As a result, the Ministry of Education has begun to retreat from the principles of *yutori*, cutting hours devoted to the integrated curriculum and increasing core subjects such as math, science and Japanese language. In

some ways, this is to be expected in light of recent developments that show Japanese students falling behind their counterparts in international math and science assessments. However, it is my belief that the teaching and learning that transpired during this brief experiment in progressive education will carry over into content areas and diversify pedagogical approaches. The *yutori* education movement was not the beginning nor is it the end of the progressive education movement in Japan.

¹ For details see: The Ministry of Education, Culture, Sports, Science and Technology (MEXT).(2001). *Education Reform in the 21st Century*. Tokyo: MEXT.

² Non-attendance (*futoukou*), acts of violence in school (*konai bouryoku*), classroom breakdown (*gakkyu houkai*), and the *ijime* (bullying) are well-known and have been discussed and analyzed for decades in educational scholarship and the popular press. For more information see MEXT (2001).

³ Literally, a person who waits for instruction.

⁴ Marginson, Simon (1999). After Globalization, Emerging Politics of Education. *Journal of Education Policy* 14(1), 19-35.

⁵ In 2003, the percentage of Japanese citizens over the age of 60 approached 20% while the number of children under 14 dipped to about 16%. Japan's current birth rate stands at 1.29. Retrieved October 16, 2005 from the Japan Information Network Web site: <http://www.jnn.com>

⁶ According to some predictions, the labor shortage will reach ten million workers in the next two decades. Moreover, the index of ageing reveals that currently, for every citizen aged 65 or older, there are 4.8 persons in the labor force. By 2050, this number will decrease to 1.7, placing additional economic burden on the working generation to pay for the social security of the nations' elderly. For further information, see: Jung, Yeong Hae. (2004) Can Japan Become A Society Attractive to Immigrants? *International Journal of Japanese Sociology*, 13, 53-68.

⁷ In 2002, the Japanese Department of Justice reported that the population of registered foreigners in Japan was 1,850,000, about 1.45% of the general population. This is a 44.5% increase over the past ten years. This increase is due in large part to changes in the Immigration and Refugee Act instituted in 1990 that provided preferential status to foreign nationals of Japanese descent to enter Japan to live and work. Brazilians of Japanese descent took advantage of this opportunity and now constitute the third largest minority in Japan at 275,000. Retrieved August 8, 2005, from The Japanese Ministry of Justice Web site: <http://www.moj.go.jp/ENGLISH/preface.html>.

⁸ According to the Ministry of Foreign Affairs, as of 1997, there were 76,260 foreign children attending Japanese public schools. Retrieved October 25, 2005 from The Japanese Ministry of Foreign Affairs Web site: http://www.mofa.go.jp/policy/human/econo_rep2/article13.html. In 2000, MEXT reported that 19,250 students required supplemental Japanese language instruction. MEXT Ministry of Education (2002) *Nihongo Shidou ga Hitsuyou na Gaikokujin Jidou Seito no Ukeire Jugyuu ni Kansuru Chousa* [Research on Japanese Language Classes for Foreign Students]. Tokyo, MEXT. Retrieved July 25, 2005 from The Japanese Ministry of Education Web site: http://www.mext.go.jp/b_menu/houdou/14/02/020214.htm.

⁹ The Japanese Self-defense Forces served in Iraq in a non-combat role, while the Japanese Diet debates whether to repeal Article 9 of the constitution, the non-aggression act.

¹⁰ According to the Organization for Economic Co-operation and Development (OECD), Japan's Overseas Development Aid (ODA for 2004 was 8,859 million US dollars, second only to that of the United States in total dollars. Retrieved October 25, 2005, from OECD's Web site: <http://www.oecd.org>.

¹¹ Hood, Christopher. (2001) *Japanese Education Reform: Nakasone's Legacy* London: Sheffield Centre for Japan Studies: Routledge Series.

¹² Lewis, Catherine (1995). *Educating Hearts and Minds: Reflections on Japanese Pre-school and Elementary Education*. Cambridge, MA: Cambridge University Press.

¹³ Cummings, William K. (1980) *Education and Equality in Japan*. Princeton, NJ: Princeton University Press.

¹⁴ Stigler, James W. & Hiebert, James. (1999) *The Teaching Gap: Best Ideas from the World's Teachers for Improving Education in the Classroom*. New York: Free Press.

¹⁵ Central Council for Education (1972) *Reports on Education Reform*. Tokyo: Government of Japan: Ministry of Education, 1972.

- ¹⁶ National Council for Education Reform (1986) *Second Report on Educational Reform*. Tokyo: Prime Minister's Office.
- ¹⁷ Central Council for Education (1996) *The Model for Japanese Education in the Perspective of the 21st Century: First Report*. Tokyo: MEXT, 1996.
- ¹⁸ Ibid.
- ¹⁹ MEXT (2001).
- ²⁰ 110 hours per year at the 6th grade level
- ²¹ MEXT, *Gakushuu Shodou Youryou: Shou Gakkou [The Course of Study: Elementary School]*. Tokyo: Ministry of Finance Publishing Office, 1998.
- ²² Motani, Yoko (2005) Hopes and Challenges for Progressive Educators in Japan: Assessment of the 'Progressive Turn' in the 2002 Education Reform. *Comparative Education*, 41(3), 309-27.
- ²³ Nagao, Akio (1999). *Sogoteki Gakushu toshiteno Jinken Kyouiku: Hajimete Miyou, Jinken Sogo Gakushu [Human Rights Education via the Integrated Curriculum: Lets Start Human Rights Integrated Curriculum]*. Tokyo: Meiji Tosho.
- ²⁴ Satou, Gunei & Hayashi, Eiji (1998). *Kokusai Rikai Kyouiku no Jugyou Tsukuri: Sogoteki na Gakushuu wo Mezashite [Creating International Understanding Lessons via the Sogoteki Curriculum]*. Tokyo: Kyouiku Shuppan.
- ²⁵ Tanaka, H. (1998) Sougou Gakushu to Kaihatsu Kyouiku [Integrated Studies and Development Education]. *Kaihatsu Kyouiku* 38(8), 3-11.
- ²⁶ The *Burakumin* are a status minority in Japan created through political decree in the Edo Period (around 1700) to work in lower status occupations. For more information on the *Buraku* issue (in English) see: Buraku Liberation Research Institute (1995). *Dowa Education: Educational Challenge Toward a Discrimination-free Japan*. Osaka: Buraku Liberation Research Institute, and Sugiharara, Juichi (2002). *Today's Buraku Problem: Feudalistic Discrimination in Japan*. Kyoto: The Institute of Buraku Problem.
- ²⁷ Koreans constitute the largest non-Japanese minority in Japan. For more information, see Ryang, Sonia (2000) *Koreans in Japan: Critical Voices from the Margins*. New York: Routledge, and Ryang, Sonia (1997). *North Koreans in Japan: Language, Ideology and Identity*. Boulder, CO: Westfield Press.
- ²⁸ The IESJ began its work with sixty-four members in 1981—as of 1997, there were 911 members. IESJ's journal, *Intercultural/Transcultural Education* began publication in 1987 and continues to print two issues annually. See Ebuchi Kazuhiro (1997). *Ibunkakan Kyouiku to Wa [What is Multicultural Education?]*. In K. Ebuchi (Ed.) *Ibunkakan Kyouiku Kenkyuu Nyumon [Introduction to Research in Multicultural Education]*. Tokyo: Tamagawa Daigaku Shuppan Bu.
- ²⁹ Sato, Gunei (1999). *Nihon no Kyouiku to Kokusaika [Japanese Education and Internationalization]*. In G. Sato (Ed.) *Kokusaika to Kyouiku [Internationalization and Education]*. Tokyo: Housou Daigaku Kyouiku Shinko Kai.
- ³⁰ MEXT (2005) *Japan Education at a Glance (2005)*. Retrieved January 4, 2006, from MEXT Web site: <http://www.mext.go.jp/english/statist/05101901.htm>
- ³¹ <http://www.gentle-h.net>
- ³² Anonymous student's reaction papers obtained from homeroom teacher.
- ³³ Prior to 1925, far more Japanese immigrants headed to North America and Hawaii. However, the U.S. Immigration Act of 1924 halted Japanese immigration to the continental United States and diverted greater numbers to South America—most to Brazil. For more information, see: Joshua Hotaka Roth, *Brokered Homeland: Japanese Brazilian Migrants to Japan* (Ithaca and London: Cornell University Press, 2002).
- ³⁴ Traditionally the eldest son inherits family land and assets.
- ³⁵ Roth (2002): 22.
- ³⁶ The museum pamphlet describes the purpose of the museum in the following manner: "Japanese migration has a 100-year history. Recently, second-generation Japanese are returning to Japan as workers, students, etc. In the past 10 years, 300,000 second-generation Japanese from South America have returned to Japan with their families to live and work. In this context, we have established this museum to help the public understand this history." JICA Yokohama. "The Japanese Overseas Migration Museum" (2003) Information Pamphlet.
- ³⁷ Ushioda Junior High School (2005).

LLP/Erasmus Teaching Staff and Student Exchange Activities at the Music Teacher Training Institutions of Turkey and Experience and Opinions of Teaching Staff Having Attended Teaching Staff Mobility Activities Regarding the Process

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LLP/Erasmus Teaching Staff and Student Exchange Activities at the Music Teacher Training Institutions of Turkey and Experience and Opinions of Teaching Staff Having Attended Teaching Staff Mobility Activities Regarding the Process

Abstract

Music has an important role in developing and diversifying various intercultural relations. With music it is possible to share, protect and transfer cultural elements. Moreover, music is one of the leading cultural elements helping to symbolize similarities and differences between individuals and societies (Ucan, 1994). With these characteristics, music aims to increase the quality of higher education in Europe and to strengthen its European dimension, and it is also considered to be one of the most important elements which is likely to make it possible for the project to reach its aim by encouraging transnational cooperation between universities within the scope of “the LLP/Erasmus Student and Teaching Staff Members’ Exchange Project” making academic and cultural transfer possible.

In the study, the activities carried out by the Turkish universities training music teachers in cooperation with European universities within the scope of LLP/Erasmus project will be examined and the experience and opinions of the teaching staff members having attended the teaching staff mobility will be evaluated. Within the scope of the LLP/Erasmus project, discussions will be held with the staff members teaching at European music institutions that are possible to reach about the unifying effect of music today in which globalization have become dominant and where borders have disappeared. With the results obtained, it is believed that academic relations between the Turkish and European music education institutions will grow stronger, and thanks to music, intercultural interaction will gain acceleration.

Keywords: Music teacher training institutions of Turkey, LLP/Erasmus, Student and teaching staff mobility, International Relations,

1 INTRODUCTION

LLP/Erasmus Student and Teaching Staff Exchange Program is one of the Education and Youth programs of the European Union. It has been in practice since 1987 among the member states and candidate countries of the European Union and the European Free Trade Association (EFTA) countries (such as Norway, Island and Lichtenstein). Ensuring the highest mobility rates since the implementation of the Project makes Erasmus the most attractive program of the EU Education and Youth Programs. It was entitled Erasmus (1469-1536), one of the most important Dutch representatives of Renaissance Humanism as he had been in different European countries as a student and an academician as well (<http://uluslararasi.akdeniz.edu.tr/katagoriler.i143.erasmus>). The aim of “LLP/Erasmus Student and Teaching Staff Exchange Project” is to reinforce the European dimension by improving the quality in higher education in Europe, to encourage the transnational cooperation between universities and to ensure the academic and cultural transmission. Turkey took its place among the countries which could benefit from the European Union Education and Youth Programs on April 1, 2004. Today, Turkey became one of the countries which increased the number of students and teaching staff benefitting from the program at most. Almost all the faculties and departments of the universities in the country have Erasmus Bilateral Agreements with European Universities. Among these departments, music institutions are taking the lead, which are thought

to make important contributions in the achievement of Erasmus project. This is because music plays an important role in sharing, protecting and transferring cultural elements to the next generations and develops and diversifies several intercultural relationships. Moreover, it is one of the primary elements used in symbolizing the identical and no identical factors among individuals and societies (Ucan, 1994).

While music education which facilitates the cultural share, one of the objectives of Erasmus project, is given in conservatories where the artistic education is given in Turkey, and in the Faculties of Fine Arts of universities where musicology education is given, music teachers are raised in the Music Education Departments of Education Faculty in universities. In Turkey 23 institutions in total raise music teachers during 4-year undergraduate education in different cities. Graduated music teachers take courses with a load of 165 credits including teaching profession knowledge and theoretical and practical courses about both European and Turkish Music. Prospective music teachers receive education in the music institutions in Europe after getting the required points in the foreign language examination specifically prepared for Erasmus. Students stay there 1 or 2 semesters during the 2nd or 3rd or sometimes in the 4th year of their education in some institutions, if their institutions have Erasmus bilateral agreements with European Universities. Teaching staff of 23 institutions which graduate music teachers also serve Erasmus program as well as the students with introductory presentations about their music and musicians, concerts and master classes as in other music institutions. Both the students and the teaching staff contribute to internationalization via music.

2 METHODOLOGY

The aim of the present study is to determine the opinions of incoming and outgoing academicians in Turkey and European music institutions within the scope of Erasmus. The experiences and opinions of Turkish and European teaching staff of music institutions that taught in the frame of LLP/Erasmus between 2006 and 2010 randomly selected (approximately half of the total Turkish teaching staff of Music Education Departments that taught in European music institutions and European teaching staff that taught in Turkish Music Education Departments) are evaluated in general terms using the questionnaire method. There was 21 teaching staff who participated in the questionnaire, 14 of whom were teaching staff of Turkish Universities, 7 of whom were from different European Countries. The selected teaching staffs have visited the music institutions at Lithuania (Faculty of Arts of Vilnius College of Higher Education), Hungary (Szeged University), Turkey (Uludag University, Onsekiz Mart University and Abant Izzet Baysal University) Portugal (Instituto Politecnico de Castelo Branco), Italy (Conservatory of Music "Lorenzo Perosi) and Austria (University of Wien, Kirchliche Pädagogische Hochschule). During their 4-5 days stay in the visited institutions, teaching staff had activities such as giving concerts, presentations or doing master classes there.

3. RESULTS

Table 1. European Music Institutions with which the Music Education Departments of Universities have Bilateral LLP/Erasmus Agreements, Their Quotas, Annual Numbers of the Students and Instructors Going and Coming

Turkish Universities	European Music Schools That Have Erasmus Agreements With Turkish Music Teacher Training Institutions	Years	Outgoing Student	Incoming Students	Outgoing Teaching Staff	Incoming Teacher Staff
Ondokuz Mayıs University (Samsun)	Hasn't got any Erasmus Agreement. The other agreements of the Education Faculty are used. (University of Wien)	08- 09			1	
Abant İzzet Baysal University (Bolu)	Conservatorio Statale di Musica di Latina (Italy) Quotas*= Only for Teaching Staff	Not Activated Yet				
	Vilnius College of Higher Education (Lithuania) Quotas*=2	07- 08		1	3	
	Klaipeda University (Lithuania) Quotas*=2	08- 09	2			
	University of Szeged Hungary Quotas*=2	06- 07			2	
		07- 08	2		3	
		08- 09	1		1	
		09 -10	1		2	
Akademia Muzyczna im Stanislawa Moniuszkiw Gdansk (Poland) Quotas*=2	Not Activated Yet					
Ataturk University (Erzurum)	Academy of Performing Arts in Praha (HAMU) (Czech Republic) Quotas*= Not indicated	Not Activated Yet				
İnönü University (Malatya)	University of Music and Performing Arts Mannheim (Germany) Quotas*=2	07-08	1			
	Conservatorio di Musica Monopoli (Italy) Quotas*=2	Not activated yet				
	Vorarlberger Landeskonservatorium (Austria) Quotas*=2	Not activated yet				
Nigde Universtiy (Niğde)	Universitatea Din Oradea (Romania) Quotas*=2	08-09	2		2	
	Klaipeda University (Lithuania) Quotas*=2	08-09	1			
		09-10	2			
Cumhuriyet University (Sivas)	Tartu Ulikool (Estonia) Quatas*=1	08-09			1	
		09-10			1	
	Krakov Music Academia (Poland) Quatas*=1	06-07	1		1	
	Instituto Politechnico de Castelo Branco (Portugal) Quatas*=1	07-08	2			
		08-09	2			
		09-10	2		1	2

Turkish Universities	European Music Schools That Have Erasmus Agreements With Turkish Music Teacher Training Institutions	Years	Outgoing Student	Incoming Students	Outgoing Teaching Staff	Incoming Teacher Staff
Canakkale Onsekiz Mart University (Canakkale)	Hildesheim University (Germany) Quotas*=2	08-09	1			1
	New Bulgarian University (Bulgaria) Quotas*=2	Not Activated Yet				
	University Of Ostrava (Czech Republic) Quotas*=2	Not Activated Yet				
	Copenhagen University (Denmark) Quotas*=2	Not Activated Yet				
Karadeniz Technical University (Trabzon)	Universitatea de Vest Timisora (Romania) Quotas*=2	08-09		1		
	Esterhazy Karoly Foiskola (Hungary) Quotas*=3	06-07	3			
		07-08	3	2		
		08-09	2	3		
	University of Rzeszow (Poland) Quotas*=3	Not Activated Yet				
Zemaitijos Kolegija (Lithuania) Quotas*=2	Not Activated Yet					
Adnan Menderes University (Aydin)	Marijampole College (Lithuania) Quotas*=1	07-08			1	
		08-09				2
		09-10				2
	Universitatea Spiru Haret (Romania) Quotas*=1	Not Activated Yet				
	University of Oradea (Romania) Quotas*=2	Not Activated Yet				
Mehmet Akif Ersoy University (Burdur)	Ostarava University (Czech Republic) Quotas*= Not indicated	08-09			3	2
	Malacitana University (Spain) Quotas*= Not indicated	Not Activated Yet				
Pamukkale University (Denizli)	Maribor University (Slovenia) Quotas*=2	The Erasmus Bilateral Agreement is Waiting to be signed				
Selcuk University (Konya)	Porto University (Portugal) Quotas*=2	06-07	3			
		08-09	2			
		09-10	1			
Gaziosmanpaşa University (Tokat)	West University of Timisoara (Romania) Quotas*= Not indicated	08-09	3			
		09-10	1			
Trakya University (Edirne)	Real Conservatorio Superior De Musica De Madrid (Spain) Quotas*=15	Not Activated Yet				

Turkish Universities	European Music Schools That Have Erasmus Agreements With Turkish Music Teacher Training Institutions	Years	Outgoing Student	Incoming Students	Outgoing Teaching Staff	Incoming Teacher Staff
Uludağ University (Bursa)	Szegeđ University (Hungary) Quotas*=incoming 2 ,Outgoing 8	06-07	2			
		07-08	3		2	
		08-09	1			1
	Conservatory of Music “Lorenzo Perosi” (Italy) Quotas*=5	08-09	1			3
		09-10	3		3	
	Hildesheim University (Germany) Quotas*=3	08-09				1
		09-10	2			
	Friedrich-Alexander-Universitat (Germany)Quotas*=1	Not Activated Yet				
Conservatory of Music “F. Torrefranca” Vibo Valentia (Italy) Quotas*=2	Not Activated Yet					
Marmara University (Istanbul)	Technical University of Dortmund (Germany) Quotas*=incoming1, outgoing 2					
	University of Szegeđ (Hungary) Quotas*= Not indicated	09-10	3			
	Tallinn University (Estonia) For Teaching Staff Only	Just started in 2010-2011				
	The Stanislaw Moniuszko Academy of Music Gdansk (Poland) Quotas*=3	07-08	4		1	1
		08-09	2		1	6
Total 16	32		59	7	29	21

*quotas of incoming and outgoing students

Bilateral LLP/Erasmus agreements of the music teacher training institutions in Turkey, the quotas of the students going and coming and the annual numbers of the students and teaching staff going and coming are given in Table 1. It is observed that only 16 of the 23 music teacher training institutions have Erasmus agreements. The 16 institutions educating music teachers have signed Erasmus agreements with 32 different European music institutions but could not activate their relations with 17 of them yet. Since 2006, a total of 59 students have been sent to the music institutions in Europe in the frame of Erasmus and 7 foreign students have received education in the institutions of music education in Turkey. While a total of 29 Turkish teaching staff have gone abroad to teach, 21 European teaching staff have visited the music teacher training institutions in Turkey.

Table 2. Types of activities that teaching staff had in their visits in the frame of LLP/Erasmus

Types of Activities	f	%
Presentation + Concert + Master class	1	04.76
Presentation+ master class	2	09.52
Concert + Master class	5	23.81
Master class	1	04.76
Concert	4	19.05
Presentation	4	19.05
Presentation + Concert	4	19.05
Total	21	100.00

Outgoing lecturers in the frame of Erasmus have to teach at least 5 hours. In the LLP/Erasmus Teaching Staff Mobility Work plan “form of instruction” must be indicated. In the work plan lecturers must fill “lecture” or “seminar” or what other activities they are planning to do. Table 2 displays the types of activities that teaching staff have performed in their visits. 23.81% of teaching staff preferred to give both concerts and master classes. 19.05% of teaching staff preferred only performing or doing presentations. 19.05% of teaching staff not only gave concert but presented a presentation also.

Turkish teaching staffs of music institutions that have given concerts have mentioned that they have preferred to play or sing Turkish folk songs with Turkish instruments like baglama, ney and kabak kemane. Three of Turkish teaching staff mentioned that they have played from contemporary Turkish composers like Ahmet Adnan Saygun, Muammer Sun, Necil Kazım Akses and Ulvi Cemal Erkin. A hungarian pianist have played piano pieces from European composers like Mozart and their local composers like Bartok, Liszt and Kodaly. One of Italian clarinettist and singer preferred to perform their local composers like Donizetti, Rossini, Tosatti and Bellini.

The mentioned subjects of teaching staff’s presentations are “Kodaly Method”(Hungarian teaching staff), “Music Types of Turkish Music Culture”(Turkish teaching staff), “Playing Styles of Traditional Turkish Instrument (Baglama) According To Regions in Turkey”(Turkish teaching staff), “Music Ability Exams in Turkey”(Turkish teaching staff), “Voice Training and Choir Education in Turkey” (Turkish teaching staff), “Scales of Turkish Folk Music”(Turkish teaching staff), “Utilizing Violin in Traditional Turkish Music”(Turkish teaching staff), “Turkish Rhythms”(Turkish teaching staff), “Introducing the Rhythmic Characters That are used in Turkish Folk Music with Bağlama”(Turkish teaching staff), “The Vocal Chamber Music in neo-Latin Languages”(Italian teaching staff) , “The Sketches of Chopin’s Piano Method as The Main Stream of the Piano Technique on Modern Piano Playing”(Italian Teaching Staff). It can be noticed above that all the teaching staff preferred to have presentations about their own music.

Some of teaching staff have preferred to do master classes of piano, clarinet and voice.

Table 3. What extend teaching staff think that their activity that they have done in visited institution reached it's purpose

	f	%
My activity completely reached it's purpose	12	57.14
My activity mostly reached it's purpose	8	38.09
My activity partially reached it's purpose	1	04.76
My activity barely reached it's purpose	0	00.00
My activity hasn't reached it's purpose	0	00.00
Total	21	100.00

In table 3 it is indicated that nearly 95% of teaching staff think that their activity that they have done in visited institution completely and mostly reached it's purpose.

Table 4. What extend teaching staff think that their visit in the frame of Erasmus meets their expectations.

	f	%
My visit completely meet my expectations	12	57.14
My visit mostly meet my expectations	9	42.86
My visit partially meet my expectations	0	00.00
My visit barely meet my expectations	0	00.00
My visit hasn't meet my expectations	0	00.00
Total	21	100.00

In table 4 it is indicated that 100% of teaching staff think that their visit in the frame of LLP/Erasmus completely and mostly met their expectations.

Table 5. In what extend teaching staff think that their activity that they have done in the visited institution reflect their own culture.

	F	%
The activity completely reflects my culture	10	47.62
The activity mostly reflects my culture	8	38.09
The activity partially reflects my culture	3	14.29
The activity barely reflects my culture	0	00.00
The activity hasn't reflects my culture	0	00.00
Total	21	100.00

It can be seen in table 5 that nearly 75% of teaching staff thought that their activity (concert or presentation) that they have done in the visited institution reflected their own culture. In another research subjected about Turkish music students' experiences and opinions regarding Erasmus, 71.43% of students mentioned that they mostly presented their countries during their stay abroad in the frame of Erasmus. Also 52.38% of students added that they usually present their traditional customs and manners (Egilmez, 2010). This opinion proves that Erasmus strengthens the inter-cultural relations.

Table 6. In what extend teaching staff think that they have recognized the culture of the country that they have visited

	f	%
I completely recognized the culture of the country that I visited	4	19.05
I mostly recognized the culture of the country that I visited	11	52.38
I partially recognized the culture of the country that I visited	6	28.57
I barely recognized the culture of the country that I visited	0	00.00
I couldn't recognize the culture of the country that I visited	0	00.00
Total	21	100.00

52.38% of teaching staff believe that they have mostly recognized the culture of the country they have visited. It is emphasized that recognizing the culture is related with the number of the days they stay. Program pins down teaching staff to stay at least one week. It's thought that this period is not enough to recognize the culture completely. On the other hand in another research as the students stay a longer period, 80.95% of Turkish Erasmus students from Turkish music teacher training institutions indicated that they highly familiarize the culture of the country they have been (Egilmez, 2010).

Table 7. In what extend the teaching staff think that music education in their country differs from the music education of the visited country.

	f	%
The music education of my country completely differs from the music education of the country that I have visited	3	14.29
The music education of my country mostly differs from the music education of the country that I have visited	10	47.62
The music education of my country partially differs from the music education of the country that I have visited	8	38.09
The music education of my country barely differs from the music education of the country that I have visited	0	00.00
The music education of my country doesn't differ from the music education of the country that I have visited	0	00.00
Total	21	100.00

47.62% of teaching staff thought that music education in their country mostly differs from the music education of the visited country. 38.09% of teaching staff indicated that their own music education partially differs from the music education of the country they have visited. On the other hand in another research only 33.33% of Turkish Erasmus students from music teacher training institutions mentioned that the music education in their country mostly differs from the music education in the visited country (Egilmez, 2010). It is thought that by learning and sharing the different music education systems of the countries with the help of European Union Youth and Education programs can serve the internalization.

Table 8. In what extend teaching staff think that music is important for building international relations.

	f	%
The music education is completely important for building international relations	15	71.43
The music education is mostly important for building international relations	5	23.81
The music education is partially important for building international relations	1	07.76
The music education is barely important for building international relations	0	00.00
The music education is not important for building international relations	0	00.00
Total	21	100.00

Music education is thought to be completely important for building international relations by 71.43% of teaching staff. 23.81% of teaching staff believe that it is mostly important. As it's considered that music education differs from country to county it could be possible to use music education as a bridge between the different counties and cultures.

Table 9. In what extend teaching staff think that music is effective to reach the aim of the Erasmus Project

	f	%
Music is completely effective to reach the aim of the Erasmus Project	11	52.38
Music is mostly effective to reach the aim of the Erasmus Project	7	33.33
Music is partially effective to reach the aim of the Erasmus Project	3	14.29
Music is barely effective to reach the aim of the Erasmus Project	0	00.00
Music is not effective to reach the aim of the Erasmus Project	0	00.00
Total	21	100.00

It is known that main aim of LLP/ Erasmus is to encourage the transnational cooperation between universities and to ensure the academic and cultural transmission. This idea is proved by nearly 86 % of teaching staff that music is completely and mostly effective to reach the aim of the Erasmus project. In other research thought of 76.19 % students that music is largely effective in achieving the goal of Erasmus Program also strengthens this opinion (Egilmez, 2010).

Table 10. In what extend teaching staff think that Turkish musical culture is effective to reach the aim of Erasmus project

	f	%
Turkish musical culture is completely effective to reach the aim of the Erasmus Project	7	33.33
Turkish musical culture is mostly effective to reach the aim of the Erasmus Project	6	28.57
Turkish musical culture is partially effective to reach the aim of the Erasmus Project	7	33.33
Turkish musical culture is barely effective to reach the aim of the Erasmus Project	1	07.76
Turkish musical culture is not effective to reach the aim of the Erasmus Project	0	00.00
Total	21	100.00

Turkey has a rich culture and its own music hosts rich items in its structure. 33.33% of teaching staff mentioned that Turkish musical culture is completely effective to reach the aim of Erasmus project. More than half of the lecturers indicated that Turkish musical culture is completely and mostly effective to reach the aim of the Erasmus project. The reason for this belief is thought to be because of the rich texture of Turkish Music.

Table 11. In what extend teaching staff think that Erasmus contributes to the development of music education.

	f	%
Erasmus completely contributes to the development of music education	9	42.86
Erasmus mostly contributes to the development of music education	4	19.05
Erasmus partially contributes to the development of music education	7	33.33
Erasmus barely contributes to the development of music education	1	07.76
Erasmus doesn't contribute to the development of music education	0	00.00
Total	21	100.00

While 86 % of teaching staff have thought that music is completely and mostly effective to reach the aim of the Erasmus project, only nearly 60% of them believed that Erasmus completely and mostly contributes to the development of music education. In other research, according to the Erasmus students of music teacher training institutions, Erasmus Program mostly contributes to the development of music education by the ratio of 57.14 % (Egilmez, 2010).

Table 12. If the Erasmus project covers not only European countries but all countries, in what extend teaching staff think that it helps the development of music education

	f	%
It completely helps the development of music education	10	47.62
It mostly helps the development of music education	11	52.38
It partially helps the development of music education	0	00.00
It barely helps the development of music education	0	00.00
It doesn't help the development of music education	0	00.00
Total	21	100.00

All of the teaching staff mentioned that if Erasmus project covers not only the European countries but also all countries, it would completely and mostly help the development of music education. In other research also according to the 61.90 % of Erasmus students of music teacher training institutions, if the Erasmus Program included not only European countries but also the whole world countries, this would make a huge contribution to music education. (Egilmez, 2010)

3 CONCLUSION

The 16 of 23 music teacher training institutes in Turkey has signed LLP/Erasmus agreement with 32 European institutes of music. 15 of the European institutes have kept in touch with the students and teaching staff. Since 2006, totally 59 students and 29 teaching staff from music teacher training institutes have gone to European universities, and 7 students and 21 teaching staff have preferred Turkey within the frame of the project. Considering the numbers of the sent and received students and teaching staff, it is observed that the music education departments of Turkey are preferred less especially by foreign students. It is assumed that with the improvement of bilateral relations and acculturation, the music education departments of Turkish universities will be preferred more.

It is known that main aim of LLP/ Erasmus is to encourage the transnational cooperation between universities and to ensure the academic and cultural transmission. This idea is proved by nearly 86 % of teaching staff that music is completely and mostly effective to reach the aim of the Erasmus project. Not only music but especially Turkish musical culture is thought to be completely and mostly effective to reach the aim of the Erasmus project by more than half of the lectures. The reason for this belief is thought to be because of the rich texture of Turkish Music.

It is determined that teaching staff, visiting music institutions have preferred presenting their local music with their local instruments or performing pieces from their own composers. Nearly 75% of teaching staff thought that their activity (concert or presentation) that they have done in the visited institution reflected their own culture. 52.38% of teaching staff also indicated that they have mostly recognized the culture of the country they have visited. It is believed that this develops the inter-cultural relations helping Erasmus to reach its aim.

47.62% of teaching staff mentioned that music education in their country mostly differs from the music education of the visited country. Also music education is thought to be completely important for building international relations by 71.43% of teaching staff. Considering that music education differs from country to county and approving it's importance in international relations, it could be possible to use music education as a bridge between the different counties of different cultures. It is thought that by learning and sharing the different music education systems of the

countries with the help of European Union Youth and Education Programs can serve the internalization.

On the other hand nearly 60% of teaching staff believed that Erasmus completely and mostly contributes to the development of music education. All of the teaching staff mentioned that if Erasmus project covers not only the European countries but also all countries, it would completely and mostly help the development of music education. It is believed that this could be serving at the same time to globalisation.

It can be concluded that with the LLP/Erasmus Project, music is shared and spread between cultures by music education. By this way music is becoming internationalized and globalized. On the other hand Erasmus is strengthening by sharing different cultures with the help of music and music education and reaching its main purpose.

In short music is feed by Erasmus and Erasmus is feed by music both serving internalization and globalization.

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**THE STATE OF THE LEFT-HAND 4TH FINGER (PINKY) AT THE
BEGINNING PHASE OF VIOLIN TRAINING**

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Topic: Curriculum and Pedagogy

THE STATE OF THE LEFT-HAND 4TH FINGER (PINKY) AT THE BEGINNING PHASE OF VIOLIN TRAINING

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ABSTRACT

At the beginning phase of violin training, as in every musical instrument, the basic behaviors acquired have direct effects on the student's future playing process. In the violin methods used, it is usually observed that the training starts with A and D Strings at the beginning phase of violin training. According to this starting system, if A string is taken, left-hand fingers are placed on the palpation in a way that the 1st finger will produce "the note of B", the 2nd finger "the note of C Sharp", the 3rd finger "the note of D" and the 4th finger "the note of E". In this way, fingers are made ready and mature to play the violin with the help of various exercises and studies of the fingers. During this process, in some small-age students, there appear problems in the placement of the 4th finger. In Turkey, as a solution to the elimination of the difficulty experienced related with the 4th finger, Ali Uçan and Edip Günay have used modes and tunes including "e flat" in place of those including "the note of e" in the 4th finger. This approach finds acceptance by some violin trainers in Turkey as well. In this system, the pinky, the weak finger of the young trainee places more comfortably on the palpation by benefiting from the Turkish Music Modes with which the trainee is acquainted.

In this study, various exercises and studies suitable to the mentioned placement are presented. Moreover, the study evaluates the 4th Finger positioning, which is the most frequent problem in the placement of the left-hand fingers in the violin training, from different perspectives and discusses its usability in violin training. In the end of the study, it is believed that the mentioned method will find acceptance and become widespread.

Key Words: Violin Education, Left hand 4.th finger, Turkish Music Modes

INTRODUCTION

One of the basic and primary needs of individuals and societies is education. Education shows a general-to-specific expansion and art education has a very meaningful place in this process. Moreover, instrument training, which is included within the scope of music education, one of the primary branches of art education, forms one of the important dimensions of music education thanks to its various acquisitions. (Uçan 2001)

Since instrument training is an occupation which gives a person a chance to know him/herself well, discover his/her existing abilities, develop his/her existing skills through education, acquire new skills, and by this way, actualize him/herself, it is defined as an important branch of music education.(Uslu 1998)

Instrument training practices in contents refer to a quite broad field. Because human's playing instrument underlies instrument playing and when positive effects of instrument playing on instrument player are considered, this training affects closely the individual him/herself,

his/her environment, the society composed of individuals, that is to say trainees, trainers and people around them at some environments where music education is carried out (Uslu, 1996).

This effect of instrument training starting at early ages appears to make positive contributions to the personality development of the child and help increase his/her self-confidence. Instrument training with such features as educative, constructive, unitary, integrative, divider, emotion and skill improver, incentive, competitive, patience teacher, motivator etc is regarded as an important and valuable educational tool (Uslu, 1998).

Instrument training splits up in itself into different branches and violin training is considered to have an effective and prominent place among the most important branches of instrument training.

Violin, a stringed instrument whose sound possibilities are extremely rich, is one of the most common and favorite instruments used in many countries of the world. The emotive expression richness, which is capable of expressing changing moods of human through impressive beauty of tone color, has made it reach an ideal solo instrument level. In addition to having "Solo Instrument" characteristics, the violin displaying a skillful power of expression for performers and audience with the warmth in its tone and the variety provided by the possibilities of performance has an important role in chamber music and orchestra. Due to the possibilities expanded by its qualities, it represents the tradition in international classical music, jazz music and even folk music (Say, 2002).

Violin training is the process of forming desirable modifications in the individual's behaviors and transforming these modifications into skills. According to Şendurur, making the most of this process depends on the creation of suitable learning experience, and the creation of learning experience depends on the violin teacher's taking effective measures, maintaining these measures throughout his/her learning life and knowing about and practicing the methods on which learning experience is based at sufficient level (Şendurur, 2001)

According to Büyükaksoy (1997), in order for the violin training to be healthy, it is necessary to emphasize the fact that principles are important as well. The teacher is supposed to be able to apply the behavioral principles with respect to the violin training to his/her students' characteristics. Many behavior patterns in playing the violin should be well-defined, explained, demonstrated and appropriate to students' ability to comprehend and accomplish.

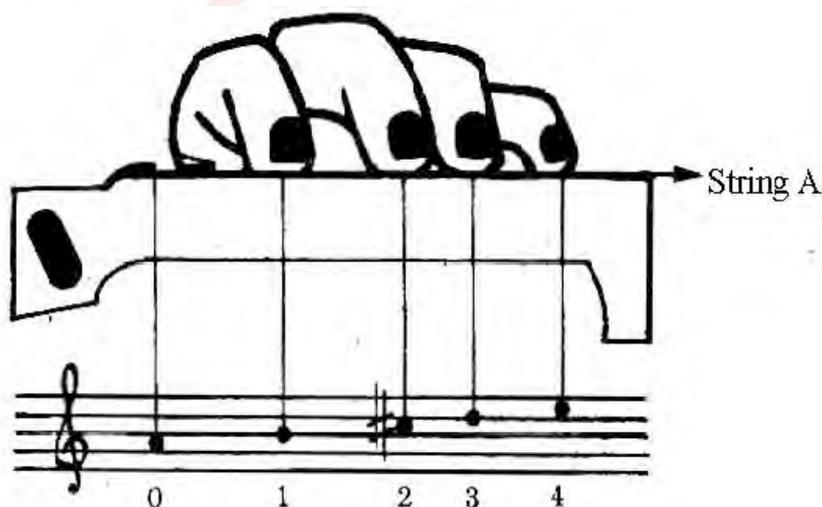
Rather than being a whole of some principles whose field of practice remained limited without having been expanded, the rules in violin playing should be flexible enough to be applied to any particular condition under discussion and general enough to include all conditions. Teachers should be aware of the fact that students have their own personalities and even approaches to music and instrument. After acknowledging this, teachers should attend to their students in this direction. Being natural should be the first guiding basic principle of the teacher (Büyükaksoy, 1997).

The beginning phase of violin training, as in those of other stringed instruments, is a difficult period especially for students at early ages. In general, the beginning phase of stringed instruments covers a difficult process compared to those of the percussion instruments like piano and the fretted ones like guitar. Besides the difficulties brought about by the playing of the violin with strings, its being a fretless instrument makes it difficult to produce proper sound especially at the beginning phase and it requires time and patience to achieve this.

When instrument training is considered in general, it should cover behaviors suitable for the physical structure of humans. According to Uçan (2004), the first and most determining base of violin playing is no doubt the structure of the human playing violin. For the structure of human determines both the structures of violin and string and the process and quality of violin playing. For this reason, the first basis of violin playing is the structure of human (Uçan, 2004). Therefore, instrument training done in accordance with the natural structure of body is important in increasing the performance success.

In violin training, the left-hand and fingers have two main functions. The first function is to press on the fingerboard where the taut strings are placed and produce sound and depending on these melodies. The second function of the left-hand and fingers is to make the vibration required for violin players reaching a certain level to position their fingers suitably and make their own performance by applying pressure on strings.

In violin methods used in the beginning phase of violin training, it is observed that training usually starts with A and D strings. According to this beginning system, when string A is considered, the left-hand fingers are placed on the fingerboard in a way that the 1st finger will produce the note of B, the 2nd finger the note C Sharp, the 3rd finger the note of D and the 4th finger the note of E.

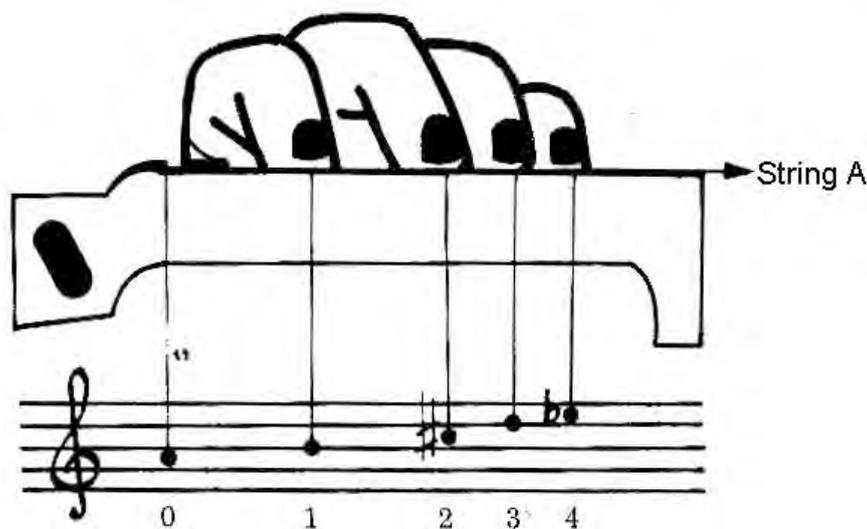


(Günay, Uçan, 1980)

When the physiological natural conditions of fingers are examined, the middle finger and the ring finger are more alongside compared to the other fingers, the index finger stands apart from the middle finger, and the pinky stands further away from the ring finger. When the left-hand fingers placed on A string are considered, the pinky, which is the 4th finger, is supposed to press on the note of E. However, since the pinky is shorter and weaker compared to the other fingers and the movements of which depend on the other fingers, some students can not apply sufficient pressure to the 4th finger (pinky) and press as twisted as required. This state is considered to create an important problem during the beginning phase of children's violin training.

In this way, the fingers should be made ready and matured enough to play the violin with the help of various exercises and studies. In this process, there appear problems in the positioning of the 4th finger (pinky) in some small-age students. In Turkey, as a solution to the problems faced in relation to the 4th finger, Ali Uçan and Edip Günay used melodies written in maqams requiring the 4th finger to press on the note of E instead of the note of E flat on the A string and the note of A flat instead of the note of A on the D string. This approach has been accepted by some violin trainers in Turkey as well. In this system, the weak little finger of the early-age child

places on the fingerboard more comfortably thanks to maqams of Turkish Music with which s/he is acquainted. This system has been used as a stage in the transition to the note of e on the A string and the note of A on the D string and covers a study-period of a few weeks differing according to students' skill levels.



(Günay, Uçan, 1980)

Günay-Uçan (1980) describes the position of the left-hand on the fingerboard in their method as follows:

“When we drop our middle, ring and little fingers (pinky) on the fingerboard, we see that these three fingers rest close to one another and even alongside. However, we also observe that a space occurs between the index finger and the little finger. The little finger’s having dropped almost adjacently to the ring finger is eye-catching. In this way, the pinky compensates for its weakness to a certain extent. If we intend to drop our pinky further on the note of E, we immediately see that it is much more difficult than dropping near the ring finger. In doing so, an easy-to-difficult training is achieved, and this is compatible with educational principles. Hence, a new situation appears before us, which we cannot come across in universal violin training resources. This natural state is also suitable for benefiting from the data of our national music. We start the beginning practices including the notes of A, B, C Sharp, D and E notes in universal violin training resources and called the first state following the natural state. We consider that this leads to a path going from national culture to universal culture”.

Practical Examples

Naturel Position on String A

(Uçan, 2004)

LIED E.G. A.U.

(Günay, Uçan, 1980)

TURKISH TRADITIONAL FOLK SONG

(Uçan, 2004)

Naturel Position on String D

LIED Ali Uçan

(Uçan, 2004)

Within the framework of the examples given above, especially due to the melodies played on one string, “Saba Maqam” should be used. Saba Maqam’s main character is formed by the ‘saba 4’lusu’(4’th interval). Saba Maqam is a combined maqam formed by the combination of the scales of Saba 4’lusu on Dügah perde (the note A) and Zigüleli Hicaz on Çargah perde (the note

C). Due to the mentioned method being used in Saba 4'lüsü (4'th interval), students in Turkey are familiar with these melodies.

SABA 4'lüsü



ZİRGÜLELİ HİCAZ MAKAMI



For the implementation of the specified method Saba Maqam then has to be transposed to 'B Scale'. Saba maqam is most widely used and listened in Turkish Maqams. As an example it could be given many instrumental and vocal works written in Saba maqam. In Turkey, especially Ezan, sang in the morning prayers is sang in Saba Maqam.

As the students in Turkey are used to this melodies, they have less difficulties in their violin lessons when they first start learning.

CONCLUSION and SUGGESTIONS

As mentioned above, Günay-Uçan considered the state of the pinky with an easy-to-difficult approach primarily with physical concerns. It was considered that it would be adopted by Turkish students easily because of musical exercise, study and the use of traditional songs. Günay-Uçan argued for passing to other exercises and studies used in universal violin methods following the method which they called "natural state". This method has been accepted and put in use by many violin trainers in Turkey.

In the violin training, whose beginning phase is difficult compared to other instruments, especially with children at early ages, the weak pinky places on the violin fingerboard much more easily thanks to this method and in later phases they feel comfortable.

After the practices, it was observed that the students having started violin training with a wrong technique and could not press their pinkies as twisted corrected these negative behaviors easily through this method.

It is considered that this method can be applied easily not only by the societies owning maqam music in their lives but also by all violin trainers in the world.

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Title:

Learning Experiences of International Students: De-centralising the Existing Discussion

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Learning Experiences of International Students: De-centralising the Existing Discussion

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Abstract

There have been extensive studies on learning experiences of international students studying in foreign countries. However, these discussions have often focused on students coming from other parts of the world to developed western countries such as the United States, United Kingdom, Australia and New Zealand. There is limited examination on the learning experiences of students moving into a South East Asian developing country such as Malaysia. In particular, there appears to be no research conducted in the Technical and Vocational Education (TVE) sector. This paper analyses the literature on learning experiences in terms of the 'academic shock' encountered by international students when studying in a foreign country. It illustrates how the existing discussions on academic shock and the adjustment strategies of international students are drawn using certain criteria largely from the 'western situation'. The remaining discussion focuses on how these criteria and the extensive literature underpinning the academic adjustment of international students might be different in the Malaysian TVE context. The paper also outlines how doctoral research is being set up to investigate a non-western perspective on the academic adjustment of international students in a TVE university in Malaysia.

Keywords: learning experiences, academic shock, adjustment strategies, Malaysian TVE

Introduction

Theories on academic experiences and adjustment—that is, the fit which students achieve within the academic context (Ramsay, Barker & Jones 1999)—of international students learning in a foreign country are largely discussed in western universities (e.g. Poyrazli & Grahame 2007; Richardson & Hurworth 2007; Skinner 2010). The extant attention has been given to academic experiences of international students coming from countries especially Asian, to western English speaking countries, for example, the United States (US), the United Kingdom (UK), New Zealand (NZ) and Australia (e.g. Poyrazli & Grahame 2007; Richardson & Hurworth 2007; Akazaki 2010). More recently, the discussion on internationalisation in higher education does not only stress the western experiences, but also the Asian and Pacific Region since internationalisation activities have rapidly grown in these regions (Futao Huang 2007; Siriwardene & Qureshi 2009). As such, higher education institutions in these area are responsible in contributing to internationalisation efforts which emphasise the quality in education (de Wit 2002). Despite the rapid growth of internationalisation strategies and students number, the literature in this field in Malaysia—particularly in TVE sector—is insufficient (Mohd Zain 2008; Idris 2009).

In relation to this situation, we propose to address the experiences of international students' academic transition from their previous to the new academic environment in a Malaysian TVE higher education institution. In addition, we also aim to explore the experiences of academic staff towards teaching international students in the TVE learning and teaching environment. Using qualitative approaches, we seek to identify the circumstances that prompt the current reciprocal adjustment that is happening in the institution. Contrary to the renowned theories on adjustment which focus on one-way efforts involving international students in the struggle and

difficulties of fitting into the new setting (eg. Oberg 1960; Gullahorn & Gullahorn in Adler 1975), we understand adjustment as reciprocal efforts between international students and the staff to achieve mutual understanding in learning and teaching processes. Adapting adjustment as a transformative learning, we aim to ascertain adjustment between international students and academic staff in the institution associated to learning and teaching processes. Understanding these experiences in academic transition, helps institutions to prepare sufficient support and infrastructure to ease the two-way transition, as well as helping to increase intercultural awareness among the existing society in the institution (Ward, Bochner & Furnham 2003; Yuefang Zhou et al. 2008). Further, this study contributes to de-centralise the plethora of discussion on internationalisation and adjustment from western English speaking countries by expanding the understanding of the academic experiences of international students to a South East Asia non-English speaking country.

We present this paper in the next three main sections. First we describe the learning experiences of international students in relation with ‘academic shock’ that is encountered when studying in a foreign country. In the second section, we illustrate how the existing discussions on academic shock are drawn using certain criteria which we identify as the ‘western situation’, thus establishing a position of the Malaysian TVE context in the central discussion. We give attention to identifying the possible new dimension that could emerge from the Malaysian TVE case. Third, we summarise how the Malaysian TVE context de-centralises the existing discussion on learning experiences of international students.

Learning experiences of international students: ‘academic shock’

‘Academic shock’ or sometimes referred as ‘cognitive shock’ is the effects of moving to a foreign learning environment which offers different academic traditions and expectations (Festinger in Ryan & Hellmundt 2003). During the transition, international students face challenges in linguistic proficiency, cultural-social exclusion and learning skills. These challenges are described further by scholars as shown in Table 1 below.

Table 1 Academic shock faced by international students

Challenges	Description
Linguistic proficiency	<ul style="list-style-type: none"> • Language disabilities (e.g. Thorstensson 2001; Seo & Koro-Ljungberg 2005; Jing Wang 2009; Akazaki 2010) • Academic writing (e.g. Andrade 2006; Yanyin Zhang & Yinan Mi 2010) • Communication difficulties such as the use of English accents, terms, idioms and jargons (e.g. Richardson & Hurworth 2007; Bartram 2008)
Cultural-social exclusion	<ul style="list-style-type: none"> • Excluded by mentors, classmates and student society (Zhang & Brunton 2007) • Student-student and student- lecturer relationship (Bartram 2008) • Host individualism culture (Thorstensson 2001; Nieto & Zoller Booth 2010)
Learning issues	<ul style="list-style-type: none"> • Psychomotor and cognitive skills are inadequate such as questioning and answering, criticising, taking notes, completing assignments and reading texts in the host language (e.g. Hanassab & Tidwell 2002; Durkin 2008) • Lecturers have high ignorance of international students’ learning difficulties (Robertson <i>et al.</i> 2000) • Difficulties following teaching methods and styles (e.g. Adrian-Taylor, Noels & Tischler 2007; Yuefang Zhou & Todman 2009) • Speech rate in teaching (Poyrazli & Grahame 2007) • Accumulation and intensity of knowledge (e.g. Brown 2008; Akazaki 2010) • Lack of referral assistance (Cameron & Meade 2003)

From the table above, challenges listed are common experiences faced by international students largely during their learning processes. Parts of the challenges are caused by the new academic environment which may not reflect students' previous educational experiences (Williams 2008; Onsando & Billet 2009). A study of pedagogy practices by Ryan and Hellmundt (2003) suggests these challenges occur not only when international students need to adjust themselves into the new academic setting, but also apply to lecturers who are involved as the demands of students' learning needs increases. These challenges become difficulties especially when students and staff are unaware of their role in creating understanding which commonly results mismatch in expectations (Carroll 2005). International students may feel the transition from their past to the new academic experiences is frustrating while staff could feel they have inadequate skills to provide the best support for the students. If these issues are not understood and supported by the institution, it could lead to greater misunderstanding and could affect students' psychological wellbeing and learning outcomes (Louie 2005; Cemalcilar & Falbo 2008). As such, research suggests adjustment strategies could be applied from students and staff in order to ensure international students gain success in the unfamiliar academic world (Ramsay, Jones & Barker 2007; Fritz, Chin & DeMarinis 2008). This is when both international students and staff put in effort to change their attitudes and behaviours to overcome the challenges during the phase of adjustment processes.

Adjustment as a reciprocal effort

In early research, adjustment strategies were usually described as one-way effort which involves international students in the struggle and difficulties to fit in the new setting (e.g. Oberg 1960; Gullahorn & Gullahorn cited in Adler 1975). In this era however, adjustment strategies should be viewed as a reciprocal effort which support intercultural awareness—that is the ability to function effectively in a diverse culture (Hamza 2010). This proposition is supported by several scholars such as Ward *et al.* (2003), Zimmermann and Sparrow (2007), and Zhou and Todman (2008) who also believe reciprocal understanding is a desirable approach to better support students' adjust to the host culture. Moreover, the proposition is consistent with one of the purposes of international education; to create intercultural awareness between international students and the society within the countries involved (Davis 2009).

A clear understanding of the reciprocal adjustment concept is accepting adjustment as a transformative learning which is defined by Mezirow (2000) as a shift in thinking from one's prior beliefs and experiences to critically reflect the others' beliefs and experiences which will interpret future understanding and action. A further study by Gill (2007) proves that international students in the UK experienced transformation by the existence of other people from other cultures. The experiences allow them to transcend their own thinking to another perspective which involves having awareness towards other's needs and culture. Gill believes that the mobility of students create learning opportunities among international students from diverse countries.

We believe the presence of international students benefits all; international students and the host community alike. In the teaching and learning environment, academic staff involved in teaching international students also face some sort of adjustment in their teaching practices (Carroll 2005; Williams 2008). On one hand, international students desire awareness of intellectual and cultural differences from the academic staff (e.g. Andrade 2006; Poyrazli & Grahame 2007). On the other hand, academic staff often have little capacity in understanding the diverse background of their international students (e.g. Ryan & Hellmundt 2003; Wang 2007; Singh 2010). The 'shift of thinking' as suggested by Mezirow therefore, is applicable to both international students and academic staff. The experiences of international students and academic staff can be transformed

into self-knowledge and awareness of each other's culture which can further help better adjustment for both parties.

The extant discussion vs. the Malaysian TVE context

Extant discussion on the experiences of international students is clustered into the three main challenges that were presented in Table 1. Looking at the background information inherent in those discussions, what clearly emerges is the focus that has been given to the experiences of international students mainly from China, Japan and Thailand (e.g. Durkin 2008; Jing Wang 2009; Akazaki 2010), while the institutions involved are situated in the US, UK, NZ and Australia (e.g. Poyrazli & Grahame 2007; Richardson & Hurworth 2007; Yuefang Zhou & Todman 2008). Accordingly we identify the pattern of the current discussion as the 'western situation'. The lists of 'academic shock' encountered by international students are the challenges reflected by the movement of students from non-English speaking countries in Asia into western English speaking countries.

The Malaysian TVE context offers new dimensions in the literature on international student experiences. The comparisons in Table 2 enable us to suggest that the Malaysian TVE context might reveal new information in expanding the understanding of international students' academic adjustment. The differences in background of the study should complement the current information of 'academic shock' faced by international students.

Table 2: The comparison of extant discussion and Malaysian TVE context

	Extant discussion ('western situation')	Malaysian TVE context
Background of the study	<ul style="list-style-type: none"> • International students are more diverse but largely come from Asia • Minor emphasis on religion • Western countries universities • Non TVE focus universities • English speaking countries 	<ul style="list-style-type: none"> • International students largely come from Africa and Middle East • Major emphasis on religion • South East Asian university • TVE focus university • Non-English speaking country
Information on learning experiences	<ul style="list-style-type: none"> • International students experienced 'academic shock' in terms of: <ul style="list-style-type: none"> - Language proficiency - Cultural-social exclusion - Learning difficulties 	<ul style="list-style-type: none"> • International students' academic shock in learning • Academic staff experiences in teaching international students
'Gap' and 'contribution'	<ul style="list-style-type: none"> • Scant research on international students coming from Middle East and Africa • Less emphasis on how religion and religious values affect international students' learning adjustment • The use of English in different culture • Limited research in Malaysian TVE universities 	<ul style="list-style-type: none"> • Give attention on international students coming from Middle East and Africa • Emphasise the similarity on religion and religious values among international students and the Malaysian TVE society • The use of English in Malay and Arabic culture • New information focusing to Malaysian TVE university

In the first instance, the Malaysian TVE context highlights that approximately 90% of international students in Malaysian TVE institutions come from Africa and the Middle East countries such as Somalia, Libya, Chad and Yemen (Malaysian TVE institution international officer, 2010, pers. comm., 30 March). The key similarity among the students themselves and the society is the shared religion, that is, Islam and values associated with Islam (Akkari 2004). The similarity plays an important factor in international students' decision to study in Malaysia

(Higher Education Malaysia 2010). The Malaysian education system which respects the practice of Islam (i.e. prayer time, code of ethics and behaviour) plays an important role as religion is the way of Islamic Middle East people lead their lives (Flaitz 2003). Thus, we anticipate that this similarity would somehow affect the adjustment of these students. In addition, discussion on learning adjustment from students coming from these regions and how religion and religious values affect learning experiences of international students is scant in the current literature.

Second, Malaysia is a South East Asian non-English speaking country. The first language for Malaysian people is Bahasa Melayu while international students from Middle East and Africa in this context largely use Arabic (Akkari 2004). English however, is used widely in the society and is the mode of instruction in Malaysia TVE sector. What remains unknown is how the use of English accents, jargons, terms and idioms in the culture of the students and staffs affect adjustment in learning and teaching.

Third, we assert that there are limitations with the literature concerning international students' adjustment in TVE institutions. The information that might emerge from this dimension is the international students and academic staffs' adjustment that is related with learning and teaching practical skills such as the use of laboratory equipments and workplace experiences. TVE universities in Malaysia are established as skill-based institutions. Part of the programs offered in Malaysian TVE universities are engineering, technical and vocational education, information technology and technology management. The academic programs prepare students for professional and managerial TVE personnel such as engineers, TVE educators, information technology officers and surveyors (Ahmad cited in Leong 2009).

As a way of addressing these significant gaps, we proposed an investigation that will research the learning experiences of international students and the teaching experiences of academic staff in a Malaysian TVE university. We focus this study on a TVE institution which has experienced rapid growth of international students largely from the Middle East and Africa. Using semi-structured, in-depth interviews situated in an interpretive qualitative methodology, we aim to explore the learning and teaching experiences from approximately ten international students and ten academic staff through focus group and individual interviews. The method adopted is the best fit for the research because experience is 'socially constructed' (Merriam 1998 p. 8) and the goal is to achieve 'rich', 'particularistic' and 'heuristic' characteristics (Merriam 2009 pp. 43-44). The findings will then illustrate the current degree of reciprocal adjustment that is happening in the institution from learning and teaching perspectives. The information will be used to indicate future steps that could be taken by the institution to ease the transition of international students as well as to support academic staff towards better quality in learning outcomes.

Conclusion

As a whole, there is extensive literature on learning experiences in terms of the challenges encountered by international students largely from Asian in western English speaking countries. Beyond these discussions however, very little is known about the learning experiences of international students in a South East Asian non-English speaking country such as Malaysia. This paper focuses on how the Malaysian TVE situation offers possibilities for expanding our understanding of international students' learning experiences from the 'western situation' into a Malaysian TVE context. These dimensions can contribute to new knowledge by de-centralising the existing discussion on learning experiences of international students.

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