ECE 2015
Official Conference Proceedings
ISSN: 2188-1162

#iafor

"To Open Minds, To Educate Intelligence, To Inform Decisions"

The International Academic Forum provides new perspectives to the thought-leaders and decision-makers of today and tomorrow by offering constructive environments for dialogue and interchange at the intersections of nation, culture, and discipline. Headquartered in Nagoya, Japan, and registered as a Non-Profit Organization (一般社団法人) , IAFOR is an independent think tank committed to the deeper understanding of contemporary geo-political transformation,  particularly in the Asia Pacific Region.

INTERNATIONAL

INTERCULTURAL

INTERDISCIPLINARY

iafor

The European Conference on Education 2015, Brighton, United Kingdom

Official Conference Proceedings

# Table of Contents

# Economies of Scale of Worker's Continuing Professional Development in Selected Universities in South-South Nigeria

Jonathan Egbe Oghenekohwo, Niger Delta University, Nigeria

## Abstract

The return to scale constitutes a significant investment index in the determination of the quantum of resources that are deployed in investment decision on workers' continuing professional development. Such investment decision is always predicted on the expected outcomes to the individual, institution and the society in context. Several investments in the development of human capacity on the job have been made, but the return to scale of such seems not to have been positively correlated with the quantum of resources invested in terms of productivity and performance among workers in most universities. This paper thus found out that, given the commitment and policy instrument to avail workers the rights of continuing professional development, the multiplier effects do seem evident in diligence, commitment, honesty, dedication, productivity and improved performance on the job among most administrative staff in universities. This author therefore concludes that, given the policy on the rights of workers to get trained on-the job, the outcomes of such training must reflect on the overall performance index, otherwise, institutions should carry out a forensic analysis of the types of continuing professional development programmes that workers participate in, whether or not, they are consistent with the vision and mission of the institutions in terms of economies of scale of workers' professional development to the individual, institution and the nation.

Keywords: Continuing, Professional Development; Economies of Scale; Worker's Education;      Administrative Staff.

## Introduction

The demand for workers' continuing professional development is a derived demand because its' multiplier effects can be measured absolutely or relatively by the standard of performance improvement, adaptation to best practices, optimization of resource utilization and efficiency in performance indicators. However, workers' continuing professional development must be conceived as an institutional policy objective as may be driven by the vision and mission statements of such entity respectively. When conceived as a mission statement, it requires that investment be made on a continuous basis to sustain the expected outcomes of such investment in human capital. Investment made on workers' continuing professional development even though seen by the worker as part of organizational support programmes, the ultimate concern is the economies of scale which the organization stands to gain either in the short or long run respectively.

Thus, in the determination of the investment index on workers' continuing professional development in universities, the return to scale in terms of effectiveness and efficiency in the use of universities resources is critical to the determination of the quantum of resources that are deployed on investment decision with respect to workers continuing professional development. In the university system, there are different categories of services namely teaching, research and community services which fall within the domain of the academics. On the other hand, there are other non-teaching services which are classified as administrative or support services to the main academic services. These support services are carried out by the non-teaching staff who are often referred to as administrative staff. However, their services are very critical to the overall attainment of the goals of the university system through affective processing and management of records such as students results, enrolment, graduations security, establishment, admissions, facilities, discipline, communication, promotion, scholarship, endowment, finance, grants, library, accommodation, and other attendant records or activities that ensure the continuity of the university system. These services among others are carried out by workers in the administrative, or non-teaching classification, who are regularly exposed to continuing professional development through continuing education on-the-job.

## Review of Literature

This continuing professional development (CPD) becomes inevitable because, it encompasses all types of facilitated learning opportunities for the attainment of credentials as obtained through the formal, coursework, conferences, informal learning opportunities situated in practice. Speck & Knipe (2005), described the process as intensive and collaborative, ideally incorporating an evaluative stage. Continuing professional development depicts the means, methods and streams by which workers maintain their knowledge **insitu** and skills as related to their professional lives. As a structured approach to informal learning, continuing professional development helps to ensure competence to practice, taking in knowledge, skills and practical experience.

The Royal Institution of Chartered Surveyors (2014) defines CPD as a commitment to continually update their skills and knowledge in order to remain professionally competent and achieve their true potentials. The Association of Personal Assistants refers to CPD as any process or activity that provides added value to the capability of the individual through an increase in professional knowledge, skills and personal qualities necessary for the appropriate execution of professional and technical duties often termed competence.

Characteristically, continuing professional development is "continuing" because, learning on the job never ceases, regardless of age or seniority. It is professional on account that, it is focused on professional competence in a professional role; and concerned with development because, the goal is to improve personal performance and enhance career progression, which arguably is much wider in scope and content than just formal training courses. Besides, the Chartered Institute of Personnel and Development (2008) noted that, continuing professional development (CPD) should be continuous, as professionals are expected to always be looking for ways to improve performance; driven by the learning needs and development of the individual, and must be evaluative rather than descriptive of what has taken place since it represents an essential component of professional and personal life, never seen as an optional extra.

Nevertheless, the overall benefits of CPD cannot be measured only by the perceived individualized outcomes, but the economies of scale of workers CPD in the university system must be quantified through evaluative rather than descriptive outcomes. Performance improvement is the central focus in professional role through continuing professional development. As a measure of its' economies of scale, continuing professional development on the job in the university system is geared at developing or enhancing process skills, sometimes referred to as leadership skills, as well as task skills. Such process skills are evident in effectiveness skills, team functioning skills, and system thinking skills. It is the evident of these skills through evaluation that justify the economies of scale of workers' continuing professional development.

Consequently, the National Professional Development Centre on Inclusion (2008) highlighted eight approaches through which workers' continuing professional development can be sustained namely: case study method; consultation; coaching; communities of practice; Liaison study; mentoring; reflective supervision; and technical assistance. Through these approaches, it was noted that continuing professional development can guarantee effectiveness skills, team functioning skills and systems thinking skills.

**Statement of Problem**

Despite windows of opportunities among administrative workers in the university to attain economies of scale as measured in effectiveness, efficiency, team functioning skills, leadership skills as encapsulated in process skills; there seems to be obvious structural causes of performance problems arising from notable deficiencies in performances as attributable to obsolete knowledge, low adaptability to new innovations, ineptitude and compromised morale, coupled with indifferent disposition to productivity and performance. These, this paper considers as constituting training

gaps which continuing professional development programmes can mitigate, given that workers are opportuned to participate actively in the process.

## Research Questions

Arising from the above, the following questions were raised to guide this research.

1.    How would workers' continuing professional development enhance optimization of resources and efficiency in workers' performance in a university system?
2.    What are the variants of workers' continuing professional development for effective management of the university system?
3.    How does continuing professional development impact on the economies of scale of university management?
4.    How does investment in workers continuing education contribute to the overall performance index of workers in the university system?
5.    What are the limiting factors to the economies of scale of workers' continuing professional development in the university system?

## Research Objectives

Among other things, it was reasoned that this research must achieve the following objectives, instant and inclusive as to:

i.    find out how workers' continuing professional development enhances the optimization of resources and efficiency in workers' performance in the university system;
ii.    establish the impact of workers' continuing professional development on the economies of scale of university management;
iii.    determine the variants of workers' continuing professional development for effective management of university system;
iv    ascertain the relationship between investment in workers' continuing professional
        development and overall performance index of workers in the university system; and
iv.    find out the limitations to the economies of scale of workers continuing professional development in the university system.

## Methodology

The study adopted a survey research design. This is because, the variables is an on-going phenomenon that can be observed, described and analyzed through the collection of primary data.

## Population, Sample and Sampling Technique

The population comprised 2500 estimated members of the non-teaching staff from two universities in the core south-south Nigeria namely; Niger Delta University (1200) and  University of  Port Harcourt (1300) representing state and federal

university respectively. A purposive random sampling technique was adopted to select a total of 125 specific participants representing 5% of the total population estimates from the two selected institutions respectively.

**Instrumentation and Data Analysis**

The instrument used in data collection was a self-structured and validated questionnaire titled: Workers' Continuing Professional Development Scale (WCPDS). The reliability of the instrument was ascertained through the Pearson Product Moment Co-efficient (PPMC) after it was twice administered on similar staff from a different university in the zone but whose staff did not participate in the study. A reliability value of 0.74 was achieved after the correlational test.

A total of 125 copies of the instrument were administered while 100 copies were certified completed accurately for data analysis. Data collected were analyzed using descriptive statistics.

**Result and Discussion**

The data analysed involve the demographic characteristics of the respondents. The results show that there were more female participants (52%) than their male counterparts (48%) in the non-teaching career profession in the selected universities. Majority of the participants were within the age bracket of between 30-34 years (32%), and 41 years above (24%) while the least age brackets presented were between 25-29 years (8%). The demographic results also showed that respondents with highest educational qualification were holders of first degree certificate (44%), followed by the holders of the higher degree certificate (28%), while other categories included holders of national certificate of education (12%), and senior school certificates (14%).

The non-teaching staff that participated in the study were categorized into senior staff (44%), and senior administrative staff (56%). These categories of participants were the most appropriate respondents for the study. Also, those who had served the universities for between 6-10 years accounted 35%, followed by those who had put in between 11-15 years (32%) in active service. These groups represent the highest representation in that categories. The types of continuing professional development programmes for which the staff had participated include; workshops training (36%) seminars and conferences (32%) respectively. The mode of sponsorship for these professional development programmes included tetfund (48%), self-sponsorship (28%) and university assisted (24%). It was also evident that executive officers (60%) were mostly involved in training, followed by administrative officers (26%) and secretaries (14%) within the senior cadre while under the junior staff cadre, clerical staff (60%) were mostly involved in continuing professional development.

**Research Question 1.**
**How would workers' continuing professional development enhance optimisation of resources and efficiency in workers' performance in the university system?**

**Table 1: Summary of Mean and Standard Deviation Score Workers' Continuing Professional Development And Optimisation of Resources and Efficiency in Workers Performance.**

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\bar{X}$ | SD |
|---|---|---|---|---|---|---|---|
| Training enhances my skills competence on the job | 40(160) | 36(108) | 16(32) | 8(8) | 100(308) | 3.08 | 0.939 |
| Conferences attended provide opportunities to be exposed to best practices in one's responsibilities/duties | 26(104) | 20(60) | 36(72) | 18(18) | 100(254) | 2.54 | 1.068 |
| Promotion has been accelerated due to the application of skills and knowledge gained through training | 14(56) | 70(210) | 6(12) | 10(10) | 100(288) | 2.98 | 0.769 |
| Participation in various seminars and conferences provided staff with additional work outlook and experience | 16(64) | 34(102) | 14(28) | 36(28) | 100(230) | 2.30 | 1.124 |
| I am more productive now than ever before due to the regular training received | 12(48) | 74(222) | 6(12) | 8(8) | 100(290) | 2.90 | 0.704 |
| I perform at peak level and surpassing my target due to the additional skills acquired | 50(100) | 44(132) | 4(8) | 2(2) | 100(342) | 3.42 | 0.669 |
| I now work to achieve set target with little or no wastages | 32(128) | 48(144) | 16(32) | 4(4) | 100(308) | 3.08 | 0.800 |
| I am adaptable to the functions of different units and departments in my institution | 34(136) | 38(114) | 22(44) | 6(6) | 100(300) | 3.00 | 0.899 |
| Training enhances staff scheduling of assignments | 44(176) | 48(144) | 6(12) | 2(2) | 100(334) | 3.34 | 0.685 |
| I have a time utilization efficiency scale | 30(120) | 58(194) | 6(12) | 6(6) | 100(312) | 3.12 | 0.769 |
| I maintain a flexible schedule of duties as a result of further training on the job | 36(144) | 54(162) | 6(12) | 4(4) | 100(322) | 3.22 | 0.733 |
| I am always at my duty post on time, but not always | 46(184) | 20(60) | 18(36) | 16(16) | 100(296) | 2.96 | 1.0136 |
| **Grand Mean** | | | | | | **2.99** | **0.658** |

Cut-off Mean = 2.50; N = 100

From table 1 above, it is obvious that the mean scores for seven, out of the twelve variables were above the cut-off mean of 2.50. Besides, the Grand Mean score of 2.99 is also greater than the cut-off mean score. This implies that, workers' continuing professional development would significantly enhance optimization of resources and efficiency in workers performance in universities in South-South, Nigeria. A critical review of the variable in item 6 showed that with exposure to continuing professional

development, workers' now attain peak level of performance thereby achieving set targets due to the additional skills acquired through the training.

**Research Question 2: What are the variants of workers' continuing professional development for effective management of the university system?**

**Table 2: Summary of Mean and Standard Deviation Score on the Variants of Workers' Continuing Professional Development for Effective Management of the University System.**

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\bar{X}$ | SD |
|---|---|---|---|---|---|---|---|
| Seminar provides opportunities for updating of knowledge that promotes best practice and thus, ensure effectiveness of system operation | 54(216) | 26(78) | 8(16) | 12(12) | 100(322) | 3.22 | 1.031 |
| Training in operational skill provides additional technical-know-how for improved performance | 42(168) | 36(108) | 14(28) | 8(8) | 100(312) | 3.12 | 0.935 |
| There is usually additional remuneration or rewards (attached) to participation in training programmes | 15(64) | 76(228) | 4(8) | 4(4) | 100(304) | 3.04 | 0.602 |
| Regular on-th-job or of off-the training ensures that one is creative and innovative in minds | 32(128) | 56(168) | 4(8) | 8(8) | 100(312) | 3.12 | 0/820 |
| Professional development enhances the sustenance of the work procedures and operational efficiency of organization | 40(160) | 36(108) | 16(32) | 8(8) | 100(308) | 3.08 | 0.939 |
| Seminars on staff development ensures regular appraisal of worker's orientation | 52(208) | 40(120) | 4(8) | 4(4) | 100(340) | 3.40 | 0.752 |

| Positive attitudinal disposition to achievement of task | 42(168) | 40(120) | 10(20) | 12(12) | 100(292) | 2.92 | 0.907 |
|---|---|---|---|---|---|---|---|
| Worker's continuing professional development in universities is vital for high quality scholarship | 26(104) | 52(156) | 10(20) | 12(12) | 100(292) | 2.92 | 0.918 |
| Research & academic excellence | 56(208) | 36(108) | 4(8) | 8(8) | 100(322) | 3.32 | 0.866 |
| **Grand Mean** | | | | | | **3.15** | **0.863** |

Cut-off Mean = 2.50; N=100

Table 2 above shows the mean and standard deviation scores for the variants of workers' continuing professional development for effective management of the university system. The mean scores for all the variables, except for item 20 are greater than the cut-off mean. Thus, these variables are therefore capable of enhancing effective management of the university system giving that workers' are continually accessed to continuing capacity building through continuing professional development. For example, the mean score for item 18 is 3.40 which is not only greater than the cut-off mean, but significantly greater than the grand mean score of 3.15.

**Research Question 3**: How does workers' continuing professional development impact on the economies of scale of university management?

**Table 3: Summary of Mean and Standard Deviation Scores on Impact of workers' Continuing Professional Development on Economies of Scale of University Management.**

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\bar{X}$ | SD |
|---|---|---|---|---|---|---|---|
| Enhanced student/staff records management system | 48(192) | 24(72) | 16(32) | 12(12) | 100(308) | 3.08 | 1.061 |
| Improved staff/student relations | 58(232) | 30(90) | 8(16) | 4(4) | 100(342) | 3.42 | 0.086 |
| Promotion of academic discipline and moral values | 36(144) | 50(150) | 10(20) | 4(4) | 100(318) | 3.18 | 0.770 |
| Goal attainment in its vision and mission | 28(112) | 52(156) | 8(16) | 12(12) | 100(296) | 2.96 | 0.920 |
| Stable academic session | 28(112) | 42(126) | 18(36) | 12(12) | 100(286) | 2.86 | 0.964 |
| Regular processing of students records | 52(218) | 44(132) | 0(0) | 4(4) | 100(344) | 3.44 | 0.701 |

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\overline{X}$ | SD |
|---|---|---|---|---|---|---|---|
| such as results, registry, transcripts, and other | | | | | | | |
| Attraction of endowments and chairs | 28(112) | 54(162) | 14(28) | 6(6) | 100(300) | 3.00 | 0.804 |
| Community services | 48(192) | 38(114) | 8(6) | 6(6) | 100(328) | 3.28 | 0.854 |
| Sustained linkages, collaboration and advancement | 24(96) | 62(156) | 16(32) | 8(8) | 100(292) | 2.92 | 0.854 |
| Quality assurance in product development | 22(88) | 48(144) | 28(56) | 2(2) | 100(290) | 2.90 | 0.759 |
| Sustenance of academic and research activities | 28(112) | 54(162) | 8(16) | 10(10) | 100(300) | 3.00 | 0.876 |
| Flexible reward system | 12(48) | 52(156) | 28(56) | 8(8) | 100(268) | 2.68 | 0.770 |
| Staff development | 34(136) | 46(138) | 14(28) | 6(6) | 100(305) | 3.08 | 0.848 |
| **Grand Mean** | | | | | | **3.06** | **0.846** |

Cut-off Mean = 2.50; N=100

Table 3 indicates the mean and standard deviation score on how workers' continuing professional development impact on the economies of scale of university management. From the presented, it is obvious that all the mean scores for the variables are greater than 2.50 which represent the cut-off mean. Besides, the grand mean score of 3.06 is also greater than the cut-off mean, an indication that, workers continuing professional development impact positively on the economies of scale of university management in south-south, Nigeria. The economies of scale are evident mostly in enhanced record management system (x = 3.08; SD = 1.061), regular processing of students records such as results, registry, transcripts among other (x = 3.44; SD = 0.701) and staff development (x = 3.08; SD = 0.848).

**Research Question 4**: How does investment in workers' continuing education contribute to the overall performance index of workers in the university management?

**Table 4: Summary of Mean and Standard Deviation on how investment in continuing Professional Development Contribute to Workers' Performance index in University System.**

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\overline{X}$ | SD |
|---|---|---|---|---|---|---|---|
| Staff mentorship and student internship | 26(104) | 20(40) | 36(72) | 18(18) | 100(252) | 2.54 | 1.068 |
| Maintenance of facilities for systems operations | 16(64) | 34(102) | 14(28) | 36(36) | 100(230) | 2.30 | 1.124 |
| Systems efficiency | 12(48) | 76(228) | 2(4) | 10(10) | 100(290) | 2.90 | 0.732 |
| Reduction in running | 44(156) | 48(144) | 6(12) | 2(2) | 100(334) | 3.34 | 0.685 |

| cost | | | | | | | |
|---|---|---|---|---|---|---|---|
| Resource allocation efficiency | 30(12) | 58(174) | 6(12) | 6(6) | 100(312) | 3.12 | 0.769 |
| Sustenance of staff general well-being | 36(144) | 54(162) | 6(12) | 4(4) | 100(322) | 3.22 | 0.733 |
| Poor evaluation of capacity is evident in the system | 46(184) | 20(60) | 18(36) | 16(16) | 100(296) | 2.96 | 1.136 |
| **Grand Mean** | | | | | | **2.91** | **0.892** |

Cut-off Mean = 2.50; N=100

Table 4 above shows the summary of the mean and standard deviation scores respectively on how investment in workers' continuing professional development contribute to the overall performance index of workers in the university system. Apart from the fact that empirically, all the mean scores are greater than the cut-off mean of 2.50, it is evident that investment in workers continuing professional development contribute significantly to system efficiency (x = 2.90; SD = 0.732), reduction in the running cost of financing professional development (x =3.34; SD = 0.685), resource allocation efficiency in workers performance ( x = 3.12; SD = 0.769) and maintenance of facilities for effective systems operation (x = 2.54; SD = 1.068). In general, investment in workers continuing professional development contributes positively to the performance index of workers in the university system in south-south, Nigeria.

**Research Question 5**: What are the limiting factors to the economies of scale of workers continuing professional development?

**Table 5: Summary of Mean and Standard Deviation Scores on Factors Limiting the Economies of Scale of Workers' Continuing Professional Development**

| Variables | SA(4) | A(3) | D(2) | SD(1) | Total | $\overline{X}$ | SD |
|---|---|---|---|---|---|---|---|
| Negative attitudinal disposition work after training | 12(48) | 66(198) | 14(24) | 88) | 100(282) | 2.82 | 0.744 |
| Training seen only as organisational support programme not-orgnaisationed indeed | 46(184) | 40(120) | 8(16) | 6(6) | 00(326) | 3.26 | 0.848 |
| Non-prioritization of capacity development is usually evident in the process | 26(104) | 36(108) | 18(36) | 20(20) | 100(268) | 2.69 | 1.072 |
| Workers continuing Professional development process needs to follow up | 32(128) | 40(120) | 12(24) | 16(16) | 100(288) | 2.88 | 1.037 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| its systematic approaches which are gradual and not once and for all exercise | | | | | | | |
| Inadequate budgetary allocation to workers' professional development limits participation | 38(152) | 54(162) | 4(8) | 4(4) | 100(326) | 3.26 | 0.719 |
| Many workers do not utilize the opportunity of professional development to enhance the systems performance | 48(192) | 42(126) | 8(16) | 2(2) | 100(336) | 3.36 | 0.718 |
| Negative attitudinal disposition work after training | 36(144) | 42(126) | 10(20) | 12(12) | 100(302) | 3.02 | 0.974 |
| Training seen only as organisational support programme not-orgnaisationed indeed | 36(144) | 44(132) | 14(28) | 6(6) | 100(310) | 3.10 | 0.859 |
| **Grand Mean** | | | | | | **3.05** | **0.871** |

Cut-off Mean = 2.50; N=100

Table 5 above shows the mean and standard deviation scores respectively on the factors limiting the economies of scale of workers' continuing professional development in the university system. The results indicate that, the cut-off mean of 2.50 is below all the mean sores for all the eight variables measured. Besides, the grand mean score of the factors (3.05) is also greater than the cut-off mean score. This implies that certain variables exist as constituting limiting factors to the economies of scale of workers' continuing professional development in the university system.

**Discussion of Findings**

The crux of this research on workers' continuing professional development is the attainment of professionalism in practice. Non-teaching staff in various universities are also regarded as professionals in their various disciplines. As professionals, there is a distinguished level of competence and skills expected. This is because, a profession is associated with:
i.      skill based on theoretical knowledge, the provision of training and education;
ii.     a test of the competence of members administered by a professional body;
iii.    a formal professional organisation which has the power to regulate entity to the     profession; and

iv.     a professional code of conduct (Armstrong, 2003:75).

Therefore, the exposure of non-teaching staff to various forms of continuing professional development programmes is a certification of the first criteria of professionalism.  This is on account that, professionalism which depicts the practice of specific skills, based on a defined body of knowledge can only be relevant when it contributes to the workers efficiency through the demonstration of skill competence, and performance improvement.

The result of this study has further lay credence to the fact that continuing professional development usually enhance process skills, leadership skills task skills, effectiveness skills, team functioning skills and system thinking skills which Jasper (2006) considered as consistent with optimization of resources (human and materials) as well as attainment of efficiency in workers' performance.  This result is therefore consistent with some of the goals for which workers' continuing professional development in many organizations inclusive of the university system are set.

Meanwhile the research also found out the variants of workers' continuing professional development among non-teaching staff in the university system. Consistently, the finding supports the submission of the National Professional Development Centre (2008) that identified among others the following:

*Coaching*: - to enhance a workers' competencies in a specific skill area by providing a process of observation, reflection and action;

*Mentoring*:-   to promote a worker's awareness and refinement of his or her own professional development by providing and recommending structured opportunities for reflection and observation.

*Reflective supervision*:- to support, develop, and ultimately evaluate the performance of employees through a process of inquiry that encourage their understanding and articulation of the rationale for their own practices.

Hence, through seminars, workshops conferences and on-the-job training, workers are exposed to skills competence in their various professions within the synergy of the university system.  With respect to the impact of workers' continuing professional development on the economies of scale of university management, recall that, a positive economies of scale was recorded.  This supports the submission of Mc Ber (2000) cited in Anderson (2004) who noted that, in professional development of initial training, and continuous professional development, capacity is aimed at improving and sustaining commitment to do everything possible for the attainment of the vision and mission statement of the system.

The impact also includes development expectations that are characterized by initiatives, information seeking skills and drive for improvement. These impact reduce wastages, promotes effectiveness, encourage efficiency and enhance significant improvement in performance index among the workers that are exposed to training and re-training.  The findings also lay credence to the report of Purcell, Kinne,

Hutchinson, Bayton & Swart (2005) on the impact of continuing professional development that noted among others that, it contributes to:

*the development and successful implementation of high performance work practices, particularly those concerned with job and work design, flexible working, resourcing (recruitment, selection and talent management), employee development (increasing skills and extending the skills base), reward, and giving employees a voice (Cited in Armstrong, 2003:16)*

In otherwords, continuing professional development significantly impact on the economies of scale of university management through the promotion of high performance work practices, enhanced flexible working situation, increasing skills and extension of the skills base of the workers. All these translate to the quantum of returns in terms of the development of high level manpower through efficient service delivery. Besides, a measure of the performance system must also be defined in the context of the available skills. Continuing professional development is concerned with staff commitment to work, improved performance and self-development skills which are not exclusive of careers and employability service in the university system.

Finally, there are limiting factors to workers' continuing professional development which are either personally or institutionally driven respectively. Such personal factors are not strictly isolated from the human behavioural disposition measured in terms of indifferent attitude, inability to utilize training opportunities and outsight refusal to attend continuing professional development programmes. These negate total commitment and the dedication expected of the workers. Institutionally, poor budgetary allocation and inconsistency in the policy driving the process significantly limit the benefits of workers continuing professional development in the university system. Beside, poor evaluation capacity coupled with the non-prioritization of workers' continuing professional development constitute negating factors in the process.

**Conclusion**

This study on economies of scale of workers' continuing professional development is based on situational variables from selected universities in South-south, Nigeria. The research has underscored that, workers' continuing professional development is an on-going human resource development practice by the university system. Beside the fact that workers' participate in the programmes, the benefits in terms of optimization of resources, attainment of efficiency, and its significant contribution to effective management of the university system, it is also obvious that the economies of scale of the process to the internal efficiency of the university system is very significant. Although there are some human and institutionalized factors that impact negatively on the process, these are however not significant to the economies of scale of the process.

**Recommendations**

Arising from the findings of this study, the following recommendations are put up as options:

1.      There is the need to maintain a statutory budget for staff professional development within the university internally generated revenue structure without        dependence on external agencies.  This will guarantee continuity in the process.

2.      There is the urgent need to motivate staff to actively participate in workers' continuing      professional development.  The process should encourage more of        mentoring,       technical assistance on the job, coaching and reflective supervision.

3.      There is the need to institute an evaluative system for workers' continuing professional development programmes in the university system.

4.      Rewards are critical to the sustenance of workers' continuing professional development.

5.      Comparative efficiency of the variants of workers' continuing professional development must be periodically determined among the members of non-teaching        staff of universities in South-South, Nigeria.

## References

Anderson, L. W. (2004). *Increasing teachers effectiveness* (2nd ed.) Paris. UNESCO UEP.

Armstrong, M. (2003). *A handbook of human resource management practice* (9th ed.). London & sterling. Kogan Page.

Golding, L. & Gray, I (2006). *Continuing professional development for clinical psychologists. A practical handbook.* The British Psychological society. Oxford: Blackwell Publishing.

Jasper, M. (2006). *Professional development, reflection and decision-making.* Oxford, Blackwell Publishing.

National Professional Development Centre on Inclusion (2008). *What do we mean by professional development in the early childhood field*? Chape Hill: The University of North-Carolina, EPG Child Development Institute.

Purcell, J; Kinnre, N; Hutchinson, S: Rayton, B & Swart, J (2003). *Understanding the people and performance link*: Unlocking the black box. London; CIPD.

Speck, M. & Knipe, C. (2005). *Why can't we get it right? Designing High-quality professional development for standards-based schools* (2nd. Ed.). Thousand Oaks: Conwin Press.

**Contact email:** jonathan.oghenekohwo@ndu.edu.ng/ joeoghenekohwo@gmail.com

# Utilisation of Resources As Correlates of Undergraduates' Academic Achievement in Cataloguing and Classification in Library Schools in Southern Nigeria

Samuel Oke Ogunniyi, Adeyemi College of Education, Nigeria
Kenneth Ivo Ngozi Nwalo, University of Ibadan, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
The study focused on utilisation of resources as correlates of undergraduates' academic achievement in cataloguing and classification in library schools in Southern Nigeria. Cataloguing and classification are still compulsory courses in library schools in Nigeria. Despite the importance of the courses in the library profession and schools, it was observed from library educators and students that there is apathy for the courses in the library schools. Some graduates in the library schools are not interested to work in the cataloguing section of the library. This may be as a result of non-provision or non-utilisation of basic resources in teaching and learning processes. Survey research design of correlational type was adopted in the study. Purposive sampling technique was used in the study to select all the 550 final year students and 18 lecturers teaching cataloguing and classification in library schools in Southern Nigeria. The research instruments that were used for data collection in this study are two questionnaires for students and lecturers, achievement test for students and observation schedule on availability of resources. Descriptive statistics, including frequencies, percentage, mean, and standard deviation was used to answer the research questions while Pearson's Product Moment Correlation coefficient was used to test the hypothesis. Results from the study among others revealed that:all the library schools in Southern Nigeria have basic cataloguing tools for learning while majority of the library schools have no cataloguing laboratory and laboratory instructor and assistant, and there was positive and significant relationship between resource utilisation and academic achievement of undergraduates in cataloguing in library schools in Southern Nigeria. The study recommends among others that the management of the schools should provide adequate and independent laboratory for cataloguing and classification in the library schools in Nigeria and employ cataloguing and classification instructors in the cataloguing laboratory.

iafor

The International Academic Forum
www.iafor.or

## Introduction

Organisation of resources is very important in the library for easy information access and retrieval. Systematic organisation of resources in the library is achieved through cataloguing and classification and other activities. The library catalogue is the end product of cataloguing. The catalogue may be in a variety of forms like card, book, microform and online. According to Edoka (2000), the need of the user or potential user of the library is of principal importance in producing the library catalogue. Taylor and Miller (2006) gave the following functions of a library catalogue to the users:

> the functions of the library catalogue are to enable a person to
> find a book of which either the author, title and subject is known
> and to show what the library has by a given author, on a given
> subject and in a given kind of literature. It also functions to assist
> in the choice of a book as to the edition and its character (p.7).

Information resources have been organised from antiquity to date to facilitate access to and use of library resources. Ancient civilisation recorded lists of books onto tablets and libraries kept records of their holdings during the Middle Ages. Development of the printing press in the 15th Century made it easy for the creation of bibliography arranged in chronological order with an alphabetical author index by Konrad Gesner (Taylor and Miller, 2006). According to Hunter and Bakewell (1991), there were some attempts at systematisation of cataloguing methods such as the cataloguing rules of Conrad Gesner (1548), Florianus Treflerus (1560), Andrew Maunsell (1595) and John Durie (1650). It was further revealed by Hunter and Bakewell that Maunsell, a London bookseller, introduced entry under surname, entry of anonymous works under title or subject or both. The first national cataloguing code was put in place by France government after the French Revolution in the 18th Century.

Despite the importance of cataloguing in librarianship, it was observed that many undergraduates continue to record poor academic achievement in cataloguing courses in library schools. This could likely be due to resource utilisation, teaching methods, time allocation and attitude of undergraduates in library schools in Southern Nigeria. Resources are very important in teaching and learning processes. Farombi (2001) defines resources as the sum total of everything that goes into any given educational system. The author classified resources into financial, human, material and instructional time resource. In a related development, Adeogun and Osifila (2011) classified educational resources into human, material, physical and financial. The resources under this study consist of human, material and physical facilities. The human resource in cataloguing and classification consists of lecturers and laboratory instructors. Lecturers and cataloguing laboratory instructors are very important in facilitating teaching and learning process in the library school. Farombi (2001), citing Manson (1981) stated that the quality of teachers is an important input in effective learning since quality output demands quality input. Both teachers and laboratory instructors are very germane in achieving high academic achievement of undergraduates in educational institutions.

Material resource needed for teaching and learning cataloguing and classification include textbooks and cataloguing tools. These materials are needed to enhance teaching and learning of the courses. Adeogun and Osifila (2011) assert that, the availability of educational resources is very important because of their role in the achievement of educational objectives and goals. Teaching and learning effectiveness and achieving the required learning outcome must be balanced with adequate resources in any educational set up. Resources provided for teaching and learning in any subject or course must be available and be made use of. Lecturers are expected to provide reading lists of textbooks relevant to the courses being taught.

Physical facility in this study consists of cataloguing laboratory and computer laboratory. Owoeye and Yara (2011) described laboratory as a room or building specially built for teaching by demonstration of phenomenon into practical terms. Cataloguing laboratory is an essential physical resource that should be provided for demonstrating theories learnt in teaching and learning cataloguing and classification in the classroom. According to Aina (2007), cataloguing and classification tools must be made available to students for practice on a regular basis in the indexing/cataloguing laboratory. In support of Aina's assertion, opportunity should be given to the students to practice regularly with cataloguing and classification tools in the cataloguing laboratory. Since cataloguing and classification are practical courses, students should be given the opportunity to make use of the tools in the laboratory on a regular basis to enable them to make use of the tools which may enhance their academic achievement. Furthermore, Adesoji (2008) citing Farounbi (1998) stated that students tend to understand and recall what they see more than what they hear as a result of using laboratories in the teaching and learning of science. Therefore, provision and utilisation of cataloguing laboratory and tools may lead to high academic achievement of the undergraduates in cataloguing and classification courses in library schools.

**Statement of the Problem**

The main problem of this study is poor academic achievement of undergraduates in cataloguing and classification in library and information science schools in Southern Nigeria. Systematic organisation of information resources in the library facilitates their access and use is achieved through cataloguing. Cataloguing and classification are core courses in librarianship in library schools in Nigeria. Despite the importance of the courses in the library schools, it was observed that many undergraduates are known to record poor academic achievement in cataloguing and classification in the library schools. Interaction with library educators and students revealed that undergraduates portrays cataloguing and classification as been difficult and were not able to have high score in courses. This is a major concern of the literature on cataloguing and classification education. It has been observed also that some undergraduates in the library schools in Nigeria each year fail to graduate because of poor performance in cataloguing and classification courses. This poor academic achievement of the undergraduates may be due to non-provision or non -utilisation of appropriate resources in the library school.

## Objectives of the Study

The specific objectives for the study are to:

    i.    find out resources available for teaching and learning cataloguing and classification courses in library schools in Southern Nigeria;
    ii.   find out the resources that are utilised in teaching and learning cataloguing and classification courses in library schools in Southern Nigeria;
    iii.  ascertain the level of academic achievement of undergraduates in cataloguing and classification in library schools in Southern Nigeria;

## Research Questions

The following research questions were answered in the study:
1. What are the resources available for teaching and learning cataloguing and classification courses in library schools in Southern Nigeria?
2. Which resources are highly utilised in teaching and learning cataloguing and classification in library schools in Southern Nigeria?
3. What is the level of academic achievement of undergraduates in cataloguing and classification in library schools in Southern Nigeria?

## Hypothesis

This null hypothesis was tested in the study at 0.05 level of significance:
**HO1**    There is no significant relationship between resource utilisation and academic
           achievement of undergraduates in cataloguing and classification

## Review of related Literature

Resources are subdivided into three in this study namely human, material and physical facility. Human resources are unique educational input necessary for the development of skill acquisition and literacy of the students (Ekundayo and Alonge, 2012). In cataloguing and classification education in library schools lecturers/teachers and cataloguing instructor/assistant are needed in imparting relevant knowledge on students when teaching and assisting students to use the laboratory and equipment/tools in understanding the theories learnt in the classroom through practical experiences respectively. The success of any organisation is a resultant effect of quantity and quality of its workforce (Adegbemile, 2011).

Teachers have been revealed as very important in teaching and learning processes. What then is the correlation between the use of a qualified teacher and students' academic achievement?  Akiri and Ugborugbo (2009) discovered that effective teachers produced better performing students. Similarly, Ugbe and Agim (2009) found that there is a significant relationship between teachers' competence and students' academic performance in Chemistry. Chemistry students taught by qualified teachers performed significantly better than those taught by unqualified teachers. Ugbe and Agim further stated that chemistry students taught by experienced teachers

performed significantly better than those by inexperienced teachers. In a related development, Adegbemile (2011) discovered that there is a significant relationship between teachers' quality and students' academic performance. Aiyelabegan (2012) found that students taught by qualified and experienced Physics teachers performed better than those taught by less qualified teachers. Similarly, Kola (2012), citing Apata (2007) stated that students taught by qualified and experienced teachers performed better than students taught by unqualified and inexperienced teachers. Teachers are therefore supposed to be professionally/academically qualified and have years of teaching experience to enable their students performed well during examinations. Furthermore, information resource instructor if employed in a well-furnished laboratory may significantly affect the academic achievement of undergraduates in cataloguing courses. Ekundayo and Alonge (2012) asserted that studies on the relationship between human resources and academic achievement have shown that human resources enhance academic achievement of undergraduates.

Material resources are very important in the teaching and learning process. The most important area in educational resource materials provision is in textbook production. Textbooks play a major role in the process of improving the overall effectiveness of an education system (Bojuwoye, 1992). Textbook is a very good source that students will resort to after the teacher's might have imparted the required knowledge. Owoeye and Yara (2011) citing Altbach (1983) averred that, nothing has ever replaced the printed word as the key element in educational process and, as a result, textbooks are central to schooling at all levels. Dahar and Faize (2011) opined that textbook is the nucleus of all the learning activities related to a particular curriculum. Dahar and Faize listed why textbook is important in teaching and learning process as follows: teacher is not a sufficient source of knowledge for reasons such as large class and time factor etc; student has to improve the knowledge received from teacher by reading the textbook; textbook plays a vital role in imparting knowledge to the students in the third world countries; and there is no choice other than textbook in many developing countries.

Another important information resource needed for effective teaching and learning cataloguing and classification in library and information schools is cataloguing and classification tools. A cataloguer requires certain tools before a bibliographic record of a document can be prepared (Aina, 2004). Library schools are expected to make all the various cataloguing and classification tools available and utilised by students. Igbeka inadvertently did not mention Anglo American Cataloguing Rules 2 (AACR2) which is a very important cataloguing tool in the library. In addition, Aina (2004) listed the tools as Anglo American Rules 2, Subject headings list (Library of Congress Subject Headings, Sears List of Subject Headings or a Thesaurus), Classification schemes (Dewey Decimal Classification, Library of Congress Classification etc), Cutter Tables, Filing Rules (ALA Filing Rules), Authority files and Reference books (gazetteer, atlases, encyclopaedia and dictionaries). These tools are important in teaching and learning cataloguing and classification.

Library and information schools are expected to provide them in this 21[st]Century in order to balance theory with practical. Cataloguing tools represent the laboratory equipment in library schools. Inadequacy or lack of facilities hinders students' exposure to practical skills; materials, tools and standard laboratory are lacking in our schools, hence poor teaching and learning process (Etuk, 2011). Etuk's assertion is

correct because, non-provision and utilisation of cataloguing tools may lead to poor teaching and learning process in library and information schools. Students are expected to turn the theories and principles learnt in the classroom into practice and where they are not available or used in the laboratory, students may not be able to apply the theories and principles.

On the relationship between information resources and academic achievement, Owoeye and Yara (2011) found that a textbook is an important tool for academic achievement. In assessing the relationship between the provision/utilisation of textbooks and academic achievement of students, Dahar and Faize (2011) discovered that there is a significant correlation between the use of textbooks and the academic performance of both Arts and Science students in Punjab (Pakistan). In the study of secondary schools students' performance in Mathematics from Zimbabwe by Wadesango and Dhliwayo (2012), it was discovered that 10 (100%) of the teachers indicated that textbook availability enhances pupils' performance. The implication is that if teachers and pupils have an adequate supply of textbooks, there is likely to be an improvement in students' achievement in Mathematics. Furthermore, Wadesango and Dhliwayo (2012) citing Lance (2002) stated that, availability of textbooks is one of the most important factors that influence academic achievement. It is worthy of note that textbooks should not only be available but must be utilised by students before any meaningful changes could be achieved in their academic achievement. If textbooks on cataloguing are available and undergraduates refuse to utilise them, it may have adverse effect on their academic achievement in library schools.

In her study titled "Effect of Availability and Utilization of Physics Laboratory Equipment on Students' Academic Achievement in Secondary Physics", Bello (2012) established that there is significant relationship between the utilization of Physics laboratory equipment and academic achievements of students in Physics, which revealed that utilisation of Physics laboratory equipment, have influence on the academic achievements of students' in Physics. On the effect of laboratory equipment on students' performance, Dahar and Faize (2011) found that the relationship of the availability of most of the science laboratory equipment, apparatus or material and chemicals with academic achievement of students in Punjab (Pakistan) is positively significant. Also, the Stepwise Regression analysis indicates that mean of the availability of laboratory equipment, apparatus or material and chemicals has a significant impact. Availability and use of laboratory tools may affect the academic performance of students in cataloguing and classification courses.

Similarly, Jebson (2012) in his study discovered that there was a significant relationship between adequacies of Biology and Chemistry laboratory equipment and students' academic achievement in Biology and Chemistry. Furthermore, Macmillan and Mannesseh (2012) discovered from their study that students exposed to practical Physics knowledge achieved higher than students who were not exposed to practical Physics knowledge. In bringing textbooks and cataloguing and classification tools together as instructional resources in library school, it may be concluded that provision and use of them may affect academic achievement of undergraduates in library schools. The various findings show that there is a significant relationship between utilisation of laboratory equipment and academic achievement of science students. It could be deduced from the findings that utilisation of cataloguing and

classification tools in the laboratory may significantly affect the achievement of undergraduates in library schools.

Another important resource in the teaching and learning of cataloguing in any educational institution is physical facility. Laboratory is one of the physical facilities require for teaching and learning subjects or courses that require practical demonstration. Laboratory is a room or building used for scientific research, experiments, testing etc (Oxford Advanced Learner's Dictionary of Current English, 2006). Laboratory is mostly used in teaching and learning science subjects. Laboratory work is indispensable to the understanding of science (Dan-Ologe and Shittu, 2012). In teaching and learning cataloguing and classification courses, laboratory is being used. According to Mohammed (2008) there is no doubt that the library and information professionals need to be practical in orientation and actions, there is the need for relevant laboratories in library and information science (LIS) schools. Cataloguing and classification courses require laboratory where cataloguing tools are kept and used. Dan-Ologe and Shittu (2012) citing Reid and Shah (2004) gave the following general importance of laboratory: supporting or strengthening theoretical knowledge; experiencing the pleasure of discovery and development of their psychomotor skills; increasing creative thinking skills; developing manual dexterity by using tools and equipment; and allowing students to apply skills instead of memorising.

The general importance of laboratory can be applied to students using cataloguing laboratory in library schools. It is therefore an important resource in undergraduates learning cataloguing in library schools. Haider (2006) discovered that there was poor laboratory facility in terms of equipment in the teaching of cataloguing and classification in Pakistani library schools. Poor facility in term of cataloguing tools may lead to students' not being able to use the tools and at the end may lead to low academic performance in the course. In the Department of Library and Information Science, University of Karachi, there is a separate cataloguing and classification laboratory. According to the University of Karachi (2006), the laboratory is equipped with latest editions of Dewey Decimal Classification Scheme, Library of Congress Classification Scheme, Library of Congress Subject Heading List and Sears List of Subject Heading List. An ideal cataloguing and classification laboratory was found in the University of Karachi library and information school. Library schools should therefore emulate this good development which may enhances high academic achievement in cataloguing courses.

In addition to cataloguing and classification laboratory, another important physical facility needed for teaching and learning cataloguing in library school is computer laboratory. Recent changes in the curricula have been the adjustment and integration of courses, the application of computer technology, the update of course contents, and the improvement of teaching methods in cataloguing and classification education of Chinese Library Schools (Ma, 2005).

There are various studies that support the use of laboratory resulting into high academic achievement of students. Adesoji and Olatunbosun (2008) found that a well-equipped laboratory can positively change teachers' attitude to Chemistry teaching, which will in turn enhance students learning outcomes in Chemistry. In the area of students' achievement in Mathematics, Odigwe (2011) stated that, there are

indications from personal observations that students exposed to the use of Mathematics laboratory performed better than those students, who were taught without the use of Mathematics laboratory. In defending her submission Odigwe reasoned that, this could be due to the fact that teaching mathematics by making the students to conduct practical work to investigate theorems assisted them in understanding the concepts better. On the relationship between the use of ICT and students' academic achievement, Arinze, Okonkwo and Iwunor (2012) revealed that ICT raises the interest and performance of students in Social Studies. The use of cataloguing laboratory and ICT by undergraduates may likewise enable them to have high academic achievement in library schools.

On the relationship between resources utilisation and academic achievement, Okemakinde, Adedeji and Ssempebwa (2008) found that there was significant relationship between the utilisation of resources allocated to the technical colleges and their academic achievement. From available literature available to the researcher, there is no study on the relationship between resources utilisation and academic achievement of undergraduates' in cataloguing in library schools in Nigeria, it is therefore imperative to fill the gap in this study.

**Methodology**

The descriptive research design of the correlational type was used in the study. The study is correlational because it aims at discovering the relationship between the variables under study. The population of the study consists of all final year students and lecturers teaching cataloguing in library schools in Southern Nigeria. Southern Nigeria consists of three geopolitical zones: South-East, South-South and South-West. The study population of the students and lecturers were 550 and 18 respectively. The study adopted purposive sampling technique to select all 400 level undergraduates and lecturers teaching cataloguing and classification in library schools in Southern Nigeria. The 400 level students were selected because of their level of exposure to cataloguing and classification courses, having offered them for, at least two years previously. The lecturers were selected because they are in vantage position to provide information on the resources used for teaching cataloguing. The research instruments that were used for data collection in this study are two questionnaires for students and lecturers, achievement test for students and observation schedule on availability of resources.

The content validity of the instruments was established by a critical review by experts comprising three lecturers in the Faculty of Education and the Chief Cataloguer of Kenneth Dike Library, University of Ibadan. The suggestions from these scholars on clarity, relevance and specificity were included into the questionnaire and achievement test. The instruments were pre-tested to ensure their reliability. The 400 level students in the Department of Library and Information Science, University of Ilorin, Ilorin were used to test the reliability of the instruments. This university is not part of the universities selected for the study. The instruments on availability and use of resources, and cataloguing and classification achievement test were analysed using the Cronbach alpha. The Cronbach alpha reliability coefficient revealed the following reliability levels: Availability of Resources Scale 0.71, Students' Use of Resource Scale 0.91; Students' Achievement Test in Cataloguing 0.63; Lecturers' Resource Utilisation Scale 0.81. These values that were obtained made the instruments to be

considered reliable. The data collected were analysed using the Statistical Package for Social Science (SPSS). Descriptive statistics, including frequencies, percentage, mean, and standard deviation were used to answer the research questions while inferential statistics such as Pearson's Product Moment Correlation coefficient was used to test the hypothesis.

## RESULTS OF THE STUDY

### Questionnaire Administration and Response Rate

Response rates to the two research questionnaires (one for undergraduates and the other for the lecturers) are presented in Tables 1 and 2 respectively.

**Table 1: Undergraduates' Questionnaire Distribution and Response Rate**

| S/N | Name of Library School | No Administered | No Returned | No Valid | Percent |
|-----|------------------------|-----------------|-------------|----------|---------|
| 1 | Abia State University, Uturu | 41 | 28 | 28 | 68.3 |
| 2 | Delta State University, Abraka | 152 | 121 | 121 | 79.6 |
| 3 | Enugu State University of Science and Technology, Agbani, Enugu | 20 | 11 | 11 | 55 |
| 4 | Imo State University, Owerri | 79 | 43 | 43 | 54.4 |
| 5 | Nnamdi Azikiwe University, Akwa | 45 | 38 | 38 | 84.4 |
| 6 | Tai Solarin University of Education, Ijebu-Ode | 83 | 49 | 49 | 59 |
| 7 | University of Ibadan, Ibadan | 60 | 51 | 51 | 83.3 |
| 8 | University of Nigeria Nsukka | 43 | 35 | 35 | 81.4 |
| 9 | University of Uyo | 275 | 21 | 21 | 74.1 |
|   | Total | 550 | 397 | 397 | 72.0 |

Table 1 shows that out of 550 questionnaire administered to the undergraduates in library schools in Southern Nigeria, 397 (72.2%) were returned and found usable for analysis.

**Table 2: Lecturers' Questionnaire Distribution and Response Rate**

| S/N | Name of Library School | No Administered | No Returned | No Valid | Percent |
|---|---|---|---|---|---|
| 1 | Abia State University, Uturu. | 3 | 2 | 2 | 66.7 |
| 2 | Delta State University, Abraka. | 2 | 2 | 2 | 100 |
| 3 | Enugu State University of Science and Technology, Agbani, Enugu. | 2 | 1 | 1 | 50.0 |
| 4 | Imo State University, Owerri. | 2 | 2 | 2 | 100.0 |
| 5 | Nnamdi Azikiwe University, Awka. | 1 | 1 | 1 | 100.0 |
| 6 | Tai Solarin University of Education, Ijebu-Ode. | 3 | 2 | 2 | 66.7 |
| 7 | University of Ibadan, Ibadan. | 3 | 3 | 3 | 100.0 |
| 8 | University of Nigeria, Nsukka. | 1 | 1 | 1 | 100.0 |
| 9 | University of Uyo, Uyo. | 1 | 1 | 1 | 100.0 |
| | Total | 18 | 15 | 15 | 83.3 |

Table 2 shows that out of 18 copies of the questionnaire administered to the lecturers teaching cataloguing in library schools in Southern Nigeria, 15(83.3%) were retrieved and found usable for the analysis.

**Demographic information of Respondents**

This section focused on the demographic information of the respondents. Table 3 is the gender distribution of the undergraduates in library schools in Southern Nigeria.

**Table 3: Gender Distribution of Undergraduates**

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 140 | 35.3 |
| Female | 257 | 64.7 |
| Total | 397 | 100.0 |

Table 3 revealed that 257 (64.7%) of the undergraduates respondents' are female while 140 (35.3%) are male. The study showed that majority of the respondents is female. Table 4 consists of rank, highest qualification, certificate in education and years of work experience of lecturers in library schools in Southern Nigeria.

Table 4 presents ranks, highest qualification, certificate in education and years of work experience of lecturers in library schools in Southern Nigeria.

**Table 4:  Demographic Variables of the Lecturers Teaching Cataloguing**

|  | Items | Frequency | Percentage |
|---|---|---|---|
| Rank | Assistant Lecturer | 1 | 6.7 |
|  | Lecturer 11 | 1 | 6.7 |
|  | Lecturer 1 | 3 | 20.0 |
|  | Senior Lecturer | 5 | 33.0 |
|  | Reader | 3 | 20.0 |
|  | Professor | 2 | 13.3 |
|  |  | 15 | 100.0 |
| Highest Qualification | MLS/MLIS | 4 | 26.7 |
|  | MSC  Inf Sc | 2 | 13.3 |
|  | Ph.D | 9 | 60.0 |
|  |  | 15 | 100.0 |
| Certificate in Education | None | 8 | 53.3 |
|  | NCE | 1 | 6.7 |
|  | BED | 5 | 33.3 |
|  | MED | 1 | 6.7 |
|  |  | 15 | 100.0 |
| Years of Work Experience | 0-5 | 1 | 6.7 |
|  | 6-10 | 1 | 6.7 |
|  | 11-15 | 4 | 26.7 |
|  | 16-20 | 5 | 33.3 |
|  | Above 20 | 4 | 26.7 |
|  |  | 15 | 100.0 |

Table 4 presents ranks, highest educational qualification, certificate in education and years of work experience of lecturers teaching cataloguing in library schools in Southern Nigeria.  The highest group of respondents was the senior lecturer cadre 5 (33.3%) while, the least group was an assistant lecturer 1 (6.7) and lecturer II (6.7%) cadres. Lecturers who hold the Ph.D 9(60.0%) were in the majority.  Majority of the lecturers 8 (53.3%) did not have any certificate in education. Teaching qualification is very important in teaching and learning processes. National Universities Commission and Teachers' Registration Council of Nigeria emphasise the need for teachers to have teaching qualification in all the levels of education in Nigeria in order for teachers to know and use various teaching methods in improving learners' response to teaching. Findings reveal that, majority of the lecturers teaching cataloguing in library schools 14 (93.3%) had six (6) years and above, work experience. The implication of this is that, lecturers teaching cataloguing in library schools have reasonable years of teaching experience though most of them were not pedagogically trained.

**Research Question 1:** Which resources are available for teaching and learning cataloguing and classification courses in library schools in Southern Nigeria

**Table 5: Available Resources for Learning Cataloguing**

| S/N | Items | Not Available | Available |
|---|---|---|---|
| 1 | Lecturers. | 25 6.3% | 372 93.7% |
| 2 | Cataloguing and Classification Laboratory Instructor. | 149 37.5% | 248 62.5% |
| 3 | Cataloguing and Classification Laboratory. | 156 39.3% | 241 60.7% |
| 4 | Computer Laboratory. | 113 28.5% | 284 71.5% |
| 5 | Anglo American Cataloguing Rule2. | 84 21.2% | 313 78.8% |
| 6 | Library of Congress Subject Headings. | 68 17.1% | 329 82.9% |
| 7 | Sears List of Subject Headings. | 87 21.9% | 310 78.1% |
| 8 | Dewey Decimal Classification Scheme. | 106 26.7% | 291 73.3% |
| 9 | Library of Congress Classification Scheme. | 84 21.2% | 313 78.8% |
| 10 | MARC 21 Coding Standard. | 186 46.9% | 211 53.1% |
| 11 | Cutter Table. | 127 32.0% | 270 68.0% |
| 12 | Resource Description and Access. | 164 41.3% | 233 58.7% |
| 13 | Library of Congress CD-MARC. | 180 45.3% | 217 54.7% |
| 14 | Library of Congress Union Catalogue (NUC). | 169 42.6% | 228 57.4% |
| 15 | ALA Filing Rules. | 87 21.9% | 310 78.1% |
| 16 | Cataloguing and Classification Textbooks. | 69 17.4% | 328 82.6% |

Table 5 revealed that majority of the students stated that all the sixteen (16) listed resources were available in their library schools. The highest number of resources available for learning cataloguing are lecturers 372 (93.7%), Library of Congress Subject Headings 329 (82.9%) and Cataloguing and classification textbooks 328(82.6%). Also, the study revealed that over 40% of students stated that MARC 21 coding standard 186 (46.9%), CD-MARC 180 (45.3%), LC Union Catalogue 169 (42.6%) and Resource Description and Access (RDA)164 (41.3%) were not available

in their library schools. The implication is that students would not be able to make use of these resources since they were not available.

**Table 6: Lecturer's Response on Availability of Human and Physical Resources in the Library School**

| S/N | Items | Yes | No |
|---|---|---|---|
| 1. | Cataloguing laboratory instructor/assistant is available in the library school. | 10(66.7) | 5(33.3) |
| 2. | Cataloguing laboratory is available in the library school. | 12(80.0) | 3(20.0) |
| 3. | Computer laboratory is available in the library school. | 12(80.0) | 3(20.0) |

Table 6 shows that, majority of the respondents indicated that, cataloguing laboratory assistant 10 (66.7%), cataloguing laboratory 12 (8.0%) and computer laboratory 12 (80.0%) were available in their library schools.

The lecturers' response on the availability of cataloguing tools is presented in Table 7.

**Table 7: Availability of Cataloguing Tools in the Library School**

| Item | Available | Not Available |
|---|---|---|
| Anglo American Cataloguing Rules 2. | 15 (100.0) | - |
| Sears List of Subject Headings. | 15 (100.0) | - |
| Library of Congress Subject Headings. | 15 (100.0) | - |
| Dewey Decimal Classification Scheme. | 15 (100.0) | - |
| Library of Congress Classification Scheme. | 13 (86.7) | 2 (13.3) |
| MARC 21 Coding Standard. | 1 (6.7) | 14 (93.3) |
| Cutter Table. | 12 (80.0) | 3 (20.0) |
| Resource Description and Access. | 1 (6.7) | 14 (93.3) |
| Library of Congress CD-MARC. | 4(26.7) | 11 (73.3) |
| Library of Congress Union Catalogue. | 4 (26.7) | 11 (73.3) |
| ALA Filing Rules. | 13 (86.7) | 2 (13.3) |

From Table 7, finding shows that, 15 (100.0%) respondents stated that Anglo American Cataloguing Rules 2, Sears List of Subject Headings, Library of Congress Subject Headings and Dewey Decimal Classification Scheme were available while 14 (93.3%) respondents indicated that MARC 21 Coding Standard 14 (93.3%), Resource Description and Access (RDA) 14 (93.3%), Library of Congress CD MARC 11 (73.3%) and Library of Congress Union Catalogue 11 (73.3%) were not available in their library schools.

**Research Question 2:** Which resources are highly utilised in teaching learning Cataloguing and classification in library schools in Southern Nigeria?

Table 8 discloses the rate of undergraduates' use of resources.

**Table 8: Rate of Undergraduates' Resources Utilisation**

| S/N | Statements | Not Used | Occasionally. Used | Highly Used | Very Highly Used | Mean | S.D. |
|---|---|---|---|---|---|---|---|
| 1 | Lecturers | 35 8.8% | 40 10.1% | 107 27.0% | 215 54.2% | 2.26 | .96 |
| 2 | Cataloguing and Classification Textbooks | 69 17.4% | 101 25.4% | 97 24.4% | 130 32.7% | 1.73 | 1.10 |
| 3 | Library of Congress Subject Headings | 81 20.4% | 112 28.2% | 88 22.2% | 116 29.2% | 1.60 | 1.11 |
| 4 | Anglo American Cataloguing Rule2 | 86 21.7% | 105 26.4% | 98 24.7% | 108 27.2% | 1.57 | 1.11 |
| 5 | Library of Congress Classification Scheme | 87 21.9% | 114 28.7% | 86 21.7% | 110 27.7% | 1.55 | 1.11 |
| 6 | Sears List of Subject Headings | 95 23.9% | 99 24.9% | 104 26.2% | 99 24.9% | 1.52 | 1.11 |
| 7 | Dewey Decimal Classification Scheme | 112 28.2% | 103 25.9% | 80 20.2% | 102 25.7% | 1.43 | 1.15 |
| 8 | ALA Filing Rules | 103 25.9% | 116 29.2% | 86 21.7% | 92 23.2% | 1.42 | 1.11 |
| 9 | Cataloguing and Classification Laboratory Instructor | 125 31.5% | 92 23.2% | 84 21.2% | 96 24.2% | 1.38 | 1.16 |
| 10 | Cutter Table | 121 30.5% | 104 26.2% | 79 19.9% | 93 23.4% | 1.36 | 1.15 |
| 11 | Cataloguing and Classification Laboratory | 135 34.0% | 94 23.7% | 86 21.7% | 82 20.7% | 1.29 | 1.14 |
| 12 | MARC 21 Coding Standard | 147 37.0% | 86 21.7% | 87 21.9% | 77 19.4% | 1.24 | 1.15 |
| 13 | Computer Laboratory | 149 37.5% | 98 24.7% | 63 15.9% | 87 21.9% | 1.22 | 1.17 |
| 14 | Resource Description and Access | 154 38.8% | 87 21.9% | 76 19.1% | 80 20.2% | 1.21 | 1.16 |
| 15 | Library of Congress Union Catalogue(NUC) | 153 38.5% | 100 25.2% | 66 16.6% | 78 19.6% | 1.17 | 1.14 |
| 16 | Library of Congress CD-MARC | 153 38.5% | 97 24.4% | 80 20.2% | 67 16.9% | 1.15 | 1.11 |

Table 8 revealed that majority of the undergraduates highly made use of lecturers $\overline{X}$ =2.26, SD=.96 is one of the human resources, cataloguing and classification textbooks $\overline{X}$ =1.76, SD=1.10 and Library of Congress Subject Headings $\overline{X}$ =1.60, SD=1.11. The use of physical resources like cataloguing and classification laboratory $\overline{X}$ = 1.29, SD=1.116 and computer laboratory $\overline{X}$ =1.22, SD=1.17 were low. Furthermore, it was revealed that the rate of the use of one of the most popular classification schemes in Nigeria: the Dewey Decimal Classification Classification (DDC) Scheme $\overline{X}$ =1.43, SD=1.15 was low.

The implication of the non-utilisation of physical resources by the majority of the undergraduates may be either due to their non-availability or the inadequate time to make use of them. Furthermore, low rate of the use of Dewey decimal classication scheme in the library schools by the undergraduates may affect their academic achievement if practical questions are drawn from the classification scheme during examination or test.

Table 9 presents the response of lecturers on the use of resources.

**Table 9: Lecturers' Use of Resources in Teaching Cataloguing**

| S/N | Statements | Not Used | Occ. Used | Highly Used | Very Highly Used | Mean | S.D. |
|---|---|---|---|---|---|---|---|
| 1 | Library of Congress Classification Scheme. | 2 13.3% | - | 5 33.3% | 8 53.3% | 3.27 | 1.03 |
| 2 | AACR2. | 1 6.7% | 2 13.3% | 5 33.3% | 7 46.7% | 3.20 | .94 |
| 3 | Library of Congress Subject Headings. | 1 6.7% | 1 6.7% | 7 46.7% | 6 40.0% | 3.20 | .86 |
| 4 | Sears List of Subject Headings. | 1 6.7% | 2 13.3% | 6 40.0% | 6 40.0% | 3.13 | .92 |
| 5 | Dewey Decimal Classification Scheme. | 1 6.7% | 4 26.7% | 4 26.7% | 6 40.0% | 3.00 | 1.00 |
| 6 | Textbooks. | 3 20.0% | 2 13.3% | 3 20.0% | 7 46.7% | 2.93 | 1.22 |
| 7 | Filling rules. | 2 13.3% | 5 33.3% | 5 33.3% | 3 20.0% | 2.60 | .99 |
| 8 | Library of Congress Union Catalogue (NUC). | 8 53.3% | 4 26.7% | 3 20.0% | - | 1.67 | .82 |
| 9 | Resource Description and Access. | 13 86.7% | - | 1 6.7% | 1 6.7% | 1.33 | .90 |
| 10 | Library of Congress CD-MARC. | 12 80.0% | 2 13.3% | - | 1 6.7% | 1.33 | .82 |
| 11 | MARC 21 Coding Standard. | 12 80.0% | 2 13.3% | 1 6.7% | - | 1.27 | .59 |

Table 9 reveals that the highly used resources by lecturers' in teaching cataloguing in library schools were the Library of Congress Classification Scheme $\overline{X}$ =3.27,

SD=1.03; the Anglo American Cataloguing Rules 2 $\overline{X}$ =3.20, SD=.94; the Library of Congress Subject Headings $\overline{X}$ =3.20, SD=.86; the SearsList of Subject Headings $\overline{X}$ =3.13, SD=.92 the Dewey Decimal Classification Scheme $\overline{X}$ =3.00, SD=1.00; Textbooks $\overline{X}$ =2.93, SD=1.22 and ALA Filing Rules $\overline{X}$ =2.60, SD=.99. The use of these resources by lecturers would result into effective teaching of cataloguing in library schools.

**Research Question 3:** What is the level of academic achievement of undergraduates in cataloguing in library schools in Southern Nigeria?

The level of academic achievement of the undergraduates in the library schools is presented in Table 10

**Table 10: Academic Achievement of Undergraduates in Cataloguing**

| Achievement | Frequency | Percentage |
|---|---|---|
| Low (0-19) | 117 | 29.4 |
| Average (20-34) | 261 | 65.7 |
| High (35 and above) | 19 | 4.8 |
| Total | 397 | 100.0 |

Table 10 shows that majority of the respondents' academic achievement in cataloguing was average 261 (65.7%).

**Table 11: Relationship between Resource Utilisation and Academic Achievement of Undergraduates in Cataloguing**

| Variable | N | Mean | Std. Dev. | Df | R | P | Remark |
|---|---|---|---|---|---|---|---|
| Resource Utilisation | 397 | 23.1184 | 12.6833 | 395 | .849** | .000 | Sig. |
| Academic Achievement | 397 | 23.8942 | 6.8279 | | | | |

* Sig. at 0.05 level

Table 11 reveals that correlation coefficient between resource utilisation and academic achievement of undergraduates in cataloguing was significant (r = .849**, N= 397, P < 0.05). This result implies that there is positive and strong relationship between resource utilisation and academic achievement of undergraduates in cataloguing. Therefore, the null hypothesis is rejected.

**Results of the Observation on Availability of Resources**

The following were observed in the library schools during the study: availability of cataloguing laboratory, cataloguing tools, cataloguing assistant/instructor and computer laboratory in library schools in Southern Nigeria. The result of the observation is as follows:

Cataloguing laboratory was available at Nnamdi Azikiwe University, Akwa (NAU), Tai Solarin University of Education, Ijagun (TASUED), University of Nigeria

Nsukka (UNN) and University of Uyo (UNIUYO) library schools while there were no separate cataloguing laboratory in Abia State University, Uturu, Delta State University, Abraka (DELSU), Enugu State University of Science and Technology, Enugu (ESUT), Imo State University, Owerri (IMSU), and University of Ibadan (UI) library schools. In the University of Ibadan for example, there is a place designated as cataloguing laboratory many years ago but cataloguing tools were kept in the Departmental library from where they are taken to the laboratory whenever needed for practicals and returned thereafter.

There were basic cataloguing tools like Anglo American Cataloguing Rules 2, Library of Congress Subject Headings, Sears List of Subject Headings, Dewey Decimal Classification Scheme, Library of Congress Classification Scheme etc in NAU, UNN and UNIUYO cataloguing laboratory. Furthermore, there were basic cataloguing tools in ESUT, IMSU and UI departmental libraries. It was observed that IMSU called their departmental library cataloguing laboratory/departmental library. There are librarians in the departmental libraries of ESUT, IMSU and UI.

There was cataloguing laboratory instructor in NAU cataloguing laboratory while TASUED and UNIUYO maintained laboratory assistants. There was no cataloguing laboratory assistant in UNN library school. TASUED and UNN used their cataloguing laboratory as classroom as well. All the nine library schools except ESUT had computer laboratory.

**Discussions of Findings**

The study found that all the library schools in Southern Nigeria have basic cataloguing tools. Cataloguing tools like Resource Description and Access (RDA) and MARC 21 coding standard were not available in most of the library schools. Although both the lecturers and undergraduates claimed availability of cataloguing laboratory instructor and cataloguing laboratory, through observation, it was revealed that majority of the library schools do not have cataloguing laboratory and cataloguing laboratory instructor and assistant. It was observed that library schools that do not have cataloguing laboratory kept their cataloguing tools in their departmental libraries. Departmental libraries are not good alternative to cataloguing laboratory. Students should be able to make use of the tools in the laboratory where they will be able to ask questions which may not be permissible in the departmental libraries. This study confirms Nwalo's (2005) discovery of the inhibitions to effective education and training of cataloguers in Nigeria among others as the dearth of resources in library schools.

Human and material resources utilised by majority of the undergraduates in learning cataloguing in library schools in Southern Nigeria were lecturers, textbooks, cataloguing tools like Anglo American Cataloguing Rules2, Library of Congress Subject Headings and Sears List of Subject Headings and textbooks. Cataloguing laboratory, computer laboratory, cataloguing laboratory instructor, Dewey Decimal Classification Scheme and Library of Congress Classification Scheme were being used by few undergraduates in learning cataloguing in library schools. Furthermore, majority of the lecturers made use of Library of Congress Classification Scheme, Anglo American Cataloguing Rules 2, Library of Congress Subject Headings, Sears List of Subject Headings, Dewey Decimal Classification Scheme textbooks and filing

rules in teaching undergraduates' cataloguing in library schools. Cataloguing laboratory, computer laboratory, laboratory instructor/assistant and Resource Description and Access (RDA) are essential resources which must be provided for teaching and learning in library schools.

These essential resources are not only to be provided, they are also expected to be utilised by students and lecturers for better academic achievement of undergraduates in library schools. In confirming the importance of laboratory in teaching and learning process, Adesoji and Olatunbosun (2008) found that a well-equipped laboratory can positively change teachers' attitude to Chemistry teaching, which will in turn enhance students' learning outcomes in Chemistry. Also, Etuk (2011) justified these that inadequacy or lack of facilities hinders students' exposure to practical skills, materials, tools and standard laboratory are lacking in our schools, hence, poor teaching and learning process. Furthermore, Odigwe (2011) found that from personal observations, students exposed to the use of Mathematics laboratory performed better than those students, who were taught without the use of Mathematics laboratory. Provision and use of laboratories should be paramount in the heart of library school authorities in achieving high academic achievement of undergraduates in cataloguing.

**Summary of findings**

Three research questions and one null hypothesis were formulated for the study. The results of the study are as follows:

1.  All the library schools in Southern Nigeria have basic cataloguing tools for learning while majority of the library schools have no cataloguing laboratory and laboratory instructor and assistant.
2.  Resources being highly utilised by majority of the undergraduates' in learning cataloguing were lecturers, textbooks, Anglo American Cataloguing Rules 2 while lecturers highly made use of Library of Congress Classification Scheme, Anglo American Cataloguing Rules 2, Library of Congress Subject Headings and Sears' List of Subject Headings and Dewey Decimal Classification Scheme and textbooks in teaching cataloguing.
3.  The study found that majority of undergraduates' achievement in cataloguing and classification was at average level.
4.  There was positive and significant relationship between resource utilisation and academic achievement of undergraduates in cataloguing in library schools in Southern Nigeria.

**Conclusion**

The study found that there was correlation between utilisation of resources and undergraduates' academic achievement in cataloguing and classification in library schools in Southern Nigeria. Utilisation of cataloguing and classification resources is therefore, a determinant of undergraduates' achievement in the cataloguing and classification courses. The implication of the study is that, undergraduate who made use of cataloguing and classification resources may perform well in cataloguing and classification courses while the undergraduate who refused to adequately make use of

the resources may have low academic achievement in cataloguing and classification courses in the library schools.

**Recommendations**

Based on the findings of the study, the following recommendations are hereby made to improve the undergraduates' academic achievement in cataloguing and classification in library schools in Nigeria:

1. Since the study has identified a lacuna in the provision of cataloguing laboratories in the library schools, it is necessary for the management of the schools to provide adequate and independent laboratory for cataloguing and classification in library schools in Nigeria.
2. Library school management should employ laboratory instructors and assistants for more effective practical sessions. This is necessary to improve academic achievement of undergraduates in cataloguing.
3. In view of resources having correlation with academic achievement of the undergraduates in cataloguing, cataloguing and classification laboratory, computer laboratory and basic cataloguing and classification tools should be utilised by the undergraduates to improve their achievement in cataloguing and classification in library schools.
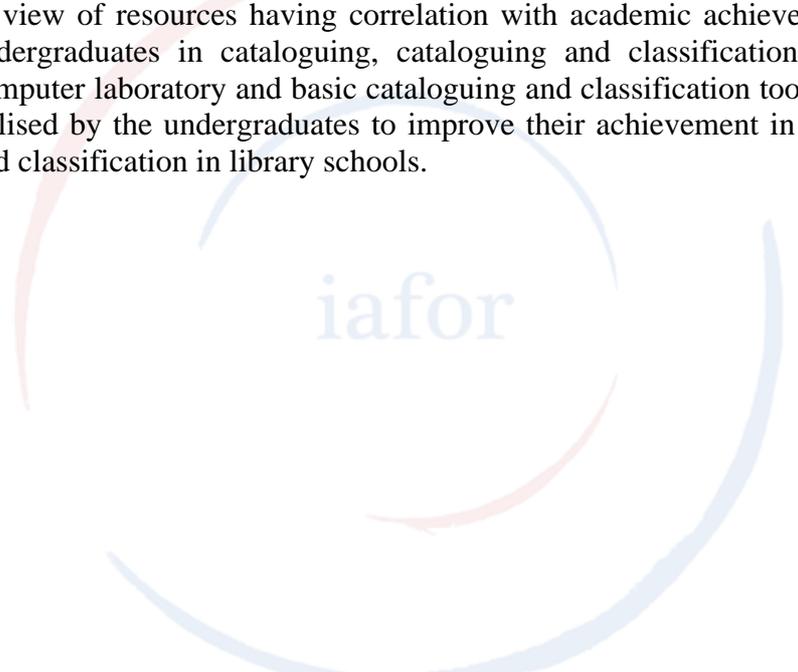
# References

Adegbemile, O. (2011). Human resources availability and students' academic performance in secondary schools in North West Geo- political zone of Nigeria. *Journal of Education and Practice* 2.6: 42 44-45.

Adeogun, A. A. and Osifila, G. I. (2011). Relationship between educational resources and students' achievement performance in Lagos State. Retrieved Sept, 25, 2012, from http//www.termpaperwarehouse.com/essay/human-resources/35949.

Adesoji, F. A. (2008). Managing students' attitude towards science through problem-solving instructional strategy. *Anthropologis,* 10.1:21.

Adesoji, F. A. and Olatunbosun, S. M. (2008). Student, teacher and school environment factors as determinants of achievement in senior secondary school chemistry in Oyo state, Nigeria. *The Journal of International Social Research* 1. 2:15,30.

Aina, L. O. (2004). *Library and information text for Africa*. Ibadan: Third World Information Services Limited.

Aina, L. O. (2007). Appropriate curriculum for library and information science in schools in Nigeria: the role of the Nigerian Library Association. *Paper presented at the Nigerian Library Association 45th national conference and annual general meeting* held at Ibom Hall IBB way, Uyo, Akwa Ibom State from 9th – 14th September, 2007.12-13.

Aiyelabegan, A. T. (2012). The influence of teachers' quality on academic achievement of students in SSCE physics in Ilorin metropolis of Kwara State. *Paper presented at 1st international conference of world educators forum: the Nigerian chapter and book abstract* held at Alvan Ikoku College of Education, Owerri, Imo State from 5th – 9th November, 2012. 56.

Akiri, A. A. and Ugborugbo, N. M. (2009). Teachers' effectiveness and students' academic performance in public secondary schools in Delta State, Nigeria. *Stud Home Communication Science* 3.2:107.

Arinze, F. O., Okonkwo, E. N and Iwuzor, A. N. (2012). Information and communication technology in secondary schools and students' academic performance in Social Studies. *African Review Research 6.4:267.*

Bello, T. O. (2012). Effect of availability and utilization of physics laboratory equipment on students' academic achievement in senior secondary school physics. *World Journal of Education* 2.5:4.

Bojuwoye, O. 1992. A case study of school-related factors affecting Nigerian secondary school pupils' academic performance. Retrieved Sept. 28, 2012, from http://www.unilorin.edu.ng/journal/education/ije/de1992/ A case study of school related factors affecting Nigerian school

Dahar, M. A and Faize, A. (2011). Effect of the availability and use of instructional material on academic performance of students in Punjab (Pakistan). *Middle Eastern Finance and Economics* 11:7-12.

Dan-Ologe, I. A. and Shittu, O. A. (2012). Improving the standard of teaching and learning of practicals in our secondary schools: emphasis on biology and chemistry practicals. *Journalof Qualitative Education*, 18:1. Retrieved Oct. 31, 2012, from htpp://www.wesoeduonline.com/journals/asseqen/improving the standards of teaching of practicals in our secondary sc.

Edoka, B. E. (2000). *Introduction to library science*. Onitsha: Palma Publishing and Links.

Ekundayo, H. P and Alonge, H. O. (2012). Human and material resources as correlates of academic performance of private and public secondary school students in Ondo State. *European Scientific Journal* 8.10 Retrieved Mar. 4, 2013, from http://eujournal.org/index.php/esj/issue/view/31

Etuk, A. G. (2011). Implementation of vocational education programmes and the reality of vision 2020: the challenges. *Multidisciplinary Journal of Research Development* 17.3:133.

Farombi, J. G. (2001). Resources and resource utilisation in distance learning. *Ibadan Journal of Distance Learning* 1. 1: 27-28.

Haider, S. (2006). Teaching of cataloguing and classification in Pakistan. *Cataloguing and Classification Quarterly*, 43:1. Retrieved Jan. 1, 2012, from mhtml:file//C:/Users/Owner/Desktop/Teaching of Cataloguing and Classification in Pakistan Mendeley. Mht.

Hunter, E. J. and Bakewell, K. G. B. (1991). *Cataloguing*. London: Library Association        Publishing.

Jebson, S. R. (2012). Relationship between learning resources and student's academic achievement in science subjects in Taraba State senior secondary schools. Retrieved Sept. 28, 2012, from http://www.readperiodicals.com/201203/2613272621. html.

Kola, A. (2012). Factors affecting students' performance in science in Nigeria schools. Retrieved Nov. 10, 2012, from file://C:/Users/Documents/Classroo-22-10-htm

Ma, Z. (20050. Education for cataloguing and classification in China. *Cataloguing and        Classification Quarterly*, 41:2. Retrieved Sept. 6, 2012, from mhtml:file://C:Users/Owner/Documents/Cataloguing and Classification in China-Cataloguing & Classification Quarterly-V…

Macmillan, J. M and Mannasseh, S. D. (2012). Effects of practical physics on students'        academic achievement: a study of Panshin Local Government Area of Plateau State. *Paper presentedat the1[st] international conference of world*

*educations forum: the Nigerian chapter andbook abstract* held at Alvan Ikoku College of Education, *Owerri, Imo State* from 5th – 9th November, 2012. 76.

Ogunniyi, S. O. (2015). Resource utilisation, teaching methods, time allocation and attitude as correlates of undergraduates' academic achievement in cataloguing in library schools in Southern Nigeria. Ph.D Thesis, Department of Library, Archival and Information Studies. University of Ibadan, xiv, +155pp.

Okemakinde, T. Adedeji, S. O and Ssempebwa, J. (2008). Teaching resources and academicperformance in Technical Colleges in Oyo State, Nigeria. Kampala *International University Research Digest* 1.2:109-116.

Owoeye, J. S. and Yara, P. O. (2011). School facilities and academic achievement of secondary school agricultural science in Ekiti State, Nigeria. *Asian Social Science* 7. 7:66.

Oxford Advanced Learner's Dictionary. (2006). Oxford: University Press. Taylor, A.G and Miller, D.P. (2006). *Introduction to cataloguing and classification*. London: Libraries Unlimited.

University of Karachi. (2006). Facilities. Department of Library and Information Science. Retrieved Oct. 25, 2012, from  http://www.dlisuok.edu.pk/Facili.htms

Wadesango, N and Dhliwayo, E. (2012). Study of secondary schools students' performance in Mathematics from Zimbabwe. *Anthropologist* 14.2:113-121.

**Contacr email:**

Samuel Oke Ogunniyi: Samtoyeniyi@yahoo.com
K. I. N. Nwalo: kennwalo@gmail.com

### The Relevance of Classroom Audits and Student Feedback on Teacher

Robert Pfumbudzayi Machera, Botho University, Botswana  Effectiveness

**Abstract**
Measuring of performance for lecturers' has become a popular event not only in the Botswana academic environment but in many parts of the world (Wingfield, 2011: 5). Being charged with responsibilities as an AAT Team Leader the researcher was interested in getting feedbacks for faculty members in his department. This study focuses on the relationship between classroom audits, student feedbacks and students' throughput. The results of this study revealed that there was no relationship between the classroom audits, student feedback and students throughput. Additional instruments / methods were recommended to evaluate lecturers' performance.
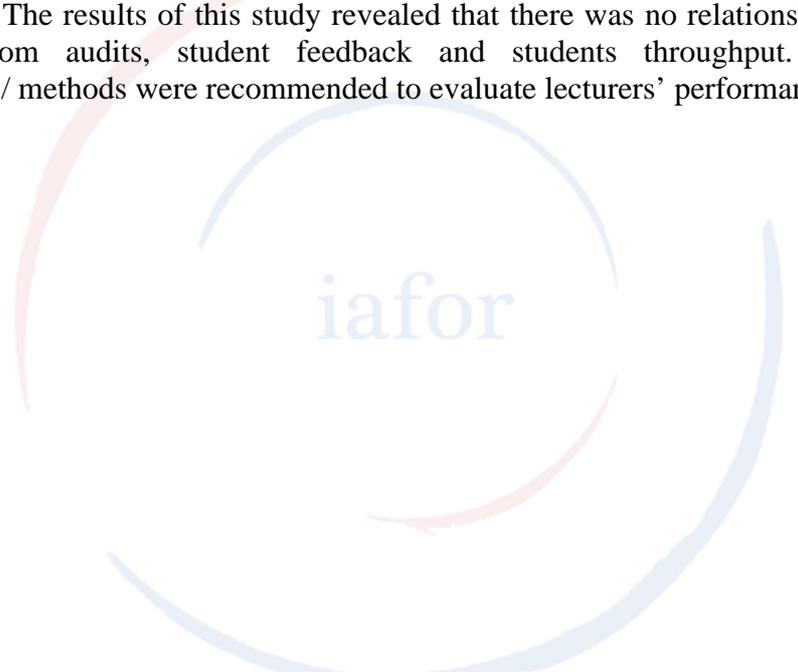
iafor

The International Academic Forum
www.iafor.or

## Introduction

At Botho University, classroom audits and student feedbacks are used to measure performance of each faculty member. What is classroom audit? According to Robbins, Odendaal and Roodt (2003:43) a classroom audit is a process whereby a supervisor observes the lecturer in the classroom in order to obtain evidence on effective teaching. At Botho University a standard classroom audit is used during observation period. Apart from classroom audits an online student feedback is also used to measure the faculty's performance. This electronic student feedback is in a form of a questionnaire which is divided into the following three headings: Institution, Student and Lecturer.

Classroom audits are relevant to lecturers as they reflect positive and negative feedback in terms of performance. Positive performance may be used in the human resources department for promotional prospects and as well as for awarding salary increments. Negative feedback may be used for continuous improvements and training and development to the concerned individuals. The researcher was motivated to conduct this study in order to see whether it was appropriate for Botho University to finally conclude on how teachers perform using these two modes of feedbacks. The two modes of feedbacks appear to be very biased as they are embedded with the halo and horn effect.

## Conceptual & Theoretical Framework

This research includes the concepts *of the halo and the horn effect* that brings in the phenomenon of biasness which is inherent in human beings. Furthermore this research used theories of motivation such as: Maslow's Hierarchy of Needs, Herzberg Two Factor Model and Elton Mayo's Hawthorne effect.

## Statement of the Problem

The above tools for measuring lecturers' performance are they effective and efficient? Classroom audits and student feedbacks are associated with the phenomenon of halo and the horn effect which was discovered by a psychologist Edward Thorndike. Foster and Ysseldyke (1976) revealed that the halo effect was also present in the evaluation of school children by their teachers. The problem was how accurately and appropriately these instruments were? It is from this background that the researcher was motivated to investigate the relationship between classroom audits, students' feedback and students' throughput rates at Botho University.

## Aim of the study

The main aim of this study was to investigate the relationships between the classroom audits, student feedback and the students' performance as mechanisms for measuring teachers' effectiveness.

## Objectives of the study

The objectives of this study are as follows:

1 To ascertain the relationship between classroom audits, student feedback and students pass rates.
2 To ascertain models that motivate lecturers
3 To identify effective teaching methodologies that increase students' throughput
4 To establish other additional instruments that may be used to measure lecturers performance

**Research Questions**
The following are the research questions for this study:

1 What are the relationships between classroom audits, student feedback and student's performance?
2 What are the models that motivate lecturers?
3 What are the effective teaching methodologies that increase students' throughput?
4 What are other additional instruments that may be used to measure lecturers performance?

**Contribution to the Knowledge Domain**

The significance of this study is that, it would benefit different stakeholders including lecturers, students, universities and colleges. The universities and colleges would then be able to use appropriate tools or instruments to measure academic staff. If this study is published it would add to the body of knowledge as different techniques for measuring academic staff are discussed.

**Literature Review**

The research was also guided by different types of observation which includes: *direct and indirect observation*. Direct observation refers to a procedure whereby lecturers are observed by their supervisors during the contact sessions in their classrooms (Cleary, Happell, Lau and Mackey, 2013:64). Indirect observation is whereby lecturers are observed by any other means such as cameras without their knowledge. This study focuses on direct observation because indirect observation is associated with many ethical problems (Cleary, Happell, Lau and Mackey, 2013:66).

In addressing the problem of measuring performance, some theories and models have been selected to illuminate the possible answers to research questions posed above. According to Cleary, Happell, Lau and Mackey (2013:65) student feedbacks are constructive as they enhances educator's effectiveness. Administrators should not use student feedbacks and classroom audits as the sole performance measure (Langbein, 2007:419). Student feedback is a management monitoring mechanism of what is happening in the classroom (Buhagiar, 2013:60). Student feedback enhances the quality of teaching and improves the teacher student relationships (Crooks, 1988:449).

**Research Methodology**

The interpretivist paradigm was followed in this study. The goal of interpretivism is to deduce the participants' perceptions of reality and to draw conclusions about the truth, knowledge and authority (Lather, 1992:92). Northcutt and McCoy (2004:49) postulated that focus group interviews must be supported by other methods in order to

enhance the validity and reliability of the study. Therefore content analysis and personal interviews were used in order to triangulate the methods of collecting data. Triangulation of methods was also concurred by Mouton (2001:171) as it enhances the validity of the study. Personal interviews were conducted on 6 lecturers selected within 12 members of the focus group. There were comparisons of personal interview results and focus group in order to determine the truth from the participants. The findings of this research would be used in the Botho University strategic policy formulation.

**Ethical Considerations**

In his capacity as a researcher it is not good practice to plagiarise, or fabricate or falsify evidence or knowingly misrepresenting information or its source (American Anthropological Association (2012:2). The researcher managed to get the lecturers' consent to participate. Lucas and Lidstone (2000:55) argue that protecting individual autonomy has long been a central principle in educational research; therefore the researcher did not coerce any lecturer to participate in this study. Furthermore the researcher was not supposed to divulge any information to third parties as this would be an infringement of the participants' rights to privacy. Finally original or actual names and batch numbers were not used in this study.

**Results / findings of the study**

**1 Content Analysis**
The following table 1.1 below shows the results of student feedback, classroom audits and student final results for AAT Accounts Preparation module. The researcher interpreted the outcomes of the three variables to find out whether there was a relationship between these three.

**Table: 1.1 Student Feedback, Classroom audits and pass rates**

| AAT – Semester 2 – Accounts Preparation Module ( Jan – June 2014) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Faculty** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** |
| **Batch No.** | **9** | **6** | **7** | **12** | **4** | **5** | **10** | **11** | **3** | **2** | **8** | **1** |
| *Feedback* | | | | | | | | | | | | |
| **Questions** | | | | | | | | | | | | |
| Qn.10 | 2.8 | 3.2 | 3 | 3.6 | 3.6 | 1.4 | 3.3 | 2.0 | 3.8 | 4.0 | 3.2 | 3.1 |
| Qn.11 | 3.4 | 3.1 | 3 | 3.4 | 3.1 | 2.1 | 3.1 | 2.6 | 3.7 | 3.3 | 3.0 | 2.7 |
| Qn.13 | 3 | 2.4 | 1.4 | 3.3 | 1.7 | 1.8 | 2.9 | 1.4 | 3.8 | 2.7 | 2.7 | 1.3 |
| Qn.14 | 2.7 | 2.6 | 2.3 | 3.6 | 3.3 | 1.4 | 2.7 | 1.9 | 3.8 | 4.0 | 2.7 | 2.6 |
| Qn.15 | 2.8 | 2.8 | 2.1 | 3.0 | 3.5 | 1.6 | 3.0 | 3.1 | 3.8 | 4.0 | 3.2 | 2.7 |
| Qn.16 | 3.3 | 2.9 | 1.9 | 3.4 | 3.6 | 1.4 | 3.1 | 2.3 | 3.6 | 4.0 | 2.9 | 2.6 |
| | | | | | | | | | | | | |
| **Feedback** | **3.0** | **2.8** | **2.3** | **3.4** | **3.1** | **1.6** | **3.0** | **2.2** | **3.8** | **3.7** | **3.0** | **2.5** |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Audits** | 3 | 3 | 3.5 | 3.5 | 3 | 3.2 | 3.77 | 2.44 | 2.9 | 3 | 3 | 3 |
| **Pass Rate** | 33% | 44% | 40% | 40% | 38% | 65% | 40% | 71% | 90% | 49% | 48% | 35% |

## 2 Analysis of the results/ findings of the study

The results reflected that 4 faculty members (C, F, H and L) who were shaded in red in table 1.1 did not achieved a minimum required score of 2.8% on student feedback. The worse scenario on the student feedback is F who scored an average of 1.6%. On classroom audits H scored a 2.44 % which was very low and all the other faculty members scored 3% and above. The pass rates were not favourable only 3 faculty members (F, H and I) managed to achieve 65 % and above. The results reflected that 8 faculty members (A, B, C, D, E, G, J, K and L) scored below 50%. The results for the module were not pleasant and it was important to compare student feedback and classroom audits.

The findings indicated that the student feedback, classroom audits and pass rates for only 1 faculty member (I) were congruently positive. The pass rate for (H) was pleasant but the student rating and classroom audits were negative. This shows that there is an element of biasness embedded in the ratings. It is difficult to justify a pass rate of 71% when the faculty member was rated negatively. Faculty (F) was negatively rated by students but achieved a 65% pass rate. Faculty (D) was positively rated but achieved a negative pass rate; this reflects biasness in relation to human judgements. The results above have shown that there is no relationship between classroom audits, student feedback and pass rate. It was important for me to support this by conducting a focus group and personal interviews.

## 2 Focus group and personal interviews

### 2.1 Focus group interviews

**Question**

Do you think that there is a relationship between classroom audits, student feedback and pass rates?

**Responses**

1)      The majority of the faculty members agreed that there is no relationship between classroom audits, student feedback and pass rates.

2)      Faculty members responded that their students are of low intelligent quotient (IQ) hence perform badly.

3)      The group agreed that the classroom audits were conducted by staff members who lack educational background.

4)     The majority of the respondents agreed that training should be offered to students on the importance of student feedback because some students were not taking feedbacks seriously.

## 2.2 Personal Interviews

### Interview Faculty member 'I'

Are you happy with the classroom audits, student feedback and pass rates?
*"I am partially happy because my classroom audit is on the lower side it shows an element of biasness from my supervisor". "I scored 90% pass rate on the module which is exceptionally good and this is in line with student feedback of 3.8% out of 4%." "The problem is on the supervisor's rate which is far much lower as far as I am concerned."*

### Interview Faculty member 'D'

What is your comment on the student feedback and classroom audits in relation to your student pass rates?

*"The student feedback and classroom audits were very positive but the pass rate was very low. The low pass rate was caused by lack of student preparedness and as well as a tight milestone". I have good interpersonal skills and this assisted me to be rated highly with my students".*

### Interview Faculty member 'H'

Can you justify your higher pass rate of 71% against lower scores for student feedback and classroom audits?

*"The batch managed to get a higher pass rate through my efforts and the feedback and classroom audits were subjective since they are negative"*

### Interview Faculty member 'F'

Are you able to justify your 1.6% lower score on student feedback?

*"The lower score of 1.6% is very biased as it is proved by a good pass rate of 65% followed by a 3.2% positive rating from the classroom audits".*

### Interview Faculty member 'C'

Your student feedback, classroom audits and pass rate were too extreme? How do your justify these extreme which were low student feedback, high classroom audits and lower pass rate?

*"The students in batch 7 they hate me, I tried to motivate them but it proves that it's a folk of dull students." The students' feedback was biased and the 40% pass rate was contributed by lack of internal motivation in those dull students".*

**Interview Faculty member 'L'**

*"The students in batch 1 biased, I tried to motivate them but it proves that it's a bunch of dull students." The students' feedback was biased and the 35% pass rate was contributed by lack of intrinsic motivation within the students".*

**2.3 Summary**

There was a triangulation of methods in order to rigorously get the truth from the findings. The focus groups and personal interviews highlighted the perceptions of faculty members in relation to the content analysis which was provided by the Faculty of Accounting and Finance. The results reflected that there was no relationship between classroom audits, student feedback and pass rates. Recommendations to improve the teacher evaluation were made in the following section.

**Recommendations**

The findings in this study proved that it was difficult to rate the teacher using student feedback, classroom audits and pass rate and hence made the following recommendations:

▪       Classroom audits should be conducted with independent evaluators who have educational background
▪       Arrange trainings and awareness for classroom audits
▪       Implement trainings and workshops for students on the importance of student feedback
▪       Include interpersonal skills and communication skills in the evaluation of faculty members
▪       Use a 360 degree performance appraisal to rate the faculty members
▪       Use Management By Objectives (MBO) to rate faculty members
▪       Encourage faculty members to enrol for Postgraduate Diploma in Higher Education (PGDHE) in order for them to improve their teaching approaches
▪       Take corrective action after student feedback and classroom audits
▪       Introduce a balanced score card to measure performance of faculty members
▪       Conduct separate motivational trainings and workshops for students and faculty members (popular motivational public speakers)
▪       Conduct students and lecturers get together workshops (networking platforms)
▪       Conduct workshops that explain Maslow's Hierarchy of Needs, Herzberg Two Factor Model and Elton Mayo's Hawthorne effect as they boost faculty members and students' morale. This eventually increases productivity and improves pass rates.

**Conclusion**

It is imperative to measure the performance of academic staff using appropriate instruments or tools.  Lastly it is very rare to obtain results that are the same from *classroom audits, student feedback and students' results as these instruments are subjective in nature.* Finally the researcher challenged educators to come up with instruments, in which all the three variables (student feedback, classroom audits and pass rates) are in agreement or align to each other.

## Reference

American Anthropological Association. (2012). *Statement on Ethics: Principles of* Buhagiar, M., A. (2013). Mathematics student teachers' view on tutor feedback during teaching practice. *European Journal of Teacher Education* 36 (1) 55 – 67.

Cleary, M., Happell, B., Lau, S., T and Mackey, S. (2013). Student feedback on teaching: Some issues for consideration for nurse educators. *International Journal of Nursing Practice* 19 (1) 62 – 66.

Crooks, K., J. (1998). Classroom research: implementing the scholarship of teaching. In Class- room assessment and research: *An update on uses, approaches, and research findings*, ed. T. Angelo, 5 – 12. San Francisco, CA: Jossey – Bass Publishers.

Foster, Glen; James Ysseldyke (1976) *"Expectancy and Halo effects as a result of artificially induced Teacher bias"*. Journal of Abnormal Child Psychology 21 (5): 519 – 533.

Langbein, L. (2007). Management by results: Student evaluation of faculty teaching and the mis- management of performance. *Economics of Education Review* 27 (1) : 417 – 428.

Lather, P. (1992). Critical frames in education research: Feminist and post-structural perspectives. *Women's studies international forum* 31 (2):87–99.

Lucas, K., B. and Lidstone, J, G. (2000). Ethical issues in teaching about research eth1ics. *Evaluation and Research in Education* 14 (1): 51–72.

Mouton, J. (2001). *How to succeed in your Master's & Doctoral Studies: A South African Guide and Resource Book*. Pretoria: Van Schaik.

Northcutt, N. and McCoy, D. (2004). *Interactive Qualitative Analysis: A Systems Method for Qualitative Research*. London: Sage.
*Professional Responsibilities.* Arlington, VA: American Anthropological Association. Available at: http:// www.aaanet.org/ethics/ upload / statement – on – Ethics – Principles – of Professional – Responsibility.pdf

Robbins., P. Odendaal, A. and Roodt, G. (2003). *Organizational Behaviour. Global and Southern African Perspectives.* Cape Town: Pearson Education South Africa.

Wingfield, B. (2011). *Can we improve postgraduate degree throughput rates*? Afr JSci. 2011:107 (11/12), Art. #967, 2 pages. http://dx.doi.org/10.4102/sajs.v107i11/12.967

**Contact email:** rmachera@gmail.com

# A Critical Analysis of Student's Self-Assessment and Teacher's Assessment

Nwabueze Godfrey Nneji, Federal College of Education, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

This study addresses the mistrust and suspicion that used to follow teachers' assessment of students' class work and examinations. It sought to find out the level of agreement or otherwise between students' assessment of their class work and the assessment given by the teacher. The focus is to provide evidence that can reduce the mistrust with which students view teachers' assessment of their work. Thirty students in engineering drawing course were asked to produce orthographic views of a rectangular block that has a through hole. A marking guide and a model answer were produced by the teacher. Students were informed that their work will be blindly assessed by them, their peers and the teacher. They were taken through the marking guide and the model answer. Each student was asked to do a blind assessment of his/her work and that of the student sitting in front of him or her. They were asked to turn in the scores they gave themselves and the one they gave to their peer. Finally the work of every student was assessed by the teacher. Both teacher and students reviewed all the scores and the review showed that students' scores of their works were in most instances lower than those given by their peers and/or the teacher. From this outcome, students commented that they now appreciate that the assessment of their work is guided by what is expected of them and not what the teacher feels about them. Consequently their trust on teachers' assessment of their work got a boost.

**Introduction**

Assessment is a process of gathering information from a variety of sources that accurately reflects how well a student is achieving the objectives of a curriculum. One type of assessment that has been shown to raise students' achievement significantly is student self-assessment (Black and William 1998, Chappuis and Stiggins 2002, Rolheiser and Rose 2001, White and Frederiksen 1998). Self-assessment requires students to reflect on their own work and judge how well they have performed in relation to the assessment criteria. The focus is not necessarily on having students generate their own grades, but rather providing opportunities for them to be able to identify what constitutes a good (or poor!) piece of work. Some degree of student involvement in the development and comprehension of assessment criteria is therefore an important component of self-assessment[1].

Traditionally, assessment of students' class works and examinations has been the prerogatives of the teacher. One of the capacities a teacher needs to possess is ability to use relevant instruments to adequately assess students. Teachers have time without number receive unfavourable reaction from their assessment of students' works from students and sometimes from parents. Consequently, students show some resentment and take teachers' assessment with mistrust and suspicion. This project set out to broaden students' outlook on assessment so as to minimize their mistrust on teachers' assessment. What the study has done is to perform multi-dimensional analysis of students' scores from a class work to compare students' self-scores with those from the teacher. This brought students into assessment task and created an opportunity for them to review and modify their impression on teachers' assessment of their work.

**Self-assessment and students' performance**

Bloom (1974) is of the opinion that involving students in evaluation of performance can be used to introduces students to the complexities of performance evaluation, encourages students to evaluate their own actions and efforts, and to encourage students to become more actively involved in the teaching and learning process. James Jesseca (2015) support this position in their submissions that student self-assessment has the promise to improve student motivation and engagement and when correctly implemented, promote intrinsic motivation, internally controlled effort, a mastery goal orientation and more meaningful learning. Thus it helps students to guide their own learning and internalize the criteria for judging success. When made using standard criteria, the judgement gives students a meaningful idea of what they know and what they will need to learn (Bruce 2001). And according to Rolheiser and Ross (2001), students who are taught self-evaluation skills are more likely to persist on difficult tasks, be more confident about their ability, and take greater responsibility for their work. For Wright (1962), the opinion a student has of his/her abilities serves as a controlling factor on how he/she behaves, hence what he/she learns and how well he/she learns it.

Students do not learn easily that which is inconsistent with the opinion of themselves. When students are involved in recording their own achievements, their level of self-awareness and independence is increased. They can negotiate their own assessment and future learning with the teacher and this gives them the confidence that they have control over achievement and records (Gripps and Stobert 1993). Students according

to Chermesh and Tzelgore (1979) are the closest role complement of the teacher; they are natural reference group for feedback purposes. The teacher therefore should make reference to them when he/she wants to find out how much they have learned. To strengthen the debate on involvement of students in their own assessment, Erickson and Wantling (1976) maintain that students obtain self-diagnosis of their abilities when they perform self-assessment and this enhances their performances.

Involvement of students in evaluation is relatively an innovative practice in evaluation but according to Donald (1982), student self-evaluation is capable of offering direction for future and spells out the criteria for success based on understanding that evaluation affect the amount and kind of learning that takes place. In the opinion of Nneji (1998), involving students in self-assessment democratises education and opens up the act of testing and measurement which hitherto looks like a blind game. This has made the assessee not to trust the work of the assessor. When students are involved in assessment of their works, they develop ability to form judgement and are therefore in a better position to improve their work since they are aware of what can be done to achieve quality and proficiency. Self-assessment makes it possible for students to analyse their work against comparative work standards. In this way they can show a better appreciation of the scores given by the teacher. It is against this background that this project is undertaken.

To achieve the objectives of this project, the following steps were taken.

1. Discussions on students' frequent resentment on teachers' assessment of their class work were held. These students were in their final year of a three year teacher education program that leads to the award of Nigerian Certificate in Education (N.C.E) and engineering drawing is one of their course offerings. The summary of their submission was that they were not convinced that teachers has been objective in his assessment of their work.
2. An agreement was reached with them that they will take part in the assessment of their next class work. They were assured that they would be put through the marking guide before they conduct the self- assessment.
3. During the next class, they were given a take-away assignment to draw in the first angle projection, the orthographic views of a square block with a round through hole shown in figure 1.
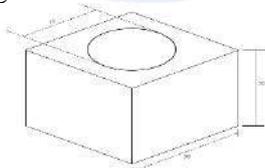


Fig 1. An isometric square with a round through hole.

4. A marking scheme and a model answer for the assignment were prepared. These are
   shown in figure 2 and table 1 respectively.
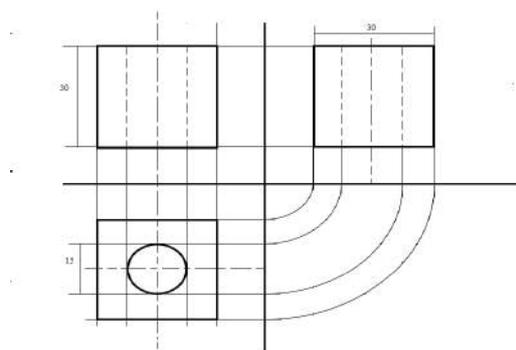
Fig 2. Orthographic views of fig 1 in first angle projection (model answer)

Table 1. Marking guide

| Attributes | Maxmarks |
|---|---|
| Angle of projection i.e first angle | 1 |
| Dimension (as given in the figure and shown on at least one view | 2 |
| Complete plan | 3 |
| Complete front elevation | 3 |
| Complete side elevation | 3 |
| Lines- from front elevation to plan and side elevation, and from plan to side elevation | 2 |
| Types of lines-outline and projection lines | 2 |
| Neatness | 1 |
| Balance | 1 |
| Title block with complete information | 2 |
| **Total** | **20** |

5. On the assessment day, students were taken through both the marking scheme and the model answer. They asked some questions and got the necessary clarifications.
6. They used the marking scheme and the model answer to assess their work blindly i.e without writing the marks on the drawing but in another paper.
7. Each student was asked to assess blindly, the drawing of the student sitting in front of him or her.
8. At the end of the students' marking the teacher collected all the students' work and used the marking scheme to assess them.
9. The students' self-assessment scores, the peer assessment scores and the teacher's assessment scores for each student were assembled and analysed as shown in table2.

Table 2. Analysis of students', peers' and teacher's assessments of students' performance.

| Student No | Self-assessment scores 20 | Peer assessment scores 20 | Teacher's assessment scores 20 | Teacher's score minus Self score | Teacher's score minus Peer scores | Peer minus Self scores |
|---|---|---|---|---|---|---|
| 1 | 12 | 12 | 12 | 0 | 0 | 0 |

| 2 | 14 | 12 | 14 | 0 | +2 | -2 |
| 3 | 16 | 12 | 16 | 0 | +4 | -4 |
| 4 | 10 | 16 | 16 | +6 | 0 | +6 |
| 5 | 8 | 12 | 14 | +6 | +2 | +4 |
| 6 | 18 | 16 | 12 | -6 | -4 | -2 |
| 7 | 14 | 10 | 12 | -2 | +2 | -4 |
| 8 | 12 | 12 | 14 | +2 | +2 | 0 |
| 9 | 10 | 10 | 14 | +4 | +4 | -2 |
| 10 | 12 | 10 | 14 | +2 | +4 | 2 |
| 11 | 12 | 16 | 14 | +2 | -2 | +4 |
| 12 | 12 | 14 | 16 | +4 | +2 | +2 |
| 13 | 14 | 14 | 18 | +4 | +4 | 0 |
| 14 | 8 | 10 | 10 | +2 | 0 | +2 |
| 15 | 10 | 12 | 12 | +2 | 0 | +2 |
| 16 | 8 | 8 | 8 | 0 | 0 | 0 |
| 17 | 16 | 14 | 18 | +2 | +4 | -2 |
| 18 | 18 | 14 | 16 | -2 | +2 | -4 |
| 19 | 12 | 14 | 16 | +4 | +2 | +2 |
| 20 | 12 | 16 | 16 | +4 | 0 | +4 |
| 21 | 16 | 16 | 14 | -2 | -2 | 0 |
| 22 | 10 | 10 | 14 | +4 | +4 | 0 |
| 23 | 10 | 12 | 16 | +6 | +4 | +2 |
| 24 | 12 | 10 | 14 | +2 | +4 | -2 |
| 25 | 8 | 8 | 10 | +2 | +2 | 0 |
| 26 | 7 | 7 | 7 | 0 | 0 | 0 |
| 27 | 12 | 14 | 14 | +2 | 0 | +2 |
| 28 | 12 | 16 | 16 | +4 | 0 | +4 |
| 29 | 12 | 12 | 16 | +4 | +4 | 0 |
| 30 | 14 | 10 | 14 | 0 | +4 | -4 |

10. A plus sign in the difference between the teachers assessment and either self or peer assessment implies that teacher's assessment is higher while a minus sign implies that teacher's assessment is lower. A zero means that all the three assessors spoke with one voice.

11. Students and teacher gave equal assessment in six out of the thirty cases (20%) while the teacher awarded higher scores than the students awarded themselves in twenty (67%) out of the thirty cases. It is only in four cases that the students out-scored the teacher in self -assessment.

12. Ordinarily, one would expect that the students would be generous with awarding scores to themselves. The outcome here can be explained in the light of some issues. It is not unlikely that the students were yet to internalize both the concept of self-assessment and the practice of it. Before this time also, they had been exposed to the rudiments of measurement and evaluation and had even participated in practice teaching during which they assessed the students they taught. Their being 'stingy' with scores could also be out of fear of the teacher because they could be suspicious with the teacher's intention since self-assessment has not been done by them before.

13. The scores awarded by students by their peers and the teachers score did not fare much better. It is in nine cases (30%) that an agreement between peer

assessment and teacher assessment agree and this number is three above what happened between self -assessment and teacher assessment. Under this category, teacher's assessment is higher in 16 cases (53%). Sixteen students got higher scores from the teacher than they got from their peers.

14. With regard to self- assessment and peer assessment, there is an agreement in nine (30%) cases while eleven cases (37%) are in favour of peer assessment. In all these, student self-assessment yielded lower scores than either teacher assessment or peer assessment.

**Discussions and conclusion**

A post assessment session was held with the students on the result of the analysis to get further insight on their views on self-assessment. First they expressed excitement on the exercise but a great surprise on the outcomes. They were greatly surprised that the scores awarded by the teacher were in most cases higher than their self- scores or peer scores.

The summary of what they could make of the assessment outcome is that the novelty of this approach in assessment may have affected the way they carried out the assessment.

It can then be deduced that involving students in assessment of their performances has a positive potential of exposing them to the rudiments of assessment thereby empowering them to appreciate what teachers go through in passing judgement on their performances. There is hope that having been exposed to assessment exercises, they will improve on the level of trust they have on teacher's assessment.

Consequently, they will in future exercise focus on what accounts for good performance and strive hard to exhibit them.

## References

Black, P. and William, D. 1198. "Assessment and classroom learning." *Assessment in education.* 5 (1)

Bloom, T. K. (1974). "Peer evaluation-A strategy for student involvement." *Man/society/technology.* (13) 5

Bruce, L. B. (2001). "Student self-assessment: Making standard come alive." *Classroom leadership* (5) 1. Retrieved Febuary 25, 2015 from http://www.ascd.org/portal/site/ascd/template. MAXIMIZE/menuitem.29d4046bbea38f2eb

Chappuis, S. Stiggins, R. J (2202). "Classroom assessment for learning". *Educational leadership.* 60 (1)

Chermesh, R and Tzeigov, J (1979). "The college instructor as a leader: some theoretical derivation from a generalization of a causal model on students' evaluation of their instructors." *Journal of education research* (73) 2

Donald, J. G (1982). "A critical appraisal of the state of evaluation in higher education in Canada." *Assessment of evaluation in high education.* (73) 2

Erickson, R. C and Wentling, T. L (1976). Measuring students growth. Griffon Press. Illinions

Gipps, C and Stobert, G. (1993). *Assessment: A teachers guide to the issue.* Griffon Perss. Illinions

Nneji, G. N (1998). "Student self-assessment: An issue in students' performances in technology education." *Technology education review.* (1) 2

Rolheiser, C. and Ross, J. A (2001). "Student self-evaluation: What research says and what practice shows." "Retrieved Febuary 25, 2015, from http://www.cdi.org/resource-library/article/self_eva.php?type=subject&id=4

White, B. Y and Frederiksen, J. R.(1998). "Inquiry, modeling and metacognition: making science accessible to all students". *Cognition and Instruction;* (16) 1 Wright, L. S. (1962). "Student self-evaluation as a technique for quality instruction." Paper presented at the 24th Annual Convention of American Industrial Art Association, Pitisburgh, Pennsylvania. April

**Contact email:** gnneji@yahoo.com

# Project-Based Learning and Students' Interest in Physics and Chemistry: Using Innovative Practices in Rural Nigerian Schools to Foster Community Change

Opara Mary Felicia, Anambra State University, Uli, Nigeria
Innocent Elekalachi Chukwuemeka, Anambra State University, Uli, Nigeria

**Abstract**

Current education reforms seek to promote innovative practices capable of fostering 21st century competencies among students in rural schools for community enhancement and sustainable development. However, the lecture-dominated educational system in Nigeria has failed to foster in learners the motivation to engage in multidisciplinary projects that mirror the reality of their daily lives and well-being of their local communities. This study aimed at investigating the extent to which project-based learning (PBL) would enhance students' interest in physics and chemistry for consequential application in the community. 150 Senior Secondary form 3 Students from two Community (rural) Schools in Ihiala LGA, and two model schools in Onitsha Urban, Anambra State, Nigeria participated in the study. Two research questions and two hypotheses guided the study. Quasi-experimental non-equivalent control group was the study design. The reliability of the instrument (PCIS- Physics Chemistry Interest Scale) using Cronbach alpha reliability method was established to be 0.70. Mean and standard deviation were used to answer the research questions while ANCOVA was used to test the null hypotheses. Focus Group Discussion was used to determine the extent to which students in the experimental group applied their knowledge-base in community problem-solving. Results revealed that PBL enhanced students' interest in physics and chemistry and fostered a growing awareness of how knowledge obtained in the science classroom can be applied in community development.

**Keywords:** Project-based learning, Interest, Community, Chemistry, Physics

iafor

The International Academic Forum
www.iafor.org

## Introduction

Our daily lives revolve around science especially Physics and Chemistry. In an ever increasing innovative competitive world, the importance of Chemistry and Physics in society and economy is undisputable. Physics and Chemistry are old and fundamental science disciplines which deal with matter and its interaction with energy. The study of matter is requisite with regards to the natural and physical components of the world in which we live. Chemistry is an interdisciplinary science which embraces the concepts of the creation of molecules, utilization of natural substances, the manipulation of action, crystals and other aggregates of matter. Its industrial relevance and momentous contribution to any nation's integrated economy and society is limitless. Chemistry is everywhere; chemistry is life; chemistry is the oracle of modern science. Chemistry is the central science that forms the pivot of many disciplines in science and technology. Chemistry covers interactions with plants, animals, humans through agriculture, biology, medicine. Chemistry protects and preserves our health, ecology, culture and heritage. For instance, the recycling of chemical elements such as carbon, nitrogen, phosphorus and other elements between living organisms and the air, water and soil contribute to many ecological and life support services that promote human well-being. These applications are observed in greenhouse gas regulation, water treatment, erosion control, soil quality control, and plant growth.(Chair, Chapin III, Costanza, Ehrlich, Golley, Hooper, Lawton, O'Neill, Mooney, Osvaldo, Symstad, David, 1999).Physics formulates the principal laws, interprets all the physical phenomena and makes predictions into the future (Haloulakos, 2009). Most modern technological devices such as electronic equipment, computers, factory machines, missiles, rails, refrigerators, television, ships, rockets, airplanes, bicycles, motor cars, telephone and many more are products deduced from the universal laws of Physics (Khan,2004). The recent trend and quest for the usability and applicability of renewable energy for various purposes are grounded on the knowledge of Physics and Chemistry. Only Physics and Chemistry will provide solution to the global concerns for energy resource efficiency and climate change.

Despite the increasing relevance of Physics and Chemistry, students' enrolment and performance in the two disciplines in Nigerian institutions are persistently poor. Thus, Chief Examiners West African Examinations Council Report showed the enrolment rate in Physics for secondary schools from 2004-2006 to be between 8.19-9.10%. From 2007-2012 out of 97.40%, 97.93%,97.67%,90.5%, 97.55%, 98.28% who registered for Senior School Certificate Examinations,39.67%, 54.64%, 50.07%, 47.57%, 44.67%, 32.21% respectively failed. In the same vein, enrolment and performance rate in Chemistry over two decades has on the average remained below 50%. Worst still, students graduate from school remaining unproductive and unable to effect fundamental changes in the communities where they live because of the disconnection between classroom instruction and learners' real world experiences. Other studies attributed the persistent low enrolment and performance rate in Physics and Chemistry to teachers' inability to improvise instructional materials using locally available resources (Oladeyo, Olosunde, Ojebisi, & Isola, 2011) in the absence of adequate teaching materials. Isola (2010) observed that many students perceive physics and chemistry as difficult subjects while Adegoke (2009) found that students' choice for Physics as a subject is attributable to several factors. Among the causal factors proffered by researchers, Opara (2013) found that teaching method is a significant variable which

affects students' learning outcomes.

To the extent teaching methods stagnate students' interest and conceptual understanding, to that extent will schools continue to produce unenthusiastic individuals who are incapable of transferring what they learn in the science classroom to the lives they eventually live outside school. Thus, the rapid growth in scientific and technological innovations which calls for skilled and productive individuals in the market economy heavily underscores the need to shift from the factory model of learning to innovative and creative methods that involve learners in creative and critical thinking. Therefore, traditional teaching "chalk and talk" lecture (factory-model) approach which involves knowledge transmission to passive recipients is not suitable in today's generation (Serbessa, 2006), especially in Africa where it is crucial for learners to develop local knowledge and competencies which could be utilized for self-improvement and community well-being. It was on this basis that Tchombe and Nsamenang (2011) advocated for an African curriculum and shift from product-oriented teachers to process-focused facilitators who are capable of rousing learners' curiosity and zeal to discovery learning. PBL is such approach that engages learners in experiential activities. The facilitator in the PB method tailors the learning activities to accommodate the needs and interest of learners while involving them in critical thinking and social interaction in groups.

Grounded on the theory of Constructivism, project-based learning takes cognizance of teaching and learning as being an active process of construction which creates enabling opportunities for learners to make connection between new information and existing network of knowledge. Psychological constructivism as articulated by Piaget (1976) and Vygotsky (1962) give preeminence to individual development and social transformation within a cultural setting.

Piaget's theory supports the idea of fashioning the adaptation of learning to the child's interest and needs. The requirements of constructivism are fully embedded in PBL which provide open-ended scenarios for students to brainstorm, create and work with concrete objects. During the process of active participation in groups, students design, conduct research, solve problems, gather data, draw conclusions from their findings and report observed results (Schneider, Krajcik, Marx, Solway, 2002). Through social interaction in groups, learners negotiate their own meaning and are able to arrive at a consensus (important mechanism in the equilibration of discrepancy and disagreement). The net effect is that learners improve on their quality of work as well as their ability to communicate more effectively (Solomon, 2003). Thus, researchers such as Papastergiou (2005) evinced that PBL possesses 'power' to motivate learners while Gulbahar &Tamar (2006) concur that PBL increases learners' motivation and serves as authentic tool for fostering achievement gains and problem-solving.

Despite, research evidence supporting PBL, its implementation in teaching and learning in Nigeria is sparse because teachers give preeminence to content coverage. Yet, the need to succinctly marry what students learn in Physics and Chemistry under classroom setting and learners' reality of life for enhanced individual and community living abound. As yet, studies done in Nigeria have not examined an interdisciplinary approach to fostering students' interest in physics and chemistry through PBL using local materials centering on the topic "energy."

**Research questions:** **(i)** what are the mean interest scores of secondary school students

taught chemistry and physics (energy concept) through project-based method and those taught by traditional method?  **(ii)** What is the effect of gender on mean interest scores of secondary school students exposed to PBL based on energy concept and those taught by traditional method?

**Hypothesis:** There is no significant effect of gender on the mean interest scores of students taught the concept of energy in physics and chemistry.

**Method:** The study design was a quasi-experimental pretest-posttest control group design.

**Sampling:** The sample for the study comprised one hundred and fifty students from four coeducational schools (two Community schools in Ihiala Local Government Area, Nnewi Education Zone and two model schools from Onitsha urban, both in Anambra State Nigeria, respectively.  Purposive sampling was used to draw all the students (boys and girls) offering both physics and chemistry in Senior Secondary Class 3 (SS3) in the schools. Treatment and control groups were randomly assigned. The control group which was exposed to traditional method comprised75 students (40 boys & 35 girls) from two intact classes of schools in Onitsha Urban while the experimental group comprised 75 students (37 boys & 38 girls) from two intact classes of schools in Ihiala. The number of participants from a total of four intact classes were 77 boys and 73 girls.

### Instrument (PCIS)
The instrument used for the study was made of 14–items using Likert-type response format with 7 positively cued and 7 negatively cued items based on 4 response options: Strongly Agree (SA), Agree (A), Disagree (DA) and Strongly Disagree (SD). The students were required to express the degree of their agreement or disagreement with each of the statements by a tick ($\sqrt{}$) in the appropriate column.

### Trial Testing and Reliability of Instrument
PCIS was subjected to trial testing by being administered to 30 senior secondary class III(SSIII)students (in Awka Education Zone, Anambra State, Nigeria) who were offering Chemistry and Physics. The internal consistency using Cronbach alpha reliability method was 0.77.

### Instructional Procedure
The control group was taught by the traditional lecture method and teacher demonstration.  The students observed teachers' demonstrations, listened to the teacher and answered teachers' questions. Teachers explained the concept of energy and gave examples of uses of solar energy without practical activities in the class to substantiate how solar energy can be used to alleviate some obvious problems encountered in Nigeria.

**The experimental group were exposed to the activities given below.**

### Example 1Topic:Alternative Energy Sources and Energy Conservation
**Objective:** Usability of local materials to construct solar concentrator (solar cooker and solar distillery unit – (i)students will become aware of and the need for alternative energy sources.

**Solar Constructor/furnace (Cooker)**

Materials needed: Square aluminum sheets (1.1m × 1.1m), one medium sized aluminum pot, white/silver & black paints, nails hinges, planks/wooden rods, metal bars and rods, nuts, screws, iron cutter angle bracket.

Students were divided into three groups, A, B and C. They were required to pick one paper by balloting. The groups that picked A worked on the solar cooker; the group that picked B worked on solar distillery unit and the group that picked C worked on the production of ginger.

**Design and construction of solar concentrator (solar cooker):** The construction work was carried out in stages. The width of the aluminum sheet provided to the students was 1.20m. In other to take care of errors that may be encountered during measurements, the students were requested to mark out a 1.02m square on the purchased aluminum sheet measuring 2.50m by 1.20m. Now construct a circle of diameter 1.0m on the 1.02m square sheet of aluminum, (Students had earlier designed and constructed prototypes of the concentrating solar collector using card board papers and they had discovered that a circle with diameter lying between 1.0m and 1.5m gives a good parabolic shape when folded if a sector of less than $25^o$ is cut out from it). Mark out a circle of diameter 1.0m (Fig. I). Mark out a small concentric circle with diameter 18.0cm. Now proceed to mark out a sector of $20^o$ on the circle which you constructed on the 1.02m square aluminum sheet (Fig. II).

Using cutters carefully cut off all the shaded areas and discard them.
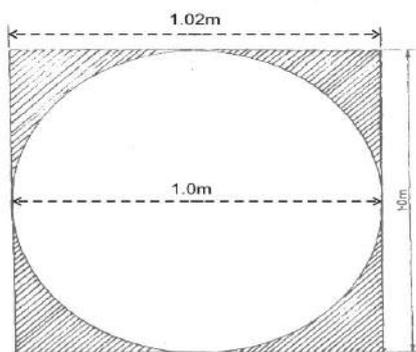


Fig. 1: A square aluminium sheet with a 1m diameter circle inscribed in it
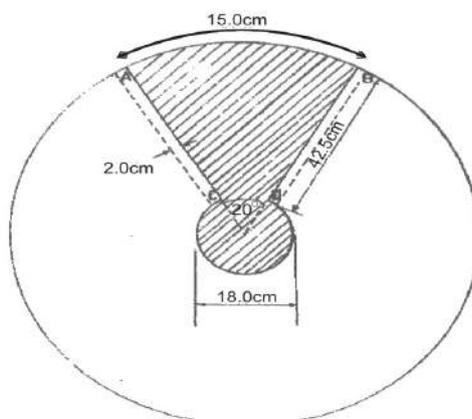


Fig. II The circle with a $20^o$ sector marked out

Now fold the resulting shape gradually until the edges AC and BD slightly overlap by 2.0cm and join the two edges together by riveting. You will obtain an umbrella shape with an open circular base of diameter 12.0cm and an aperture of diameter ($D_{ap}$) 90.0cm. (Fig. III).
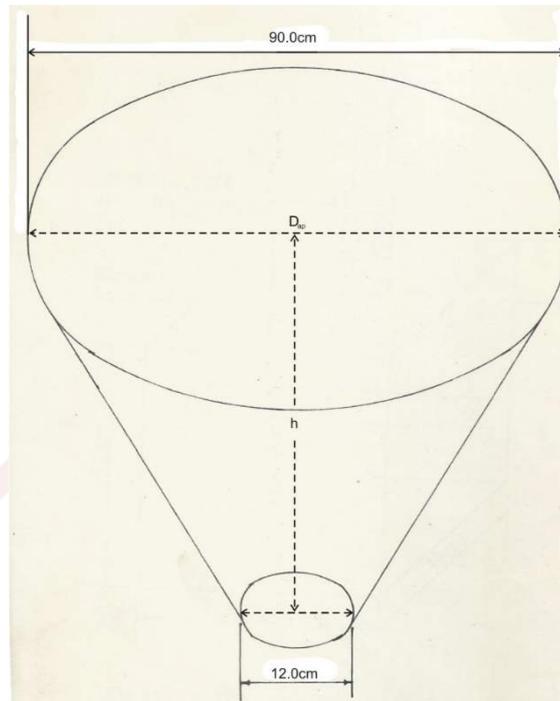


Fig. III:   The side view of the formed concentrating surface
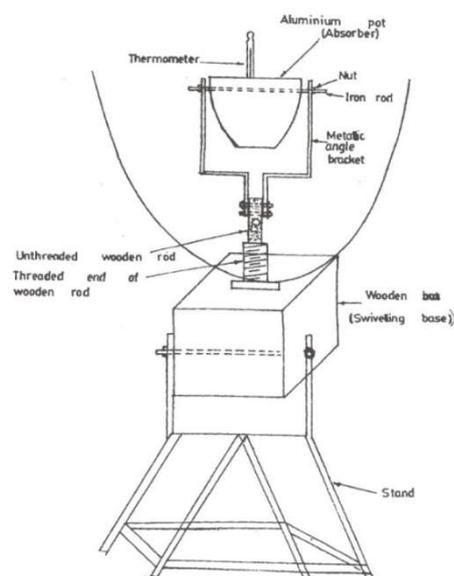


Fig. IV: The assembled solar concentrator with all its parts
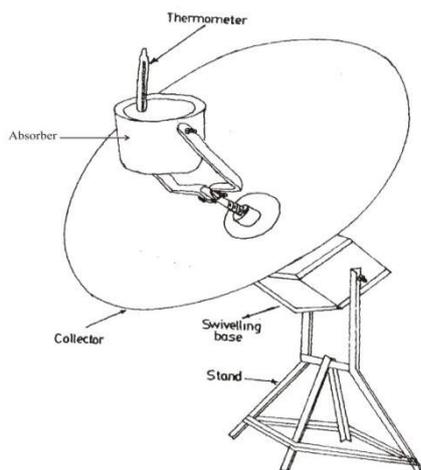
Fig. V: Pictorial view of the constructed solar concentrator

**Solar Distillery Unit**

**Materials:** Concrete or aluminum sheet, Perspex glass, iron bars, aluminum trough, black paint, charcoal, plastic container (say 20 liters) and rubber tube about 2 meters length.

**Instruction**: Construct a rectangular basin measuring 322.0 cm in length, 110.0 cm in width and 90.0 cm depth. Paint the inner walls of the basin with thick black paint to increase absorptivity. Put pieces of charcoal inside the inner base of the basin. Pour impure water into the basin. Cover the basin with the inverted v-shaped Perspex glass with gentle sloping sides that end over a trough at each side of the concrete or aluminum basin. The trough conducts the distilled water to a reservoir. (See Fig VI).

Dimensions of the distillery unit: Area of Basin: $3.22m \times 1.1m = 3.54m^2$

Volume of Basin: $3.22m \times 1.1m \times 0.90m = 3.19m^3$
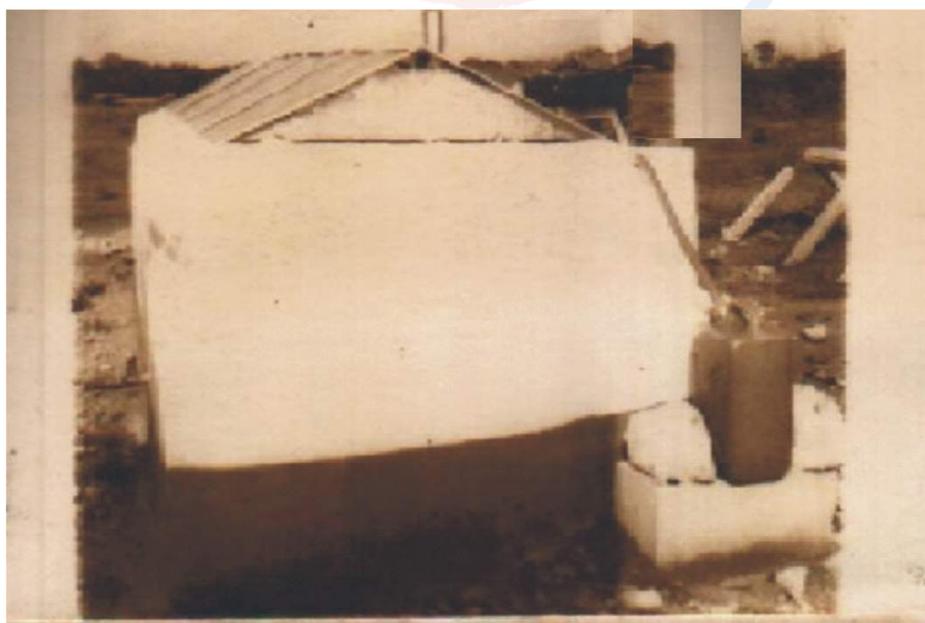


Fig. VI Picture Showing Sample of the Distillery Unit with the V-Shaped Roof Constructed by Students.

Alternatively, some students may choose to construct the basin in such a way that one end will be higher than the other end by about 50cm. and place a plane Perspex glass roof on the basin.
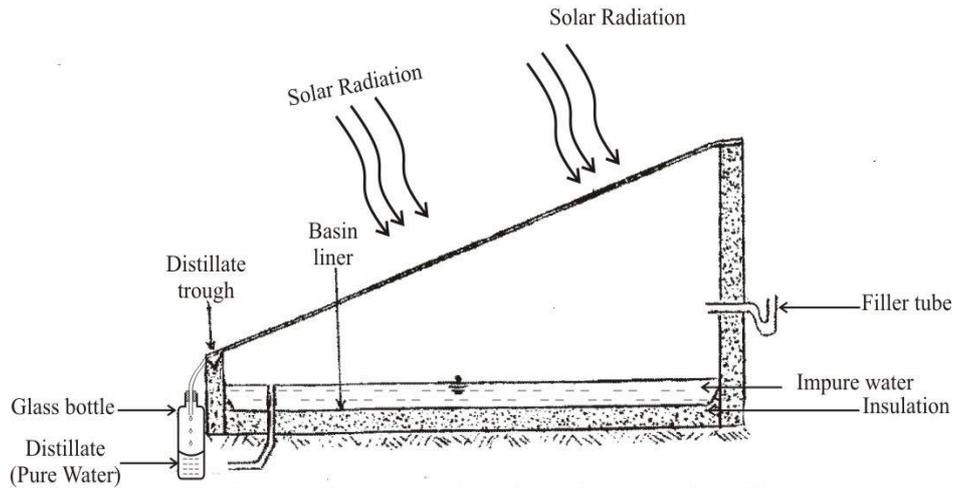


Fig. VII: The cross section of a Basin-Type Solar still

The distillery unit acts like a heat trap (the greenhouse effect) because the roof is transparent to the incoming sun light of short wavelength, but opaque to the long infrared radiation, emitted by hot water. The roof encloses all the vapor and prevents its lost and at the same time keeps the wind from reaching the impure water and cooling it. The water vapor wets the glass and gives a smooth transparent film of liquid.

The dry ground is a poor conductor of heat and the relatively large area of the still permits only a relatively small loss of heat at the edges. The water and the underlying dry ground hold their heat during the night and continue to distill at a reasonably constant rate throughout the night to the early hours of the day.

The energy flow within and outside the distillery can be summarized as shown in Fig VIII. below.
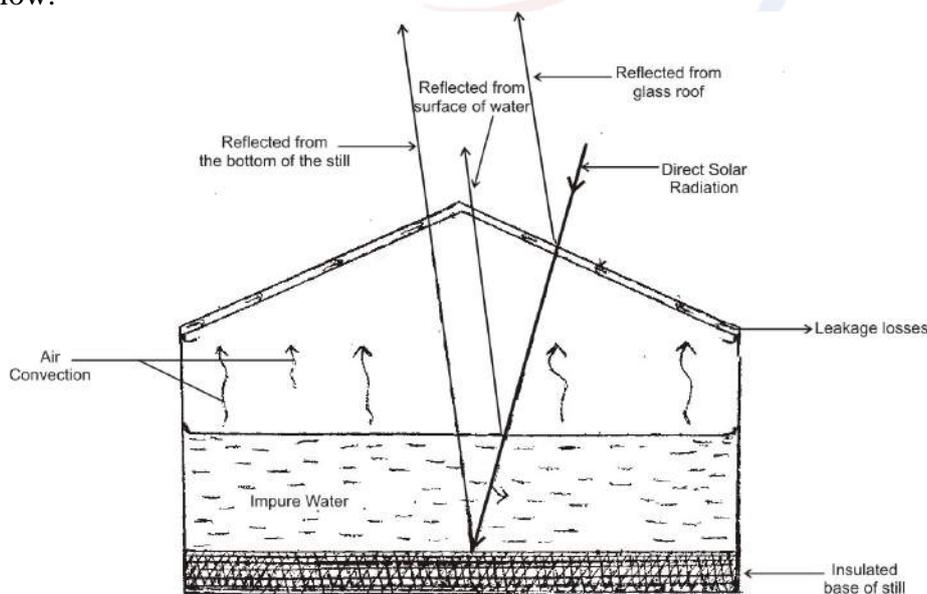


Fig. VIII: Energy flow diagram of a concrete basin type solar distillery unit
The distillery unit is estimated to last for 6-10 years so long as it is constantly maintained.

**The Operational Mode of a Solar Distillery Unit**

The solar distillery is a simple project made from inexpensive materials and can provide distilled water for a number of applications. Its mode of operation is very similar to the hydrologic cycle which produces fresh water as rain or snow.

In the hydrologic cycle, the solar radiation is absorbed by the oceans and causes evaporation of water from the surface of the oceans. The vapor so produced increases the humidity and temperature of the air above the ocean surface. This humid air is moved by wind (also produced by solar energy) to locations where cooling takes place and some of the humidity condenses as rain or snow. This process of humidification which is followed by dehumidification is accomplished on a small scale by the basin-type solar distillery.

**Extraction of Ginger Oil, Ginger Oleoresin and Ginger Powder from Ginger Rhizome**

i.   Collect fresh ginger from the farm or buy from any local market.
ii.  Wash off the soil debris, dry, grind and place in reflux.
iii. Add about 500ml of petroleum ether into a round bottom flask of soxhlet extractor.
iv.  Apply heat at $60^0C$. The vapour evaporates and subsequently cooled at condenser. Drying over the sun further highlights local use of solar energy as well as evaporation process.
v.   The condensing vapour filled the refluxes containing the ginger. Transfer dissolved extract into the flask by siphoning action.
vi.  The process continues until extraction completes. Time $1^1/_2$ hour.
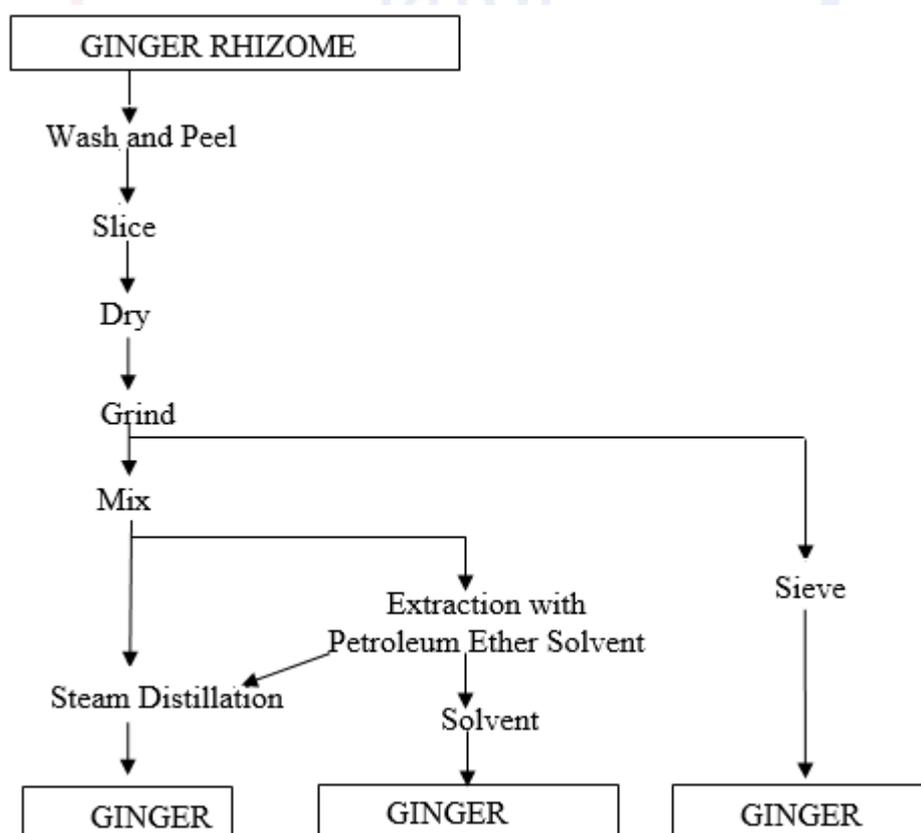


Fig IX: Flow Chart for production of ginger oil, ginger oleoresin and ginger powder

vii. In chemistry, among the factors which increase the rate of chemical reaction is surface area. Hence, by grinding the ginger to powder the surface area is increased giving a greater area for collisions to take place and so causing increase in the rate of reaction.

viii. Why use petroleum ether as solvent – it is cheap and non- toxic; organic solvents dissolves organic solutes.

ix. Energy is also a factor in the solution process during mixing. To break the bonds that hold the particles of a solid together, energy is needed. The addition of energy increases the motion of the particles and particles separate faster.

**Applications of ginger oil, ginger oleoresin and ginger powder** : Locally, it can be used as raw material on pests as Bean Weevil as against synthesized insecticide (pesticide) which has side effects on man who consume the food preserved with them. In addition, ginger is cheap and locally available.

Students were asked to find other health benefits of ginger and do a concept map on the uses of ginger.

**Focus Group Discussion (See Appendix A)**

**Results**

1. The test of the assumption for analysis of covariance (ANCOVA) which are: (i) the linearity between the dependent measures and the covariates; and (b) the homogeneity of regression or parallelism

2. The relevant data tor testing each of the research questions and hypotheses.

**Tests of ANCOVA Assumptions**

(a) The significance of relationship between the dependent variables and the covariates.
$H_0$: The relationship between the covariates and their respective dependent variables is not significant ($p < 0.5$).

**Table 1: Correlation Coefficients (R) Between the Covariates and Their Dependent Variables**

| Covariates | Dependent variables | Treatment | Control | Pooled |
|---|---|---|---|---|
| **Pre-Interest Score** | Post-Interest Score | 0.50 | 0.70 | 0.70 |
| **Critical** | N | 75 | 75 | 150 |
| | R | 0.20 | 0.20 | 0.20 |

Table 1 shows that the value of r between the covariate and the dependent variable is.50 for the treatment group and.70 for the control group. The pooled r ranged .70. The critical value for r required for significance at .05 level is .20. Since the value is less than the observed values of r, the latter are significant and thus the null hypothesis of no significant difference between the covariate and the dependent variable is rejected. Therefore, the covariate shows a significant relationship with the corresponding dependent variable, that is, there is a linear relationship between the covariate and the dependent measure. Thus, the data for the study satisfies the linearity assumption for the use of ANCOVA.

(b) The homogeneity-of-regression or parallelism
$H_0$: There is no significant difference between the population regression coefficients of the control and experimental groups.

**Table 2: Population Regression Coefficients of the Treatment and Control Groups**

| Source | S.S | d.f | MS | $F_{cal}$ |
|---|---|---|---|---|
| B/W Reg | 0.29 | 1 | 0.29 | 1.64 |
| Within | 35.47 | 150 | 0.14 | |
| S/A (Adj ) | 35.78 | 151 | | |

| Variable | Groups | $b_{s/Ai}$ = $(Sps/Ai)(SS_S/A1_{(x)})$ |
|---|---|---|
| Interest | Control | .30 |
| | Treatment | .70 |

The result of the F-test summarized in the table, indicates that the hypothesis of homogeneity of group regression coefficients is tenable. The hypothesis tested using the group regression lines shows that the regression coefficients are equal.

**Table 3: Means and Standard Deviations of Students' Scores in Post-Treatment PCIS (by Treatment by Gender)**

| | | Gender | | |
|---|---|---|---|---|
| | | M | F | Overall |
| Treatment | | 4.45 | 3.90 | 4.18 |
| | SD | .29 | .33 | .31 |
| | N | 37 | 38 | 75 |
| Control | | 2.50 | 2.00 | 2.25 |
| | SD | .35 | .39 | .37 |
| | N | 40 | 35 | 75 |
| Overall | | 3.475 | 2.95 | 3.22 |
| | SD | .31 | .36 | .34 |
| | N | 77 | 73 | 150 |

**Research Question 1:** What are the mean interest scores of secondary school students exposed to PBL while teaching the concept of energy in chemistry and physics and those taught by traditional methods?

Table3 shows the overall mean interest scores of students in the experimental group to be 4.18while the control group had an overall mean interest score of 2.25. Therefore, the experimental group appeared to have a higher mean interest score than the control group.

**Research Question 2**: What is the effect of gender on mean interest scores of secondary school students exposed to PBL based energy concept and those taught by traditional method?

Data in Table 3 show the overall mean interest scores for male and female students to be 3.475 and 2.95 respectively. This means that on the overall, the interest of the male students appeared to have increased more than that of the female students.

**Table 4: Analysis of Covariance (ANCOVA) of Students' Interest Scores (by Gender by Teaching Method)**

| Source of Variation | Sum of Squares | Degree of freedom (df) | Mean Square | Significance of F | Decision at 0.05 level |
|---|---|---|---|---|---|
| Covariate (pretreatment) | 12.68 | 1 | 12.68 | .00 | S |
| Main Effects | 33.49 | 3 | 11.25 | .00 | |
| Teaching Method | 1.52 | 1 | 1.52 | .00 | |
| Gender | 1.45 | 1 | 1.45 | .00 | S |
| Two-way Interaction | 3.82 | R | 3.82 | .00 | |
| Teaching Method x Gender | 3.82 | 1 | 3.82 | .00 | S |
| Explained | 28.63 | 4 | 9.43 | .00 | |
| Residual | 17.77 | I45 | .07 | | |
| Total | 38 | 149 | .25 | | |

Table 4 shows that teaching method as main effect was significant on the interest of students in physics and chemistry with reference to the concept of energy (F = 0.00). Therefore at a higher F value of .05 teaching method as main effect is significant. This leads to the rejection of the null hypothesis of no difference between mean interest score of experimental group and the control group.

**Hypothesis**
The results in Table 4 reveal that gender is significant on students' interest on selected topics in physics and chemistry .05 level (F = 0.00). This means that at higher value of .05 level gender is significant. Based on this, the null hypothesis of no difference between the mean interest score of students' gender is rejected. This further confirms the observed difference between the overall mean interest score of female students (2.95) and (3.475) for the male students.

**Discussion**

Results from this study provided empirical evidence that teaching methods have the capacity of enhancing and sustaining students' interest in science disciplines which otherwise students regarded as difficult, abstract, boring and uninteresting subjects. That different teaching styles can impact differently on students' interest as opined by Atkin & Zukovsky, 1994) is evidenced in this study since the experimental group had higher mean interest score than the control group. Previous research findings substantiate the results of this study. Baker and Leary (1995) found that the girls rejected physical sciences because these areas were not viewed as helping or caring disciplines and instead preferred areas such as biology.

The study has also given credence to the fact that exposing students to appropriate learning experiences, boost their motivation to learn more and sustains their interest. That the interest of the male students was shown to have improved more than interest of the female students appeared to agree with the findings of some studies such as Chang (2008); Ayodele, (2009). When students are interested in a particular subject or topic they come to the classroom with personal interest.

**Conclusion**

This study sought to examine the extent students' interest would be sustained using PBL. In an ever growing, dynamic, innovative, competitive world, reforms in education expect students to develop their skills and employ effectively local materials in order to live well in an age of globalization. With the massive revolution in knowledge and changes in globalization, new expectations call for a generation of science teachers (facilitators, motivators, stimulators) who through effective and student-centered practice will produce individuals capable of becoming informed citizens who can transfer classroom knowledge to their personal lives, homes and communities. To achieve this, the current practice and system of teaching and learning in the science classroom must change. This study has shown that professional development for Nigerian science teachers has become imperative to help them develop techniques in their profession for enhancement of 21st century skills among learners. Finally, the desire for improved performance in the public examinations can only be accomplished by motivating and sustaining the interest of learners, given opportunities to carry out relevant projects which foster creative and critical thinking skills among them.

# References

Aitkin, M. & Zukovsky, R. (1994). Multilevel interaction models and their use in analysis of large-   scale school effectiveness studies. *School and Environment* 5 (1), 45-73

Ayodele, M.O. (2009). Gender differences in Mathematics and I integrated science achievement among Junior Secondary School Students. *MJLI* 6(41 - 52*)*

Baker, D., & Leary, R. (1995). Letting girls speak out about science. *Journal of Research in Science Teaching,* 32, 3–27.

Chair, S. N., Chapin III, F. S., Costanzo, R., Ehrlich, P. R., Golley, F. B., Hooper, D. U., Lawton, J. H., O'Neill, R. V., Mooney, H. A., Sala, O. E., Symstad, A. J.,& Tilman. D. (1999).  Biodiversity and Ecosystem Functioning: Maintaining Natural Life Support Processes. *Issues in Ecology 4, 1-14*

Chang, Y. (2008*). Gender differences in science achievement; Science self – concept and science values.* The proceedings of IRC 2008

Gulbahar, Y. & Tinmaz, H. (2006). Implementing project-based learning and e-portfolio assessment in an undergraduate course. *Journal of Research on Technology in Education, 38*(3), 309-327.

Haloulakos, V. E.(2009). Physics, the layman, and daily life, a simplified explanation of the three basic laws of physics: Newton's gravitation and planetary motion Maxwell's electromagnetic waves Einstein's special relativity and modern physics. Googled from Einstien Haloulakos on June 20, 2015

Isola, O. M. (2010). *Effects of standardized and improvised instructional materials on students' achievement in secondary school physics*. Unpublished M.Ed Thesis. University of Ibadan.

Khan, H. A. (2004). *Education, science and technology in developing countries: some thoughts and reflections*. M/s A. R. Printers. COMSATS Headquarters Pakistan

Nsamenang, A.B. & Tchombe, T. M. S.(2011). *Handbook of African educational theories and practices, a generative teacher education curriculum.* Human Development Research Centre (HDRC), Bemenda Cameroon.

Oladejo, M. A., Olosunde, G. R., Ojebisi, A. O. & Isola, O. M. (2011). Instructional materials and students' achievement in physics: some policy implications. *European Journal of Humanities and Social Science*. 2 (1), 113-122

Opara, M. F (2014).Improving Students' Performance in stoichiometry through the implementation of collaborative learning. *Journal of Education and Vocational Research* 5(30), 85-93.

Papastergiou, M. (2005). Learning to design and implement educational web sites within pre-service training: A project-based learning environment and its impact on student teachers. *Learning, Media and Technology* 30 (3), 263–279.

Piaget, J. (1976). Piaget's theory. In B. Inhelder & H. H. Chipman (Eds). *Piaget and his school.* New York: Springer Verlag.

Serbessa, D. D. (2006). Tension between traditional and modern teaching-learning approaches in Ethiopian primary schools. *Journal of International Cooperation in Education*, 9(1), 123-140.

Schneider, R. M., Krajcik, J., Marx, R. W., & Soloway, E. (2002)Performance of students in project-based science classrooms on a national measurement of science achievement. *Journal of Research in Science Teaching*, 39(5), 410-422.

Solomon, G. (2003). Project-based learning: a primer. *Technology & Learning*, 23(6), 20-26.

Vygostky, L. S. (1975). *Mind in Society: The development of higher mental processes.* Cambridge M. A: Harvard University Press.
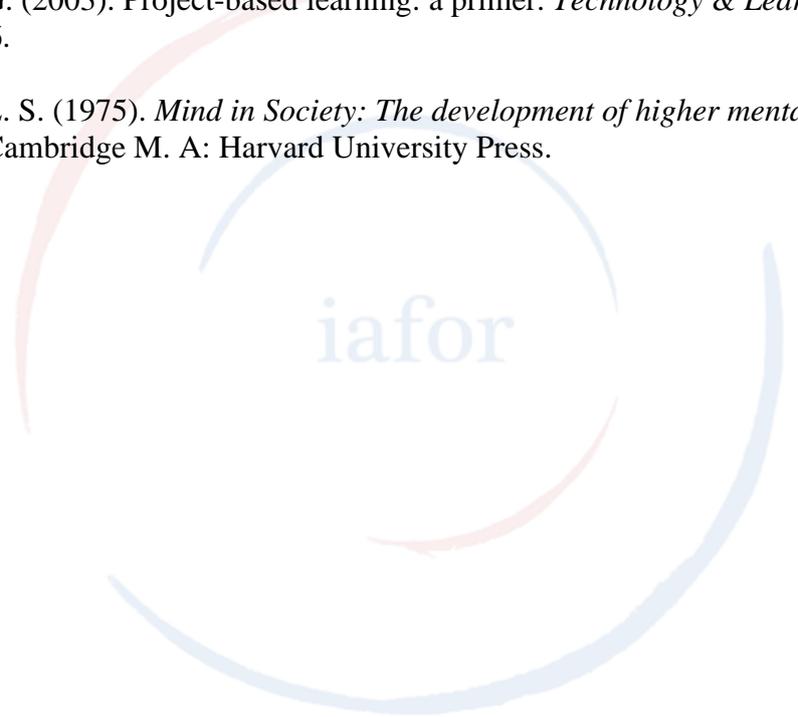
**Appendix A**
**Focus Group Discussion**

**Facilitator:** How did you find the project? Which aspect was interesting? Which was unsatisfying to you?

Alice: Initially, I found it difficult to begin and I wondered why our teacher won't draw the diagram for us on the black board and explain the whole lesson.

George: I felt the same way like Alice but by the end of the second week when the design started coming up, I became excited and said to myself – "Wao! I can do it".

Bayero: When I started getting ideas from my group members, I felt good. I wondered why we have to spend so much money on kerosene if we could use the sun to cook. I tried it out with my colleagues in the village and we have decided to create awareness in the village so that the poor families who cannot afford to buy kerosene and gas often can use solar energy. After all, it is also far better than using wood.

Goody: The process is very slow but we have tried using solar energy to heat our water for bathing.

Ayo: I often go to the bush to fetch firewood for my mother but I had to tell my mother that when we run shut of firewood we could use the solar energy cooker to prepare small quantity of food.

Grace: Fascinating! I have already put some ginger powder I produced in the beans stored in a container by my mum.

Peace: The project is very interesting but it makes one work hard. It also involves a lot thinking.

Linda: I didn't know how to write a report but I have learnt it now with the assistance of other students in my group. When we first did the topic on energy I had the impression that all talk on solar energy were achievable only by the 'white man'!!

Salome: The aspect most satisfying to me was that we can cook with Sunlight energy. I am happy because those who live in the remote village can plan to use solar energy especially when there is shortage of kerosene/fuel scarcity. Also, fetching of firewood during the rainy season can be inconveniencing, so solar energy cooker is an invention that help us reduce the stress of firewood fetching under the rains.

Facilitator: How do you purify your drinking water at home?

Basil: Hm! We don't purify water, we drink the water we got directly from the well or borehole. But from the project of water distiller, I have learnt that it is not only safer to purify water but that it will not cost us much, after all we don't have to buy the energy from the sun! My problem is that the process is slow.

(The names given here are not real names of the participants).
Email address of corresponding author: ebere1975@gmail.com

## Sociolinguistic Obstacles in Language Learning: Results of Two Follow-Up Studies

Eugen Zaretsky, University Hospital of Frankfurt/Main, Germany
Benjamin P. Lange, Julius Maximilian University of Wuerzburg, Germany

**Abstract**

The language competence of preschool children depends on a complex constellation of demographic, sociolinguistic, physiological, and psychological factors. In this study, some of such factors were analyzed for two samples of German preschool children ($N$s = 163 and 134) whose language skills in German were tested twice with medians of 15 and 6 months in between. Sociolinguistic factors were assessed with questionnaires for parents and daycare center teachers. The study examined which factors documented in the first test session were statistically associated with the language competence of the children in the second test session. An expert panel classified all children as needing or not needing additional educational support or medical help in learning/acquiring German. These two classifications were the object of further analyses in linear-by-linear, Chi-square, and Mann-Whitney $U$-tests. To identify the most important factors associated with the two classifications, all factors with significant results entered classification trees. Children who were classified as needing educational or medical support often had limited contact to the German language, and their parents had a low educational level and/or insufficient command of German. Participation in language courses did not yield significant results. Children of Turkish and Arab origin lived in comparatively closed communities, acquired German under unfavorable conditions, and constituted the two weakest subgroups of German learners. In general, most study participants who were linguistically weak in the first test session remained weak in the second one. Most of the chosen sociolinguistic factors were good predictors of children's language competence several months later.

Key words: language acquisition, language disorders, German language, children, preschoolers

iafor

Some sociolinguistic factors are known to influence the language acquisition process in preschool children: child's emotionality and parenting stress (Noel, Peterson, & Jesso, 2008), socioeconomic status and maternal education (Letts, Edwards, Sinka, Schaefer, & Gibbons, 2013; Taylor, Christensen, Lawrence, Mitrou, & Zubrick, 2013), and, for immigrant children, languages spoken at home (Cornips & Hulk, 2008).

Depending on the study design, findings of studies on sociolinguistic variables in the language acquisition may vary considerably. Such studies can be subdivided into (a) those concerned with the cross-sectional analysis of sociolinguistic variables (influence on or association with language competence in a certain point in time), (b) those concerned with factors influencing or associated with language competence in the future (usually follow-up studies), (c) those concerned with factors influencing or associated with changes in language competence between two test sessions. Frequent otitis media, for instance, can be negatively associated with language competence in the study type (a) (deficient language skills in a cross-sectional study), not associated with the language competence in the study type (b) (if the language input suffices to overcome the negative effects of the hearing deficits), and positively associated with changes in the language competence in the study type (c) (for instance, if a child who had a minimal language competence began to catch up with the peers due to a sufficient language input). The present study is the type (b), that is, it examines factors which are predictive of the language competence in the future.

For a sample called Study 2 in the present article (see Methods), some sociolinguistic variables documented in the first test session appeared to be associated with the classification of children as needing or not needing medical help in acquiring German in the second test session (Zaretsky & Lange, 2015). The classification of children was carried out by a group of university experts. Children who were classified as needing medical help usually scored below the $6^{th}$ percentile in comparison with the reference group and had some diagnosed or not diagnosed language-related illnesses/diseases/impairments which influenced the language acquisition negatively. The identified sociolinguistic variables were the following: whether the child likes to play with other children, whether the child speaks out when playing, whether the child plays with German speaking children in the daycare center and after daycare center time, age when the child had enough language contact to learn German, school mark given by a daycare center teacher for the language competence of the child when he/she began to attend the daycare center, school mark given by a daycare center teacher for the language competence of the child in the first test session, age in the first test session, whether the child attends an association or a study group, language the mother prefers to speak at home, language the father prefers to speak at home, and language the child prefers to speak at home. Also, in the first test session, children needing medical help were significantly more often classified by the language experts as needing additional educational support (language courses) than children who did not need medical assistance. In the classification tree with the same classification of children as needing or not needing medical support as the dependent variable and all significantly associated factors as independent variables, only the classification of children as needing or not needing additional educational support yielded a significant result. Among children who were classified as needing educational support in the first test session, 30% were classified as needing medical help in the second test session. Among children who were classified as not needing educational support in

the first test session, 8% were classified as needing medical help in the second test session.

The present study aimed at the identification of sociolinguistic variables significantly associated with the language competence of German pre-school children in the next test session several months later. The language competence was either classified dichotomously by the language experts (the child needs additional educational support and/or medical help in acquiring/learning German) or was measured by the total number of correct answers in validated language tests. Hence, sociolinguistic factors which can be predictive of the language competence of German preschoolers were analyzed.

**Material and Methods**

In both follow-up studies children were tested twice with a time span of several months in between. All test subjects were classified by an expert panel from the Frankfurt University Hospital as (a) needing (ED) or not needing (NED) additional educational support and (b) as needing (CLIN) or not needing (NCLIN) medical help in acquiring/learning German. The expert panel consisted of language experts (speech and language therapists, researchers in linguistics). The classification was carried out on the basis of test batteries, audio records of the tests, and questionnaires for parents and daycare center teachers. Children classified as ED scored below the 17th percentile of the reference group and were considered to need educational support (language course) to catch up with their peers. The characteristics of children classified as CLIN were described in the Introduction.

The data were analyzed retrospectively and had been originally collected for the development of speech and language tests. In Study 1, the original study design excluded monolingual Germans. In Study 1 and Study 2, no inclusion criteria were applied, except for the preferred age of four and age range between three and five in the first test session. All children irrespective of immigration background, impairments, and other sociolinguistic factors were included if parents signed an informed consent. Details on both studies can be found in Table 1.

Table 1. *Sample sizes, tests used, time spans, and locations of all three studies*

| | Study 1 | Study 2 |
|---|---|---|
| *N* | 134 | 165 |
| *N* boys | 82 (61%) | 99 (60%) |
| *N* girls | 52 (39%) | 66 (40%) |
| *N* MO | 3 (2%) | 60 (36%) |
| *N* BM | 131 (98%) | 105 (64%) |
| Age range, 1st session | 48-53 | 37-68 |
| Age median, 1st session | 50 | 50 |
| Age range, 2nd session | 54-60 | 60-81 |
| Age median, 2nd session | 56 | 66 |
| NCLIN (1st session) | 109 (81%) | 147 (89%) |
| CLIN (1st session) | 25 (19%) | 18 (11%) |
| NCLIN (2nd session) | 117 (87%) | 141 (86%) |
| CLIN (2nd session) | 17 (13%) | 24 (14%) |
| Result NCLIN →CLIN | 7 (5%) | 8 (5%) |
| Result NCLIN →ND or CLIN→CLIN | 112 (84%) | 144 (87%) |
| Result CLIN→ NCLIN | 15 (11%) | 13 (8%) |
| NED (1st session) | 61 (45%) | 105 (64%) |
| ED (1st session) | 73 (55%) | 60 (36%) |
| NED (2nd session) | 70 (52%) | 116 (70%) |
| ED (2nd session) | 64 (48%) | 49 (30%) |
| Result NED → ED | 8 (6%) | 8 (5%) |
| Result NED → NED or ED → ED | 109 (81%) | 138 (84%) |
| Result ED → NED | 17 (13%) | 19 (12%) |
| Tests | MSS b → MSS b | MSS b → S-ENS |
| Time span in months between test and retest (range) | 4-7 | 9-33 |
| Time span in months between test and retest (median) | 6 | 15 |
| Questionnaires (1st session) | for parents and daycare center teachers | for parents and daycare center teachers |
| Time of test conduction | 2010 | 2008-2011 |
| Test location | daycare centers | public health departments and daycare centers |
| Region in Germany | state of Hesse | state of Hesse |

*Note*. NED = not needing additional educational assistance in acquiring German, ED = needing additional educational assistance in acquiring German, NCLIN = not needing medical assistance in acquiring German, CLIN = needing medical assistance in acquiring German, MO = monolingual German children, BM = bi-/multilingual children, MSS b = validated short version of the language test "Marburger Sprachscreening", S-ENS b = language test "S-ENS. Screening des Entwicklungsstandes bei Einschulungsuntersuchungen" with some additional validated tasks

The statistical analysis was carried out in the same way for both studies. First, associations between the sociolinguistic variables and (a) the classification of children as ED/NED, (b) the classification of children as CLIN/NCLIN, and (c) the total scores of language tests were analyzed with different non-parametric tests depending on the characteristics of the data: Chi-square ($\chi^2$), linear-by-linear association (lbl), Spearman's correlation ($\rho$), Mann-Whitney $U$-test, and Kruskal-Wallis $H$-test. In all cases the sociolinguistic variables were documented in the first test session, and the ED/NED, CLIN/NCLIN classifications as well as the total scores of the language tests were taken from the second test session. Hence, the predictive power of the sociolinguistic factors was analyzed.

Non-parametric tests were utilized because the data were either ordinal or not normally distributed according to the Kolmogorov-Smirnov test ($ps < .05$). Sample sizes varied depending on the number of parents and daycare center teachers who answered the respective question.

Next, all sociolinguistic variables which turned out to be significantly ($p < .05$) or at least marginally significantly ($p \leq .08$) associated with the classifications of children or with the total scores of the language tests, entered classification trees as independent variables. The dependent variables were the same two classifications of children and total scores of the language test. Growing method Exhaustive CHAID was utilized in all classification trees.

In Study 1, the speech and language test "Marburger Sprachscreening" was used in both test sessions in a validated, modified short form (MSS b; Euler et al., 2010; Neumann et al., 2011). It contains subtests on speech comprehension, articulation, vocabulary, grammar, phonological short-term memory (repetition of sentences and nonce words), and fluency. No transformation of data was necessary for calculations with the total number of correct answers. In Study 2, the same version of the "Marburger Sprachscreening" was utilized in the first test session. However, in the second test session children were far too old for this test. Therefore, the standard school enrolment test of the state of Hesse was used, namely the "S-ENS. Screening des Entwicklungsstandes bei Einschulungsuntersuchungen" (Döpfner, Dietmair, Mersmann, Simon, & Trost-Brinkhues, 2005) with some additional validated tasks (S-ENS b). Because of these additional items, which had other scale values than the S-ENS items, the total score of each subtest (speech comprehension, articulation, vocabulary, grammar, phonological short-term memory) was $z$-transformed. Fluency disorders were not the subject of this study. Questionnaires for parents and daycare center teachers where sociolinguistic factors were documented were a part of MSS b. The questionnaire items were not completely identical in Study 1 and Study 2 because the language test MSS b was in the process of development.

**Results**

Associations between the sociolinguistic variables from the questionnaires and the classifications of children (ED/NED, CLIN/NCLIN) as well as the total scores of the language test MSS b were analyzed in Table 2 for Study 1. Only sociolinguistic variables which yielded significant or marginally significant results at least once are mentioned in Tables 2 and 3. Not significantly associated factors are listed below the tables.

Table 2. *Study 1: Sociolinguistic factors from the first test session significantly associated with the results of the second test session*

| | ED/NED | CLIN/NCLIN | total scores |
|---|---|---|---|
| compliance in the test situation (good – average – bad) | $lbl_{(1)}$ = 17.12***, $N = 134$ | $lbl_{(1)}$ = 6.43*, $N = 134$ | n. s. |
| classification ED/NED | $\chi^2_{(1)}$ = 53.87***, $N = 134$ | $\chi^2_{(1)}$ = 3.80*, $N = 134$ | $U = 705$, $Z = -6.72$***, $N = 133$ |
| classification CLIN/NCLIN | $\chi^2_{(1)}$ = 16.18***, $N = 134$ | $\chi^2_{(1)}$ = 17.78***, $N = 134$ | $U = 622$, $Z = -4.20$***, $N = 133$ |
| the child attended a nursery school in the first two years of life (yes/no) | $\chi^2_{(1)} = 8.85$**, $N = 84$ | n. s. | $U = 417$, $Z = -3.01$**, $N = 84$ |
| language preferred at home (German, Turkish, Russian, Italian, Croatian/Serbian, Greek, English, Arab, Spanish, other languages) | $\chi^2_{(6)}$ = 19.29**, $N = 101$ | n. s. | K-W: $\chi^2_{(6)} = 26.67$***, $N = 100$ |
| language the child prefers to speak at home (the same options) | $\chi^2_{(6)}$ = 17.55**, $N = 91$ | n. s. | K-W: $\chi^2_{(6)} = 19.90$**, $N = 90$ |
| language the mother prefers to speak at home (the same options) | n. s. | n. s. | K-W: $\chi^2_{(6)} = 12.71$*, $N = 94$ |
| mother's first language (the same options + some more languages) | n. s. | n. s. | K-W: $\chi^2_{(6)} = 22.16$*, $N = 102$ |
| the child speaks out when playing (never – seldom – sometimes – often – always) | $lbl_{(1)}$ = 13.72***, $N = 112$ | n. s. | $\rho = .390$***, $N = 111$ |
| the child plays with German speaking children in the daycare center (with the same options) | $lbl_{(1)} = 4.94$*, $N = 110$ | n. s. | $\rho = .345$***, $N = 109$ |
| the child likes to play with other children (with the same options) | n. s. | n. s. | $\rho = .212$*, $N = 111$ |
| the child does not hear well (with the same options) | $lbl_{(1)} = 8.50$**, $N = 110$ | $lbl_{(1)}$ = 9.74**, $N = 110$ | $\rho = -.212$*, $N = 109$ |
| age when the child had enough language contact to learn German (in years) | $lbl_{(1)} = 9.15$**, $N = 82$ | n. s. | $\rho = -.504$***, $N = 82$ |
| school mark given by a daycare center teacher for the language competence of the child when he/she began to attend the | $lbl_{(1)}$ = 18.78***, $N = 88$ | $lbl_{(1)} = 6.71$*, $N = 88$ | $\rho = -.593$***, $N = 88$ |

| | | | |
|---|---|---|---|
| daycare center (from 1 "excellent" to 6 "very bad") | | | |
| school mark given by a daycare center teacher for the language competence of the child in the first test session (with the same options) | $lbl_{(1)}$ = 24.71***, $N = 91$ | $lbl_{(1)}$ = 12.24***, $N = 91$ | $\rho =$ -.625***, $N = 91$ |
| the child speaks his/her mother tongue, if not German, appropriately for his/her age (yes/no) | $\chi^2_{(1)}$ = 4.28*, $N = 98$ | $\chi^2_{(1)}$ = 12.20***, $N = 98$ | n. s. |
| the child plays with German speaking children after the daycare center time (yes/no) | $\chi^2_{(1)}$ = 4.03*, $N = 97$ | n. s. | $U = 72$, $Z = -2.57*$, $N = 96$ |
| the child is in language therapy (yes/no) | $\chi^2_{(1)}$ = 4.05*, $N = 106$ | $\chi^2_{(1)}$ = 27.85***, $N = 106$ | n. s. |
| language disorders in the family (yes/no) | $\chi^2_{(1)}$ = 4.00*, $N = 102$ | $\chi^2_{(1)} = 9.16**$, $N = 102$ | n. s. |
| mother's educational level (no school certificate – secondary school certificate – intermediate school leaving certificate – matura – high school) | $lbl_{(1)} = 5.40*$, $N = 91$ | n. s. | $\rho = .270*$, $N = 90$ |
| father's educational level (with the same options) | n. s. | $lbl_{(1)} = 3.76*$, $N = 88$ | n. s. |
| age of the child in the first test session (in months) | $U = 1855$, $Z = -1.75^{\#}$, $N = 134$ | n. s. | n. s. |
| length of daycare center attendance (in months) | $U = 535$, $Z = -4.70***$, $N = 98$ | $U = 317$, $Z = -2.77**$, $N = 98$ | $\rho = .399***$, $N = 97$ |
| sex of the child (male/female) | n. s. | $\chi^2_{(1)}$ = 3.67$^{\#}$, $N = 134$ | n. s. |
| the child has some illness/disease/impairment which might influence negatively language acquisition (yes/no) | n. s. | $\chi^2_{(1)}$ = 11.89**, $N = 104$ | $U = 230$, $Z = -2.20*$, $N = 101$ |

*Note.* NED = not needing additional educational assistance in acquiring German, ED = needing additional educational assistance in acquiring German, NCLIN = not needing medical assistance in acquiring German, CLIN = needing medical assistance in acquiring German, K-W = Kruskal-Wallis *H*-test, lbl = linear-by-linear association
*** $p < .001$, ** $p < .01$, * $p < .05$, $^{\#} p \leq .08$, n. s. = not significant

Some factors were excluded from Table 2 because they were not significantly associated with the ED/NED and CLIN/NCLIN classifications and the total score of the language test. These were the following: languages spoken at home (only German, German and other language(s), only other language(s)), the child attends the daycare center for half a day or a full day, language the father prefers to speak at

home, father's first language, in the daycare center group there is at least one more child who speaks the same non-German language as the study participant, how often the child plays with this child/children, "problems with reading and writing" in the family, age when the mother and father began to learn German, time span between two test sessions, age of the child in the second test session.

Next, sociolinguistic factors significantly associated with the ED/NED and CLIN/NCLIN classifications entered classification trees as independent variables. There were, however, several exceptions. Compliance of the child in the test situation was not considered because this factor is not the cause of the language deficits but rather the consequence of the medical and psychological issues which might be associated with the language deficits. Also, the ED/NED classification in the first test session was excluded from predicting the ED/NED classification in the second one because the subject of the analysis was identification of sociolinguistic variables associated with the ED/NED classification. The same is valid for the CLIN/NCLIN variable from the first test session in the prediction of the CLIN/NCLIN classification from the second test session.

A classification tree with the ED/NED classification as the dependent variable and all sociolinguistic factors which yielded significant results for this classification in Table 2 as independent variables predicted correctly 70% of the cases, that is, of the classification of study participants as ED or NED. The only sociolinguistic factor associated with the ED/NED classification was "language preferred at home" ($\chi^2_{(1)} =$ 22.01, $p < .001$, $N = 134$). Children whose families spoke Arabic or Turkish at home were classified as ED in 74% of the cases, whereas children whose families spoke any other language at home were classified as ED in 32% of the cases.

A classification tree for the prediction of the CLIN/NCLIN classification did not identify any statistically significant factors. In this respect it should be mentioned that the Bonferroni adjustment of the $p$-value was applied automatically in all classification trees and resulted in the exclusion of all factors which were not highly significantly associated with classifications and with total scores of the language tests.

In the third classification tree the total score of the MSS b test functioned as the dependent variable and significantly associated factors (see Table 2) as the independent variables, except ED/NED and CLIN/NCLIN. "Language preferred at home" was again identified as the most important variable ($F_{(1, 115)} = 15.40$, $p = .012$, $N = 117$): children who spoke Arabic, Turkish and "other" languages at home ($M = 36.35$, $SD = 11.22$) scored lower than children who spoke German, Italian, Greek, Spanish, English, Serbian/Croatian, and Russian ($M = 43.75$, $SD = 9.00$). No other nodes were identified.

Associations between sociolinguistic variables from questionnaires and the classification of children as ED/NED as well as the total scores of the language test S-ENS b were analyzed in Table 3 for Study 2. Results on associations between the classification of children as CLIN/NCLIN and sociolinguistic variables were published elsewhere, including a classification tree (Zaretsky & Lange, 2015), and were summarized in the Introduction.

Table 3. *Study 2: Sociolinguistic factors from the first test session significantly associated with the results of the second test session*

| | ED/NED | total scores |
|---|---|---|
| languages spoken at home (only German, German and other language(s), only other language(s)) | $lbl_{(1)}$ = 29.57***, $N = 143$ | $\rho = -.491$***, $N = 132$ |
| compliance in the test situation (good – average – bad) | $lbl_{(1)} = 9.54$**, $N = 153$ | n. s. |
| classification ED/NED | $\chi^2_{(1)} = 64.11$***, $N = 162$ | $U = 452$, $Z = -8.39$***, $N = 150$ |
| classification CLIN/NCLIN | $\chi^2_{(1)} = 4.06$*, $N = 162$ | $U = 430$, $Z = -4.16$***, $N = 150$ |
| classification BM/MO | $\chi^2_{(1)} = 15.29$***, $N = 162$ | $U = 1486$, $Z = -4.34$***, $N = 150$ |
| language preferred at home (German, Turkish, Russian, Italian, Croatian/Serbian, Greek, English, Arab, Spanish, other languages) | $\chi^2_{(6)} = 56.37$***, $N = 129$ | K-W: $\chi^2_{(6)} = 52.57$***, $N = 119$ |
| language the father prefers to speak at home (the same options) | $\chi^2_{(6)} = 41.40$***, $N = 111$ | K-W: $\chi^2_{(7)} = 30.05$***, $N = 101$ |
| language the mother prefers to speak at home (the same options) | $\chi^2_{(6)} = 49.27$***, $N = 118$ | K-W: $\chi^2_{(6)} = 44.44$***, $N = 108$ |
| language the child prefers to speak at home (the same options) | $\chi^2_{(6)} = 45.35$***, $N = 116$ | K-W: $\chi^2_{(6)} = 36.61$***, $N = 106$ |
| mother's first language (the same options) | $\chi^2_{(10)} = 29.52$**, $N = 62$ | K-W: $\chi^2_{(10)} = 31.69$***, $N = 62$ |
| father's first language (the same options) | $\chi^2_{(9)} = 22.69$**, $N = 61$ | K-W: $\chi^2_{(9)} = 20.00$*, $N = 61$ |
| the child speaks out when playing ("never – seldom – sometimes – often – always") | $lbl_{(1)}$ = 22.16***, $N = 131$ | $\rho = .368$***, $N = 121$ |
| the child plays with German speaking children in the daycare center (with the same options) | $lbl_{(1)} = 7.85$**, $N = 80$ | $\rho = .285$*, $N = 74$ |
| in the daycare center group there is at least one more child who speaks the same non-German language as the study participant (yes/no) | $\chi^2_{(1)} = 4.82$*, $N = 65$ | $U = 312$, $Z = -1.79^{\#}$, $N = 59$ |
| age when the child had enough language contact to learn German (in years) | $lbl_{(1)}$ = 24.92***, $N = 61$ | $\rho = -.624$***, $N = 54$ |
| school mark given by a daycare center teacher for the language competence of the child when he/she began to attend the daycare center (from 1 "excellent" to 6 "very bad") | $lbl_{(1)}$ = 28.68***, $N = 63$ | $\rho = -.756$***, $N = 57$ |

| | | |
|---|---|---|
| school mark given by a daycare center teacher for the language competence of the child in the first test session (with the same options) | $lbl_{(1)} = 30.40^{***}$, $N = 63$ | $\rho = -.789^{***}$, $N = 56$ |
| the child attends an association or a study group (yes/no) | $\chi^2_{(1)} = 24.09^{***}$, $N = 66$ | $U = 211, Z = -2.66^{**}$, $N = 54$ |
| the child plays with German speaking children after the daycare center time (yes/no) | $\chi^2_{(1)} = 9.50^{**}$, $N = 102$ | $U = 82, Z = -3.21^{**}$, $N = 94$ |
| the child is in language therapy (yes/no) | $\chi^2_{(1)} = 4.17^*$, $N = 151$ | $U = 216, Z = -1.92^{\#}, N = 140$ |
| age of the child in the first test session (in months) | $U = 2159, Z = -2.02^*, N = 162$ | n. s. |
| age when the father began to learn German (in years) | $U = 162, Z = -1.80^{\#}, N = 45$ | n. s. |
| age when the mother began to learn German (in years) | n. s. | $\rho = -.313^*$, $N = 48$ |
| mother's educational level (no school certificate – secondary school certificate – intermediate school leaving certificate – matura – high school) | n. s. | $\rho = .390^*$, $N = 51$ |
| the child attended a nursery school in the first two years of life (yes/no) | n. s. | $U = 506, Z = -1.74^{\#}, N = 88$ |

*Note.* NED = not needing additional educational assistance in acquiring German, ED = needing additional educational assistance in acquiring German, NCLIN = not needing medical assistance in acquiring German, CLIN = needing medical assistance in acquiring German, K-W = Kruskal-Wallis *H*-test, lbl = linear-by-linear association, BM = bi-/multilingual children, MO = monolingual German children
$^{***} p < .001$, $^{**} p < .01$, $^* p < .05$, $^{\#} p \leq .08$, n. s. = not significant

Factors not mentioned in Table 3 because of non-significant results were the following: sex of the child, the child attends the daycare center for half a day or a full day, the child attends the daycare center regularly, the child likes to play with other children, the child has a mental disability, participation in a language course, the child does not hear well, how often the child plays with child/children who speak(s) the same non-German language (for immigrants), the child likes to go to the daycare center, the child speaks his/her mother tongue, if not German, appropriately for his/her age, motor and sight disorders, frequent otitis media, head and face malformations like cleft lip and palate, early or difficult birth (including low birth weight), "problems with reading and writing" in the family, language disorders in the family, the child has some language-related illness/disease/impairment, father's educational level, length of daycare center attendance in months, time span between test sessions in months, age in the second test session.

In the classification tree with the ED/NED classification as the dependent variable and all significant or marginally significant variables from Table 2 as independent variables, 71% of the cases were predicted correctly. All participants were subdivided into two groups depending on the language(s) spoken at home ($\chi^2_{(1)} = 19.81$, $p < .001$, $N = 162$): (a) only German: 9% of ED-results, (b) German and (an)other language(s) or no German at all: 42% of ED-results. No further nodes were identified.

In the last classification tree, a total score of $z$-transformed S-ENS b values was predicted by all significantly associated sociological variables except ED/NED and CLIN/NCLIN. Only one factor was identified, namely "languages spoken at home" ($F_{(1, 148)} = 40.61$, $p < .001$, $N = 148$). All children were subdivided into those from families preferring to speak only German at home ($M = 0.36$, $SD = 0.07$) and children from families preferring to speak German and (an)other language(s) or only (an)other language(s) ($M = -0.61$, $SD = 1.10$).

**Discussion**

In this study, two samples were analyzed retrospectively. In both cases, the association of sociolinguistic factors documented in the first test session with the test results in the second test session was the object of the study. Most of the chosen factors (items in questionnaires for parents and daycare center teachers from the language test MSS b) were shown to be relevant for the language competence of German preschoolers several months after the first test session. The language competence was assessed with two language tests on grammar, articulation, speech comprehension, vocabulary, and phonological short-term memory. On the basis of these language tests, children were classified by language experts as needing or not needing additional educational or medical help in learning/acquiring German. These two classifications and total scores of the language tests entered the statistical analyses.

Sociolinguistic characteristics of children needing educational and/or medical help as well as of children with low test scores can be summarized as follows (each statement is valid for at least one of two studies, under consideration of the results on the CLIN/NCLIN classification in Study 2 published in Zaretsky and Lange (2015)):

- Their compliance in the test situation was low (ED/NED, CLIN/NCLIN),
- CLIN were often classified as ED, ED were often classified as CLIN, and children with low test scores were often classified both as ED and CLIN,
- They did not attend a nursery school in the first two years of life (ED/NED, LTS = low total score),
- Their families spoke some foreign language(s) at home (ED/NED, LTS), including the mother (ED/NED, CLIN/NCLIN, LTS), father (ED/NED, CLIN/NCLIN, LTS), and children (ED/NED, CLIN/NCLIN, LTS),
- Also, they spoke German not so often or did not speak it at all at home (ED/NED, LTS),
- They were more often raised bi-/multilingually (ED/NED, LTS),
- The first language of their mothers (ED/NED, LTS) and fathers (ED/NED, LTS) was not German,
- They spoke out comparatively seldom when playing (ED/NED, CLIN/NCLIN, LTS),

- They played not so often with German speaking children in the daycare center (ED/NED, CLIN/NCLIN, LTS) and after the daycare center time (ED/NED, CLIN/NCLIN, LTS),
- In general, they did not like to play with other children (CLIN/NCLIN, LTS),
- In the daycare center, there was at least one more child who spoke the same non-German language (for immigrants; ED/NED, LTS),
- They did not hear well (ED/NED, CLIN/NCLIN, LTS),
- They began comparatively late to acquire/learn German (ED/NED, CLIN/NCLIN, LTS),
- Their fathers (ED/NED) and mothers (LTS) also began late to learn German,
- Their language competence at the beginning of the daycare center attendance (ED/NED, CLIN/NCLIN, LTS) and in the first test session (ED/NED, CLIN/NCLIN, LTS) was comparatively low,
- They attended comparatively seldom associations or study groups (ED/NED, CLIN/NCLIN, LTS),
- They did not speak their mother tongues appropriately for their age (for immigrants; ED/NED, CLIN/NCLIN),
- They were in language therapy (ED/NED, CLIN/NCLIN, LTS),
- Their relatives had language disorders (ED/NED, CLIN/NCLIN),
- The educational level of their mothers (ED/NED, LTS) and fathers (CLIN/NCLIN) was comparatively low,
- They were younger in the first test session than NED and NCLIN (ED/NED, CLIN/NCLIN),
- They attended the daycare center for a comparatively short period of time (ED/NED, CLIN/NCLIN, LTS),
- They were more often boys than girls (CLIN/NCLIN),
- They had some illnesses/diseases/impairments which might influence language acquisition negatively (CLIN/NCLIN, LTS).

Classification trees identified languages spoken at home as the most important factor from the list above. Children who spoke (an)other language(s) than German at home acquired German comparatively slowly.

To sum up, the quality and quantity of the contact to the German language play the crucial role in the language acquisition. Most of the chosen sociolinguistic variables were associated with two or three outcome parameters of the language competence: ED/NED, CLIN/NCLIN, and total scores of the language tests. No contra-intuitive or unexpected results were obtained. Children scored low in the second test session if they scored low in the first one, these were especially those with little language contact as well as children with medical issues. Turkish and Arab children were classified as ED more often than other children. Unfavorable language acquisition conditions of Turkish preschool children were described for the data base used here in Zaretsky, Neumann, Euler, and Lange (2013). Also, unfavorable sociolinguistic conditions of Turkish and Arab children acquiring German in Germany were analyzed in the dissertation by Marossek (2013).

## References

Cornips, L., & Hulk, A. (2008). Factors of success and failure in the acquisition of grammatical gender in Dutch. *Second Language Research, 24*, 267–295.

Döpfner, M., Dietmair, I., Mersmann, H., Simon, K., & Trost-Brinkhues, G. (2005). *S-ENS. Screening des Entwicklungsstandes bei Einschulungsuntersuchungen.* Göttingen: Hogrefe.

Euler, H. A., Holler-Zittlau, I., van Minnen, S., Sick, U., Dux, W., Zaretsky, Y., & Neumann, K. (2010). Psychometrische Gütekriterien eines Kurztests zur Erfassung des Sprachstandes vierjähriger Kinder [Validity criteria of a short test to assess speech and language competence in four-year-olds]. *HNO, 58*, 1116–1123.

Letts, C., Edwards, S., Sinka, I., Schaefer, B., & Gibbons, W. (2013). Socio-economic status and language acquisition: Children's performance on the new Reynell Developmental Language Scales. *International Journal of Language & Communication Disorders, 48*, 131–143.

Marossek, D. (2013). *„Gehst du Bahnhof oder bist du mit Auto?" Wie aus einem sozialen Stil Berliner Umgangssprache wird: Eine Studie zur Ist-Situation an Berliner Schulen 2009-2010 [„You go station, or are you with car?" How a social style turns into Berlin colloquial language: A study on the current situation in Berlin's schools in 2009-2010]* (Doctoral dissertation). Retrieved from Technische Universität Berlin (http://opus4.kobv.de/opus4-tuberlin/frontdoor/index/index/docId/4062). (urn:nbn:de:kobv:83-opus4-40625)

Neumann, K., Holler-Zittlau, I., van Minnen, S., Sick, U., Zaretsky, Y., & Euler, H. A. (2011). Katzengoldstandards in der Sprachstandserfassung. Sensitivität und Spezifität des Kindersprachscreenings (KiSS) [Fool's gold standards in language screening. Sensitivity and specificity of the Hessian child language screening test (Kindersprachscreening, KiSS)]. *HNO, 59*, 97–109.

Noel, M., Peterson, C., & Jesso, B. (2008). The relationship of parenting stress and child temperament to language development among economically disadvantaged preschoolers. *Journal of Child Language, 35*, 823–843.

Taylor, C. L., Christensen, D., Lawrence, D., Mitrou, F., & Zubrick, S. R. (2013). Risk factors for children's receptive vocabulary development from four to eight years in the longitudinal study of Australian children. *PlosOne, 8*, e73046.

Zaretsky, E., & Lange, B. (2015). "Predictors of severe language deficits with clinical implications in a representative sample of German pre-school children". Presentation at the "2nd International Conference on Education and Social Sciences". 02.-04. Febr. 2015, Istanbul, Turkey.

Zaretsky, E., Neumann, K., Euler, H. A., & Lange, B. P. (2013). Pluralerwerb im Deutschen bei russisch- und türkischsprachigen Kindern im Vergleich mit anderen Migranten und monolingualen Muttersprachlern [Plural acquisition in German by Russian and Turkish children in comparison with other immigrants and monolingual Germans]. *Zeitschrift für Slawistik, 58*, 43–71.

# *The Language Practicum Learning Experience of AB English 2013*

Jocelyn I. Bartolata, Bicol University, Philippines

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

The research is a quasi-evaluation of Language Practicum (LP) 2012-2013, the on-the-job Training (OJT) component of the AB English Program of Bicol University. The research looked into the attainment of objectives of the newly implemented requirement for graduates, the training experience of the students, and the job performance of the Language Practicum trainees.

The results showed the remarkable success of the first year of implementation as viewed by the trainees themselves. The development of Knowledge, Skills and Attitudes (KSA) was rated outstanding as well, indicating satisfactory work performance and experience. The academic skills developed in the AB English program found to be most applicable to job performance are: interpersonal; work-readiness; business letter writing; oral presentation; public speaking; social responsibility; composition writing; listening; oral expression; and information technology. The academic skills found to be least applicable are: folk and ballroom dancing; playing sports; scientific literacy; comparing and contrasting literary masterpieces; literary performance; foreign language; defining of literary terminologies; literary evaluation; literary interpretation and analysis; and writing of literary criticisms.

Over-all, the trainees are one in saying that the AB English Language Practicum 2013 was beneficial and successful. While saying so, others also expressed the need for improvement in terms of implementation. Among these are: increase the number of hours; schedule the practicum in summer of the $3^{rd}$ year; provide a pre-orientation seminar to better prepare the students before deployment; provide a list of possible sponsoring agencies that accommodate language practicum trainees; and regular visits by the Language Practicum Professor.

**Keywords:** *practicum, on-the-job training, trainees' assessment, AB English*

**Introduction**

This research is the first of three studies that make up a research project forming a quasi-evaluation of the AB English Language Practicum 2012-2013. Largely, the intention is to use findings to propose policy recommendations and guidelines for the improved conduct of the Language Practicum, now on its third year of implementation. The research looked into the attainment of objectives of the newly-implemented requirement for graduates, the training experience of the students, and the job performance of the Language Practicum Trainees.

Consequently, the research aims to bridge the gap between competencies and jobs available. The continuity in information exchange, with schools updating the students about the trends in employment and with the industry providing such information, hopefully, will resolve the pervasive mismatch between academe and industry, on a micro level at the least.

Language Practicum as part of the AB English curriculum was implemented for the first time in 2013 as a development emerging from the 2009 revised curriculum. However, owing to the dramatic change in the educational landscape in the Philippines, particularly the 2012 shift to K to 12 in the basic education which directly impacts higher education, and ASEAN Integration 2015, the need to revamp the existing program design becomes imperative. As such, the question on what to change, and why becomes crucial. At the onset, this research intends to use its findings only in the development of guidelines that will redound to the improved implementation of the Language Practicum. Today, this narrow view has expanded to getting a fuller examination of the Language Practicum learning experience of the trainees to determine its place and value to future curriculum development efforts.

The objectives of the study are as follows:

1. To determine the level of attainment of objectives of the Language Practicum 2013 from the point of view of the trainees;
2. To determine the level of knowledge, skills and attitude (KSA) development of the Language Practicum trainees; the most/least developed learning domain in particular, as self-assessed;
3. To find out from trainees which academic skills are most/least applicable to job performance of language trainees;
4. To identify the problems in terms of job performance encountered by the trainees throughout the duration of the Language Practicum; and
5. To establish the students' over-all assessment of the language practicum learning experience, at the same time, deduce the good practices derived from the experience.

**Conceptual/Theoretical Framework**

This research is anchored on the quasi-evaluation approaches/model of program evaluation.
The researchers adhered to the restraint of the source in using the term evaluation theory, referring to the "more advanced" notion of evaluation. Evaluation Theory is here reserved for "creatively developed yet more rigorously tested conceptualization

of program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63). Because more demanding requirements and higher standards are required for the meaning of theory, the term model/approache is preferred. This refers to "an evaluation theorist's idealized conceptualizations for conducting program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63).

The question-oriented approaches address specified questions (often employing a wide range of methods) and the method-oriented approaches typically use a particular method. Whether the methodology or questions addressed in these approaches are appropriate for assessing a program's merit and worth are secondary consideration. The questions-oriented begins with a set of questions and the methods-oriented may start with an overriding commitment to employ both qualitative and quantitative methods. Both approaches stress that it is usually better to answer a few pointed questions well than to attempt a broad assessment of a program's merit and worth (Stufflebeam &Shinkfield, 2013).

One example of the question-oriented approaches is the objectives-based study advanced by Tyler. Here, the objectives are oftentimes formulated by the service provider as an advanced organizer. The purpose of the evaluation is to know the extent of attainment of objectives. Study 1 mainly determines the extent to which the previously set objectives of the Language Practicum (LP) are achieved, assessed from the point of view of the trainees themselves. It is likewise methods-oriented in its commitment to varied strategies in obtaining answers to, what may be described as narrow, nevertheless, important questions in order to obtain an insight into the worth and merit of the Language Practicum. For instance, the study is substantiated by data on the development of trainees along knowledge, skills and attitudes through their self-ratings. Finally, the paper presents a qualitative assessment of the Language Practicum by perusing the trainees' narrative reports and inferring into other factors as useful skills, problems encountered, good practices and over-all assessment of the experience.

The elements for quasi-evaluation, true to the expert's conceptualization, may not meet the requirements of a sound evaluation (Stufflebeam & Shinkfield, 2013) but they can investigate questions that will provide evidence on the program evaluated and the approaches are committed to assessing and helping improve aspects of the Language Practicum.

Equally important as well is the anchoring of the research on Kirkpatrick's Training Evaluation Model which seeks to meaningfully measure learning in organizations through the four levels: "reaction (what they thought and felt about the training), learning (the resulting increase in knowledge or capability), behavior (extent of behavior and capability Improvement and implementation/application), and results (the effects on the business or environment resulting from the trainee's performance)" ("Kirkpatrick's Learning", 2013). These components are addressed in the ensuing questions, except for level 4, which may be a subject of subsequent studies. Level 3 on the other hand is modified to focus more on the learning in the academe as applied to job performance, instead of the intended application of learning from the training to the actual job.

To graphically represent the framework, a model follows:

Figure 1. Research Model

## Materials and Methods

This study used survey-questionnaires deriving information from student evaluations of the attainment of objectives. However, it was more qualitative in nature as descriptions of learning experience and job performance were derived from the guided narrative reports submitted by the trainees. Respondents include a total enumeration of 86 fourth year students.

For validation purposes, the results of the research project were presented to a small group of fifteen (15), mostly sponsoring employers, and representatives from the academe, particularly the department chair of the English Department. The focus-group discussion (FGD) yielded more qualitative data meant to enrich the discussion of results.

## Results and Discussion

### The Level of Attainment of Objectives

Data showed that Language Practicum trainees rated the attainment of objectives of LP 2013 superior, with the average mean of 4.49. The objectives are here presented, as ranked from most to least achieved: give students the opportunity to acquire the work values required of the job market (4.61 or outstanding); afford students actual venue for job prospecting, networking and over-all development of professional work relationships (4.52 or outstanding); provide students with practical training on the job supplemented by related theoretical instruction (4.48); and offer students a venue to translate their communication and related skills to actual job performance (4.36 or superior). Table 1 presents the same data.

**Table 1.** Level of Attainment of Objectives

| Objectives | Mean | Adjectival Description |
|---|---|---|
| Provide students with practical training on the job supplemented by related theoretical instruction | 4.48 | Superior |
| Offer students a venue to translate their communication and related skills to actual job performance | 4.36 | Superior |
| Give students the opportunity to acquire the work values required of the job market | 4.61 | Outstanding |
| Afford students actual venue for job prospecting, networking and over-all development of professional work relationships | 4.52 | Outstanding |
| **Average Mean** | **4.49** | **Superior** |

The numbers show the remarkable success of the first year of implementation of the Language Practicum as viewed by the trainees themselves. It is however notable that the 2nd objective, *to offer students a venue to translate their communication and related skills to actual job performance,* although described as superior, garnered the lowest rating of 4.36. It could be attributable to the fact that supervisors normally do not entrust to their trainees sensitive functions, as this may also mar the supervisor's own targets and performance expectations. This was validated in the focus-group discussion conducted for the purpose. Tuason of GSIS Legazpi mentioned:

> "Due to the privacy and security policy of the agency, we really cannot give them the same tasks that we have. They are limited to clerical or 'messengerial' tasks. We have our own system which only the regular GSIS employees can access and use. Even our contractual employees are not given access to the main system so students, regardless of the course, are given only basic tasks such as filing and sorting for privacy and security reasons."

Mora of DOT Legazpi confirmed the statement saying:

> "We indeed do not give big tasks to the trainees, usually clerical and 'messengerial' tasks only. Also, our work load is usually per project and on organizing events which require good communication and coordination skills. Having said that, there are times when OJTs come in and the event is already ongoing or sometimes their OJT hours are not enough to last through out the event so, we really cannot give them such big tasks due to time constraints."

The same was noted by Ochoa of DSWD Legazpi:

> "In DSWD, we assign students based on their courses, so AB English students are tasked to departments with relevant work, but we do not entrust them with writing communication letters for efficiency and to save time as well. We can only give them the training they need by giving basic tasks such as

> acting as secretariat and other easy jobs because our tasks are done faster if we do it ourselves rather than entrusting it to them which will need time because we still have to teach them and check if they did what we asked correctly."

In general student trainees are given the same basic tasks/functions regardless of their disciplines because of privacy and security issues, time constraints and efficiency problems. Trainees do not really have solid client and work exposures as those of the regular/permanent workers, unless of course the supervisor's trust and confidence in them have been built over time. The 108-hour duration may not have been sufficient to allow that.

### *The Level of Attainment of the KSA of the Language Practicum Trainees*

Over-all, the development of Knowledge, Skills and Attitudes is rated outstanding at 4.58 average mean. Knowledge is rated 4.63 (outstanding); skills is 4.50 (superior); and attitude is 4.61 (outstanding). Knowledge is most developed.

Going over the details, in the knowledge domain, task accomplishment and productivity was rated 4.66 or standing. This is the most developed aspect in this domain. The other key aspects followed closely: management of office/work procedure was rated 4.63 or outstanding; and, knowledge on the key functions of the job was rated 4.59 or outstanding.

On skills, listening and following instructions was rated 4.66 or outstanding. This is the most developed aspect in this domain. The two other aspects were rated outstanding as well: use of technology in the workplace was rated 4.63 or outstanding; and, speaking in both formal and informal situations was rated 4.62 or outstanding. Writing documents, letters and memos was rated 4.09 or superior.

The attitude domain posted these ratings: desirable attitudes as self-esteem, positivity and assertiveness was rated 4.68 or outstanding. This was the most developed aspect in the attitudes domain. Relationship with clientele was rated 4.63 or outstanding; personal appearance or professional image also earned a rating of 4.63 or outstanding while work qualities and habits was rated 4.49 or superior. Table 2 shows these data clearly.

**Table 2.** Level of Attainment of Knowledge, Skills and Attitudes Development of Language Practicum Trainees

| KSA | Mean | Adjectival Description |
|---|---|---|
| Knowledge on the key functions of the job | 4.59 | Outstanding |
| Management of office/work procedures | 4.63 | Outstanding |
| Task accomplishment and productivity | 4.66 | Outstanding |
| | **4.63** | Outstanding |
| Writing of documents, letters, memos and reports | 4.09 | Superior |
| Speaking in both formal and informal situations | 4.62 | Outstanding |
| Listening and following of instructions | 4.66 | Outstanding |
| Use of technology in the workplace | 4.63 | Outstanding |
| | **4.50** | Superior |

| Desirable Attitudes as self-esteem, positivity and assertiveness | 4.68 | Outstanding |
|---|---|---|
| Personal appearance or professional image | 4.63 | Outstanding |
| Work qualities and habits | 4.49 | Superior |
| Business ethics with executives and coworkers | 4.64 | Outstanding |
| Relationship with clientele | 4.63 | Outstanding |
|  | **4.61** | Outstanding |
| **Average Mean** | **4.58** | **Outstanding** |

While the superior description is overwhelming, a few notes can be telling. On knowledge, key function on the job was rated lowest. In the focus-group discussion, Rasco shared: "It is true that Information Technology and Computer Literacy are two of the skills asked of us during training that we could not respond to properly due to lack of enough training." This was stressed by Ochoa who shared her observation: "they are able to use Microsoft Word and Microsoft Excel but when it comes to the more complicated aspects of Excel such as formulas and generating other web sheets, they do not know how to do it. It might be necessary to provide orientations on office procedures before students are deployed to their sponsoring agencies.

On skills, listening and following instructions was rated outstanding which gives an impression that AB English students are skilled at this micro skill in communication, and are willing to learn from their supervisors. Work qualities and habits being rated as lowest in the attitudes domain might just be the prodding needed to insist on a thorough orientation on desirable work habits before deployment. If not, it is also possible to integrate this in regular classroom instruction in courses such as Organizational Communication and Business Writing.

### *Academic Skills Most/Least Applicable to Job Performance of Trainees*

The academic skills here identified are culled from the course syllabi of the 2009 Revised AB English Curriculum as already used in Hermosa et al's. As revealed in the findings, the academic skills found by the Language Practicum trainees to be most applicable to job performance are: interpersonal (4.42); business letter writing (4.26); workplace readiness (4.16) oral presentation(4.16); social responsibility (4.11), public speaking (4.11); composition writing (4.11): oral expression (4.05); listening (4.05) and Information Technology (4.05). These are the skills topping the list as presented in Table 3.

The result for the most applicable skills is not as surprising. After all, the respondents of this study were the beneficiaries of the revised curriculum which, at the time of revision in 2008, incorporated courses which were the identified needs of the times. The revised curriculum strengthened the development of interpersonal as well as organizational communication skills in the course *Interpersonal and Organizational Communication*. It also ensured the work readiness of the students through the course *Language Practicum,* which provides the students the basic knowledge and preparation before actual deployment. Business Writing which is adequately treated in *Business Communication* may indeed be attributed to the addition of this course. Oral presentation, public speaking and listening being on top 10 may also be credited to the enhancement in course description of *Speech Communication*. Social responsibility on the other hand are embedded in most of the courses in the program.

At the tail end are six academic skills developed mostly from literature courses namely: writing of literary criticisms, literary interpretation and analysis, literary evaluation, defining of literary terminologies, literary performance, and comparing and contrasting of literary masterpieces; two academic skills from Physical Education, namely: playing sports and folk and ballroom dancing; one from an elective subject, which is Foreign language and one from Technological Environment which is scientific literary skill. This is a valuable insight that must be considered in the crafting of a new curriculum.

While literature courses are instrumental in developing critical, analytical and reflective thinking, fact cannot be discounted that other skills developed from literary studies are not readily applicable to the workplace. The focus-group discussion provided insights on the issue. Mora of DOT maintained: "I think Literature subjects develop our critical thinking skills. We may not see its importance right away but it does help students become more proficient in communication such as writing." Rasco also stressed a similar point by emphasizing that: "my writing skills were developed because of the literature subjects I have gone through and I was and still am able to apply it in my day-to-day task as an administrative aide for Mayor Alsua as I am tasked to also write some of her speeches, presentations and reports. I am able to apply literature values and writing skills." On the other hand, Latigay offered a different viewpoint: "Literature is important for it develops our comprehension and thinking skills but the students find it hard to apply their literature skills into their daily communication and tasks." Mora agreed, and thus pointed out: "AB English curriculum hones you and leads you to the academe. Maybe the curriculum may be adjusted in a way that we can incorporate more technical subjects which develops skills that are required by the work industry." To this Ochoa added: "Maybe lessen literature subjects, make it elective subjects only."

**Table 3.** Skills Most/Least Applicable to Job Performance of Trainees

| Academic Skill | Rating | Adjectival Rating | Rank |
|---|---|---|---|
| Interpersonal Skills | 4.42 | Most Applicable | 1 |
| Business Letter Writing | 4.26 | Most Applicable | 2 |
| Workplace –readiness | 4.16 | Most Applicable | 3.5 |
| Oral Presentation | 4.16 | Most Applicable | 3.5 |
| Social Responsibility | 4.11 | Most Applicable | 5.33 |
| Public Speaking | 4.11 | Most Applicable | 5.33 |
| Composition Writing | 4.11 | Most Applicable | 5.33 |
| Oral Expression | 4.05 | Most Applicable | 9 |
| Listening | 4.05 | Most Applicable | 9 |
| Information Technology | 4.05 | Most Applicable | 9 |
| Organizational Communication | 4.00 | Most Applicable | 10.5 |
| Cooperative Planning & Teamwork | 4.00 | Most Applicable | 105 |
| Leadership | 3.95 | More Applicable | 11.5 |
| Data Gathering | 3.95 | More Applicable | 11.5 |
| Critical, Analytical & Reflective Thinking | 3.89 | More Applicable | 13.5 |
| Community Development | 3.89 | More Applicable | 13.5 |
| Debate | 3.84 | More Applicable | 16 |
| Creative Writing | 3.84 | More Applicable | 16 |
| Correct Movement | 3.84 | More Applicable | 16 |
| Grammatical | 3.68 | More Applicable | 20 |

| | | | |
|---|---|---|---|
| Non-Verbal Communication | 3.63 | More Applicable | 21.5 |
| Essay Writing | 3.63 | More Applicable | 21.5 |
| Research Writing | 3.53 | More Applicable | 23.5 |
| Reading Comprehension | 3.53 | More Applicable | 23.5 |
| Statistics/Mathematical | 3.47 | More Applicable | 25 |
| Teaching | 3.11 | More Applicable | 26.5 |
| Journalistic Writing | 3.11 | More Applicable | 26.5 |
| Argumentation | 3.05 | More Applicable | 28 |
| Thesis Writing | 3.00 | More Applicable | 29.5 |
| Artistic/Creativity | 3.00 | More Applicable | 29.5 |
| Presentation of Science Advocacies & Business Report Writing | 2.95 | Fairly Applicable | 31 |
| Writing of Literary Criticism | 2.74 | Fairly Applicable | 32 |
| Literary Interpretation & Analysis | 2.63 | Fairly Applicable | 33.5 |
| Literary Evaluation | 2.63 | Fairly Applicable | 33.5 |
| Defining of Literary Terminologies | 2.47 | Fairly Applicable | 35 |
| Literary Performance | 2.42 | Fairly Applicable | 36.5 |
| Foreign Language | 2.42 | Fairly Applicable | 36.5 |
| Comparing & Contrasting of Literary Masterpieces | 2.21 | Fairly Applicable | 38 |
| Scientific Literacy | 2.05 | Fairly Applicable | 39 |
| Playing Sports | 1.84 | Least Applicable | 40 |
| Folk & Ballroom Dancing | 1.63 | Least Applicable | 41 |

Following this line of thought, the panel seemed to arrive at an agreement summed up in Latigay's comment, thus: "lessen and remove other literature subjects that seem redundant all throughout the course of the program. Though we appreciate those literature subjects, I think some are no longer necessary to prepare us for the corporate world."

This research sees the value of inculcating higher order thinking skills which can only be attained by rigorous reading or even viewing of academic materials, regardless of content classification. The more critical aspect is the attainment of the set learning outcomes which necessarily must be constructively aligned to instructional strategies and assessment. Content becomes secondary to the outcome which is now the take-off point of all instruction. Teachers become secondary to learners who now occupy the central role in the process.

As for physical education courses, relegating it to basic education might just be a solution.

*Problems in Job Performance Encountered by the Language Practicum Trainees*

Problems encountered by the Language Practicum trainees as ranked include : limited duration/number of hours (56.63%); difficulty in applying for a job (34.94%); schedule

of LP in conflict with class (25.30%); job mismatch (18.07%); delayed submission of documents for LP (7.23%); LP was confined in Bicol region (7.23%); no orientation/seminar before deployment (6.02%)t; operation of office facilities(4.82%); demanding customers/clients (4.82%); difficulty in accounting (1.20%); and limited knowledge on computer applications (1.20%). On the following page is a graphical representation of data.

Shown in the graph as the biggest problem encountered by the trainees was *limited number/duration of time for language practicum.* It must be understood that in the approved curriculum, the 6-unit course was given an equivalent number of 108 hours. This was prior to the release of the CMO prescribing the standard number of hours for On-the-Job-Training at 200 hours. On the 2nd year of implementation, the 200-hour requirement was encouraged pending the revision in the curriculum. Representative from GSIS however said that 200 hrs is enough for as long as it is continuous. She stressed further that during OJT, students must not have other school-related activities such as class or thesis for them to be able to join regional trainings and travels which usually last 5-10 days. It does not need to be summer time, though.

*Difficulty in applying for a job* came in 2nd. Language Practicum 2013 was the first year of implementation. As such there was no prior listing provided to the students as to possible sponsoring agencies in the locality. There was also no previous experience or practice that could have been referred to for reference and guidance. The next year was a better version, procedure-wise.

The 3rd problem was *conflict in schedule with other classes* which resulted from the Language Practicum being scheduled in the last semester along with a few other subjects. This was in a way resolved the following year by requesting the college registrar to rethink the schedule and allot one day free when students can work in their respective sponsoring agencies.
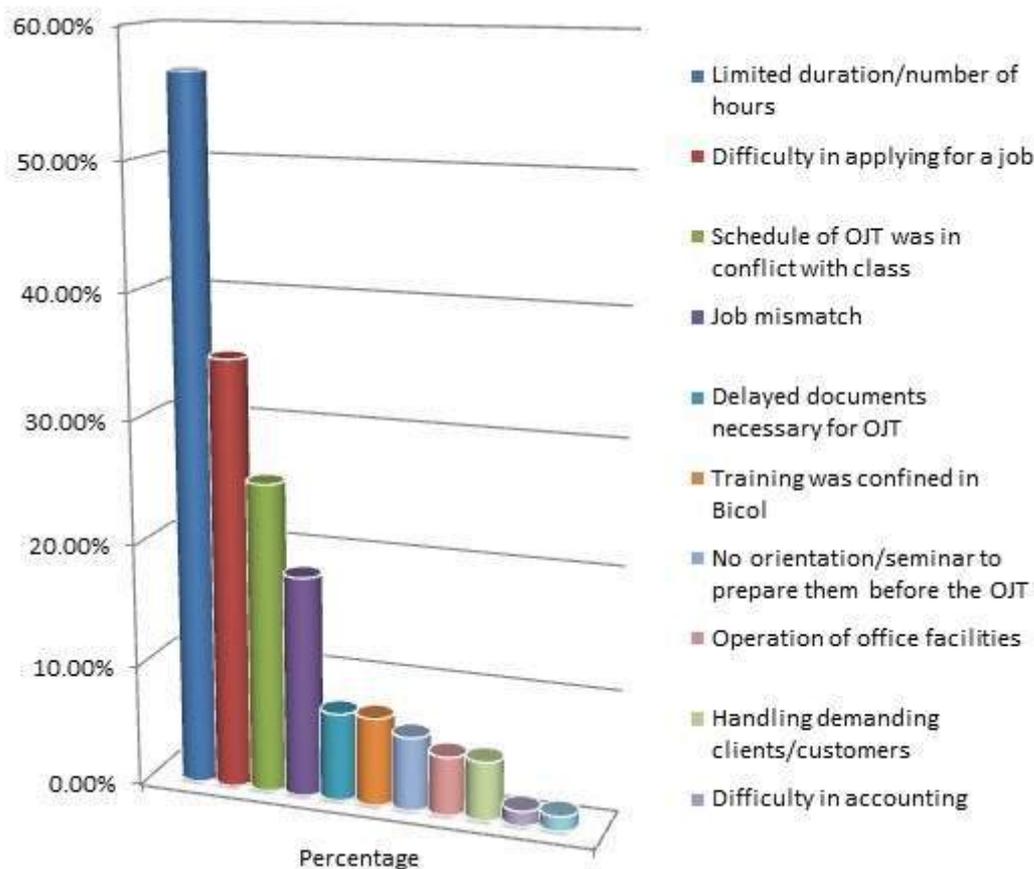
**Figure 1.** Problems in Job Performance Encountered by the Language Practicum Trainees

*Job mismatch* was also seen as the 4rd problem. This could be interpreted as trainees being asked to perform functions not specialized or geared to their skills. The problem is legitimate, but then again, by observation trainees regardless of degree programs, are oftentimes assigned rank and file jobs. These are also entry-level positions for most.

*Delayed documents necessary for language practicum* was 5th. While it is true that there were a number of documents required before a student was allowed to undergo language practicum, the delays were mostly caused by the students themselves. Most of them were unable to comply because of other preoccupations as thesis defense and requirements in other courses. MOA signing was also part of the delay.

*Training was confined to Bikol*, also ranked 5th, was necessary because of the schedule for Language Practicum being in the second semester. The problem will remain unresolved until such a time that training is scheduled in summer or if not, until the rest of the courses for the second semester are realigned and distributed to the other semesters in the lower years. As of the moment though, there is an option for either national or international Language Practicum for as long as students are personally able to make arrangements with the registrar and subject professors as to compliance with course requirements.

***Trainees' Over-all Assessment of the Language Practicum 2013***

Over-all, the trainees are one in saying that the AB English Language Practicum 2013 is beneficial and successful. Insights were provided in the focus-group discussion such as as said by Latigay: "Yes it is successful. There were skills we had already before the training started and others that we had to learn during the job itself especially when the job given is not relevant to the course. Either way, I learned a lot from the training." Martinez, also shared her experience: "It was successful yet there were limitations due to privacy concerns so we were given basic tasks such as encoding, filing etc."

While mostly lauded the success of the Language Practicum, others also expressed the need for improvement in terms of implementation. Among these are: increase the number of hours; schedule the practicum in summer of the 3$^{rd}$ year; provide a pre-orientation seminar to better prepare the students before deployment; provide a list of possible sponsoring agencies that accommodate language practicum trainees; and regular visits by the Language Practicum Professor.

Some good practices that may be adopted from the implementation are: effecting time management in complying with documentary requirements; practicing good communication skills to land a job related to the field; and showing of professionalism at all times.

**Conclusions**

These are the conclusions derived from the findings, and the recommendations advanced in the light of these findings:

1. The objectives of Language Practicum are successfully attained. It is recommended that program implementers find ways to ensure that these objectives are continuously attained by putting guidelines in place.

2. Language Practicum is successful in developing the competencies required by this OJT component of the program. However, it is recommended that further assessment of competency acquisition be made by identifying the task accomplishments which are the tangible manifestation of this.

3. There are academic skills that are most and least useful to actual job performance. It is recommended that these be considered in the crafting of future curriculum to ensure that graduates are job-ready.

4. The Language Practicum trainees encountered problems in Language Practicum. It is recommended that these be addressed by program implementers.

5. Language Practicum 2013 is remarkably successful, thus it is recommended that it be adopted in succeeding curriculum revisions, ensuring that good practices are replicated and improvements be added.

**References**

Aringo, J. A., Bares, M.H.N., Custodio, J.A., & Lecaros, M.S. (2010). Comparative analysis of assumed jobs and on-the-job trainings: Basis for identifying career options for BS Management graduates (Undergraduate thesis, Bicol University, 2010).

Balingasa, J. & Quimpo, M. (2010). Problems encountered by the BU-IPESR students in their Out-Campus Practice Teaching, SY 2009-2010 (Undergraduate thesis, Bicol University, 2010).

Domo, M.G.D. (2009) The on-the-job training experiences of the Bicol University graduates of the Department of Sociology, academic year 2006-2008 (Undergraduate thesis, Bicol University, 2009).

Focus group discussion on the AB English language practicum 2013 and beyond. 12 May 2015. Legazpi City.

Hermosa, K.A.R., Martinez, N.G., & Ordiales, M.H.N. (2014) The applicability of the new AB English curriculum to work performance as gleaned from Language Practicum 2013" (Undergraduate thesis, Bicol University, 2014).

Kirkpatrik's learning and training evaluation theory, (n.d.) Donald Kirkpatrick's learning evaluation model 1959; review and contextual material Alan Chapman 1995-2014. Retrieved April 24, 2013 from http://www.businessballs.com/kirkpatricklearningevaluationmodel.htm

Mateos, L., Baeza, J.A., Latigay, J., Latorre, C.V., Ludovice, G. (2015) 21st century competencies embedded in the AB English enhanced curriculum (Undergraduate thesis, Bicol University, 2015).

Lumbo, A.C. (2010) Performance of Bachelor of Physical Education in practice teaching batch 2009-2010 (Undergraduate thesis, Bicol University 2010).

Malate, M.M. & Ronda, R.G. (2011). An assessment of the in-company training in Bicol Region of the Bicol University College of Arts and Letters (BUCAL) Journalism students (Undergraduate thesis, Bicol University, 2011).

Nevarez, J.P. & Merenciano, K.T.E. (2008). An assessment of the in-company training of the fourth year Journalism students (Undergraduate thesis, Bicol University, 2008).

"OJT" Retrieved July 1, 2013 from http://en.wikipedia.org/wiki/OJT

Scribner, S. &. (n.d.). Retrieved July 1, 2013, from Laboratory for Cognitive Studies of Work, The Graduate School and University Center, City University of New York: http://education.eserver.org/on-the-job-training.txt

Sergio, J., et al. (2011) Bicol Region's industry demand for graduates of AB English and AB English Language/AB Literature (Undergraduate thesis, Bicol University, 2011).

Stufflebeam, D.L. & Shinkfield, A.J. Evaluation theories, models and spplications. Retrieved April 22, 2013 from
https://books.google.com.ph/books?id=xx6UgC6UdFMC&pg=PA57&dq=objectives-based+evaluation+by+tyler&hl=fil&source=gbs_toc_r&cad=4#v=snippet&q=an%20 evaluation%20theorist%E2%80%99s%20idealized%20conceptualizations%20for%20 conducting%20program%20evaluation&f=false

Taladtad, S.G., Bala, M.K.R., & Rodelas, M. 12 January 2010. Factors that affect the on-the-job training of BSBA Practicumers of the University of Manila:  An assessment.  Retrieved July 1, 2013 from http://www.slideshare.net/taladtad/factors-that-affect-the-on-thejob-training-of-6528978

### *Industry Profile of Sponsoring Organizations of Language Practicum Trainees*

Gemma B. Bellena, Bicol University, Philippines

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

This study forms phase 3 of a research project titled. "Language Practicum 2013 and Beyond." Language Practicum (LP) refers to the On-the-Job Training (OJT) for AB English students of Bicol University, Philippines. Specifically, the research profiles the sponsoring organizations that accommodated the Language Practicum trainees for 2013; enumerates job descriptions in the market fit for trainees and lists down competency requirements of such job descriptions. The study is anchored on the questions-oriented model of evaluation, or more appropriately quasi-evaluation. It began with questions that can happen to give evidence on the worth and merit of the LP and its continued place in the AB English curriculum. This phase of the study addresses the "beyond" part as it attempted to profile future host organizations and their competency requirements so that trainees are properly fielded. Initial data yielded these results: 61.30% of sponsoring organizations are government agencies while 38.70% are private offices further categorized as bank/financial (6.40%), airlines (6.40%), direct selling/marketing (6.40%), BPO (6.40%), construction (3.20%), events organizing (3.20%) and others (3.20%). Based on documents evaluation, the five top job jobs handled by the trainees include those of: administrative officer, information officer, customer service representative, clerk and technical/speech writer. Competency required from trainees mentioned: interpersonal skills, workplace-readiness, oral presentation, public speaking, organizational skills, among others. Study 3 asserts that AB English Language Practicum trainees have the best chance in these three industry types, depending on where (local, national, international) they wish to hold their student internship in the future.

**Keywords:** *practicum, on-the-job training, industry profile, AB English*

iafor

The International Academic Forum
www.iafor.org

## Introduction

This research is the third of three studies that make up a research project forming a quasi-evaluation of the AB English Language Practicum 2012-2013. Largely, the intention is to use findings to propose policy recommendations and guidelines for the improved conduct of the Language Practicum, now only on its third year of implementation. The research looked into the attainment of objectives of the newly-implemented requirement for graduates, the training experience of the students, and the job performance of the Language Practicum Trainees. It also went as far as industry profiling of host organizations willing to accommodate AB English trainees in the future.

Consequently, the research aims to bridge the gap between competencies and jobs available. The continuity in information exchange, with schools updating the students about the trends in employment and with the Industry providing such information, hopefully, will resolve the pervasive mismatch between academe and industry, on a micro level at the least.

The industry's role is crucial in achieving the objectives of the Language Practicum (LP), namely: (1) Provide students with practical training on the job supplemented by related theoretical instruction; (2) Offer students a venue to translate their communication and related skills to actual job performance; (3) Give students the opportunity to acquire the work values required of the job market; and (4) Afford students actual venue for job prospecting, networking and over-all development of professional work relationships. In the initial implementation of the program, the choice of the sponsoring organization was left to the students to give them the actual feel of job prospecting and networking. However, this choice was screened by the LP coordinator and the Department Chair for English, and finally approved by the Dean. Certain criteria were set. Sponsoring organization must be of (1) Of reputable name and standing; (2) Capable to meet the objectives of the Language Practicum; (3) Willing to develop basic work knowledge, skills and values of the trainee; and (4) With job descriptions commensurate to the academic preparations of an AB English graduate.

Specific objectives are as follows:

1. To describe the profile of the sponsoring employers that responded to the Language Practicum of AB English;
2. To describe the profile of other organizations willing to accommodate AB English trainees;
3. To enumerate specific job descriptions in the market fit for AB English trainees; and
4. To list down competency requirements of such job descriptions.

## Research Framework

This research is anchored on the quasi-evaluation approaches/model of program evaluation.

The researchers adhered to the restraint of the source in using the term evaluation theory, referring to the "more advanced" notion of evaluation. Evaluation Theory is here reserved for "creatively developed yet more rigorously tested conceptualization of program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63). Because more demanding requirements and higher standards are required for the meaning of theory, the term model/approaches is preferred. This refers to "an evaluation theorist's idealized conceptualizations for conducting program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63).

The question-oriented approaches address specified questions (often employing a wide range of methods) and the method-oriented approaches typically use a particular method. Whether the methodology or questions addressed in these approaches are appropriate for assessing a program's merit and worth are secondary consideration. The questions-oriented begins with a set of questions and the methods-oriented may start with an overriding commitment to employ both qualitative and quantitative methods. Both approaches stress that it is usually better to answer a few pointed questions well than to attempt a broad assessment of a program's merit and worth (Stufflebeam &Shinkfield, 2013).

This study, like study 1, is also anchored on the questions-oriented model of evaluation, or more appropriately quasi-evaluation. It began with questions that can happen to give evidence on the worth and merit of the LP and its continued place in the AB English curriculum. This portion of the study addresses the "beyond" part in the title as it attempts to present a profiling of host organizations and their competency requirements so that trainees are properly fielded, with the industry acting as extensions of the academe in providing the preparation required of the program.

The elements for quasi-evaluation, true to the expert's conceptualization, "may not meet the requirements of a sound evaluation" (Stufflebeam & Shinkfield, 2013) but they can investigate questions that will provide evidence on the program evaluated and the approaches are committed to assessing and helping improve aspects of the Language Practicum.

Equally important as well is the anchoring of the research on Kirkpatrick's Training Evaluation Model which seeks to meaningfully measure learning in organizations through the four levels: "reaction (what they thought and felt about the training), learning (the resulting increase in knowledge or capability), behavior (extent of behavior and capability Improvement and implementation/application), and results (the effects on the business or environment resulting from the trainee's performance)" ("Kirkpatrick's Learning", 2013). These components are addressed in the ensuing questions, except for level 4, which may be a subject of subsequent studies. Level 3 on the other hand is modified to focus more on the learning in the academe as applied to job performance, instead of the intended application of learning from the training to the actual job.

To graphically represent the framework, a model follows:



Figure 1.  Research Model

**Materials and Methods**

The methodology is descriptive with data coming from survey-questionnaire administered to sponsoring employers and other industries in the local and national levels.  Data from the international level industries were gathered from existing websites.  Data were tallied and collated using ranking and percentage for simple statistical analysis.

For validation purposes, the results of the research project were presented to a small group of fifteen (15), mostly sponsoring employers, and representatives from the academe, particularly the department chair of the English Department.  The focus-group discussion (FGD) yielded more qualitative data meant to enrich the discussion of results.

**Results and Discussion**

*Industry Classification of Sponsoring Organizations that Accommodated LP Trainees*

To gain a better perspective of the sponsoring organizations, here is a look at the list and the classification. The researchers arbitrarily classified the industries as schools, government agencies/offices, media centers and private agencies as these are industry classifications which previous studies used.  It is a classification derived from the list

of possible job placements for AB English as stated in the approved curriculum and from research results of tracer studies.

**Table 1.** List of Sponsoring Organizations 2013

| Government Agencies | Years in Service | Private Companies | Years in Service |
|---|---|---|---|
| Provincial Gov't of Albay | 178 | Avon | 128 |
| City Civil Registry City of Legazpi | 158 | Phil. Airlines | 73 |
| Department of Trade & Industry | 116 | Dev't Bank of the Phil | 67 |
| Bureau of Immigration | 115 | ALECO | 22 |
| Bureau of Internal Revenue | 110 | Zest Airways | 19 |
| Philippine national Bank | 98 | Canon Marketing Phils. | 18 |
| Securities & Exchange Commission | 81 | SLTCFI BPO | 15 |
| Department of Education | 71 | Goodfound Cement | 14 |
| Maritime Industry Authority | 40 | South AsiaLink Credit | 11 |
| Philippine Information Agency | 38 | Sutherland | 9 |
| Fiber Industry Dev't Authority | 33 | Eventertainment Co. | |
| Dep't of Science & Technology V | 27 | | |
| DPWH Region V | 27 | | |
| DENR V | 27 | | |
| Land Transportation Office | 27 | | |
| DILG Region V | 23 | | |
| Bureau of Fire Protection | 23 | | |
| Commission on Higher Education | 20 | | |
| Philhealth | 17 | | |

Of the total number, 63.33% or 19 employers are classified as government agencies. These are public offices, such as cabinet offices and bureaus, Local Government Offices, and other government arms in the province, namely: (1) the Provincial Government of Albay, (2) Civil Registry of Legazpi, (3) Bureau of Immigration (BOI), (4) Bureau of Internal Revenues (BIR), (5) Philippine National Bank (PNB), (6) Securities and Exchange Commission (SEC), (7) Department of Education (DepEd), (8) Fiber Industry and Development Authority (FIDA), (9) Philippine Information Agency (PIA), (10) Department of Science and Technology (DOST), (11) Department of Public Works and Highways (DPWH), (12) Department of Environment and Natural Resources (DENR), (13) Department of Interior and Local Government (DILG),(14) Bureau of Fire Protection, (15) Commission on Higher Education (CHED),(16) Land Transportation Office (LTO), (17) Department of Trade and Industry (DTI), (18) Maritime Industry Authority, and (19) Philhealth.

The remaining 36.67% or 11 are private companies which are also varied in the nature of trade or business such as banking, finance, entertainment, Business Process Outsourcing, manufacture, and services. These companies are: (1) Avon Cosmetics, (2) Philippine Airlines, (3) Development Bank of the Philippines, (4) Albay Electric Cooperative (ALECO), (5) Zest Airways, (6) Canon Marketing, Phils., (7) SLTCFI,

(8) Goodfound Cement, (9) South Asian Link Credit, (10) Sutherland, and (11) Eventertainment Company.

For this initial batch, no sponsoring organization comes from the local educational institution and media centers. Figure 1 shows these data graphically.
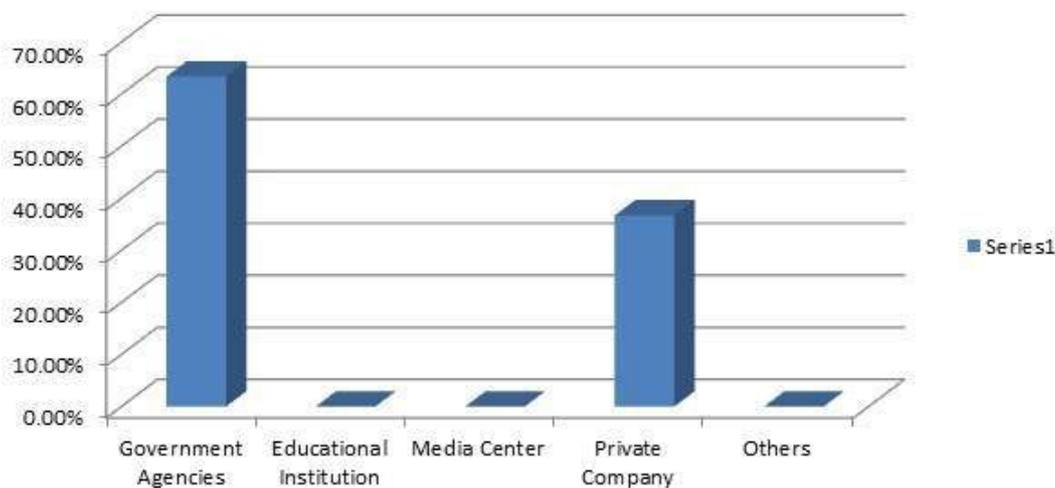


**Figure 1.** Classification of Industries that Accommodated the LP Trainees 2013

In terms of years in service, the government agencies range from 17-178 years while private agencies range from 9-128 years which means that mostly have been long established and are therefore, reputable.

This profiling in terms of classification and years in service is valuable as it gives the academe direction where to field the student trainees and what competencies must be developed by the academe for the students to land student internship, and future jobs. The information that AB English are mostly accepted in government and private agencies, but not in schools and media centers implies which industry type is most and least likely to hire them in the future. Thus, the competencies needed in government and private agencies such as interpersonal communication (76%); work-readiness (57%); business letter writing (%); oral presentation (53.20%); public speaking, (53.20%) (Bartolata, 2015), must be strengthened while those geared for schools and media centers must be reconsidered.

*Industry Classification of Sponsoring Organizations Willing to*
*Accommodate LP Trainees in the Future*

To further substantiate the listing of industry for future placements, and to validate the general observation made earlier in this paper, a survey is conducted. The attempt is made at expanding the scope to Metro Manila (national) and ASEAN (international) levels. However, after exhausting possible measures at alternative data gathering procedure, this researcher was only able to obtain data on the international level through synthesis of available information online.

*Local*
Because part of the objective of this research is to look into possible placement for Language Practicum trainees in the future, a random survey of ten (10) possible sponsoring organizations from four (4) different industry categories was made.

Seven (70%) of the government agencies are willing to accommodate AB English Language Practicum trainees, and 3 (30%) are not. Two of these reasoned: "we prefer graduates of IT courses" and one said: "we do not accept OJT's."

Seven (70%) of the private agencies are willing to accommodate AB English Language Practicum trainees from Bicol University. Three of these are in finance/credit; one is in Business Process Outsourcing; one is in transportation; one is in sales/direct selling; and one is in hotel/accommodation. The remaining three (30%) are not willing to accommodate for the following reasons: "we prefer skills-oriented trainees like graduates of electrical technology or similar vocational courses" and "we do not have need for trainees." These organizations are into business outsourcing, construction, and direct selling.

Four (40%) of the media centers are willing to accommodate AB English Language Practicum trainees "for clerical tasks only" while six (60%) are not. The reasons given vary as: "we hire correspondents or part-time writers," we prefer Law students," and "the management does not allow trainees."

Two (20%) of the educational institutions/schools are willing to accommodate AB English Language Practicum trainees and eight (80) percent are no. Most respondents said that "we have our own OJTs and student assistants from our own school."

This is again an affirmation of earlier studies and this study's claim that the government agencies and private companies/organizations are most willing to accommodate AB English Language Practicum trainees while educational institution/schools and media centers are not. However, it is quite clear that the type of industry nor the nature of business or trade does not determine whether an organization accepts or rejects. Apparently, it is the local industry's own need that is a prime factor.

*National*
On the national level, the same random sampling was adopted. Ten (10) organizations per industry type were taken as respondents.

Ten (100%) of the government agencies are willing to take in AB English Language Practicum Trainees from Bicol University.

Six (60%) of the private companies are willing to accommodate AB English trainees. These are those in BPOs, ICT, retail, manufacturing and telecommunications. Four (40%) are not willing citing for a reason "preference for students of IT, Finance, Marketing or other Business courses." These companies are more or less of the same nature of business as those who are willing to accommodate.

Eight (80%) of the media centers are willing to accommodate AB English trainees while 2 (20%) are not. One of the reasons given for non-willingness is preference for student trainees within Metro Manila.

Three (30%) of the educational institutions are willing to accommodate, while seven (70%) are not. Schools mentioned that the non-willingness is due to any of these reasons: preference for other students of other courses, non-availability of program for OJT, program for paid student assistants from their own schools, OJTs from their own school.

Again, even on the national level, this is an affirmation of information derived from the locality that the government agencies and private companies are most willing to accommodate AB English trainees from Bicol University. Interestingly, it also revealed answer to question that has baffled earlier researchers, that which pertains to why educational institutions often reject Language Practicum trainees. These very reasons were hinted at during the focus group discussion.

*International*
Originally, to gain more valid data for this, the researcher sent electronic questionnaires to the top 20 organizations of each ASEAN nation. However, only one of these responded. Despite successive follow-ups, only electronically generated and perfunctory replies were received. As it was also expensive to continue the research using telephone interview or courier, the researcher made use of desk research by looking for information in their websites.

Ten (10) organizations from the countries Cambodia, Laos, Singapore, Malaysia, Hongkong and Vietnam generated information about student internship. Nine (9) of these are private companies and one (1) is an educational institution. Eight (80%) of these are willing to accommodate student trainees from other countries while two (20%) are not.

International internship is possible for AB English Language Practicum trainees. There are companies which can arrange student internship such as Asia Exchange, Internship Indonesia Ltd., Global Placement and Internship Asia, which could probably be tapped for this purpose. Bicol University can make future arrangements for international internship for AB English students.

*Job Descriptions/Titles in the Market Available for AB English*
*Language Practicum Trainees*

Using as checklist job descriptions/titles identified in Hermosa, et al.'s (2014) as top job descriptions available in the market for LP trainees, this paper also attempts to revalidate and meta-analyze data by surveying different population samples. Addressing as well the "beyond" aspect, the paper also discusses job descriptions available in the national and international levels – for LP trainees.

*Local*
Table 2 shows the job descriptions/titles available for Language Practicum Trainees in the local/provincial level.. As ranked, these are: Information Officer (100%), Clerk (100%), Communication Assistant (93.5%), Encoder/translator (93.5%),

Frontline/Administrative Clerk (48.4%), Public Relations Officer (48.4, Customer Service Representative (45.2%), Technical/Speech Writer (35.5%), Administrative Officer (35.5%), Researcher (25.8%), Copywriter (16.1%) and Events Coordinator (6.5%).

Topping the list of descriptions/titles are Information Officer (100%), Clerk (100%), Communication Assistant (93.5%) and Encoder/translator (93.5%) which echo the findings in Hermosa et al.'s (2014) research to a certain degree.

**Table 2.** Job Description/Titles Available for Language Practicum Trainees

| Job Description | Frequency | Percentage | Rank |
|---|---|---|---|
| Information Officer | 31 | 100.0 | 1.5 |
| Clerical Job | 31 | 100.0 | 1.5 |
| Communication Assistant | 29 | 93.5 | 3.5 |
| Encoder/Translator | 29 | 93.5 | 3.5 |
| Frontline/Administrative Clerk | 15 | 48.4 | 5.5 |
| Public Relations Officer | 15 | 48.4 | 5.5 |
| Customer Service Representative | 14 | 45.2 | 7 |
| Technical/Speech Writer | 11 | 35.5 | 8.5 |
| Administrative Officer | 11 | 35.5 | 8.5 |
| Researcher | 8 | 25.8 | 10 |
| Copywriter | 5 | 16.1 | 11 |
| Events Coordinator | 2 | 6.5 | 12 |

N=31

These job descriptions/titles might point to a generalization that while trainees are accommodated in entry- level positions (rank and file), these require specific communication skills. An information officer for instance "organizes, evaluates, and distributes information in different formats within and outside a company or organization. He or she should be familiar with how the media works and have writing experience" ("What does," 2014). A clerk on the other hand performs a variety of administrative tasks, including answering telephones, typing or word processing, making copies of documents, and maintaining records. These require excellent communication skills just like that of a communications assistant and a translator/encoder. Thus, outside the academe, AB English students are valued for their skills at communication, but which are specific to a corporate world, government of private.

Interestingly, these are some of the job descriptions/titles in their respective offices which the focus-group discussants said to be suited for AB English trainees/ graduates: Sales/Account Executives because they are articulate and have great communication skills according to Bermal (Media Center representative); Officer, administrative posts, social work, training specialist and these are dependent on skills because hiring process is competence-based according to Mora (DOT); Any job so long as one performs well according to Rasco (LGU, and; any job that requires communication skills because other technical skills can just be learned along the way said Martinez (Private sector).

*National*

Table 3.3 shows the job descriptions available for AB English students on the national level. As ranked, these are: Clerk (92.6%); Communication Assistant (74.1%); Administrative Officer (70.45); Researcher (70.4%); Encoder/translator (66.7%); Copywriter (66.7%); Public Relations Officer (63.0%); Technical/Speech Writer (63.0%); Information Officer (59.3%); Frontline/Administrative clerk (59.3%); Customer Service Representative (59.3%) and Events Coordinator (51.9%).

The top three are: Clerk (92.6%), Communication Assistant (74.1%) and Administrative Assistant (70.4%) which tied with Researcher (70.4%).

**Table 3.** Job Description/Titles Available for Language Practicum Trainees

| Job Description | Frequency | Percentage | Rank |
|---|---|---|---|
| Clerical Job | 25 | 92.6 | 1 |
| Communication Assistant | 20 | 74.1 | 2 |
| Administrative Officer | 19 | 70.4 | 3.5 |
| Researcher | 19 | 70.4 | 3.5 |
| Encoder/Translator | 18 | 66.7 | 5.5 |
| Copywriter | 18 | 66.7 | 5.5 |
| Public Relations Officer | 17 | 63.0 | 7.5 |
| Technical/Speech Writer | 17 | 63.0 | 7.5 |
| Information Officer | 16 | 59.3 | 10 |
| Frontline/Administrative Clerk | 16 | 59.3 | 10 |
| Customer Service Representative | 16 | 59.3 | 10 |
| Events Coordinator | 14 | 51.9 | 12 |

N=27

This information can be interpreted similarly with the data obtained from industries in the locality: that seemingly, AB English Language Practicum trainees even in Manila may be given tasks related to their communication skills.

Summing up, the top 3 job descriptions available for AB English student interns, local or national levels are: clerk, communication assistant and encoder/translator.

Thus, it may be valid to insist that competencies related to the business world, particularly on corporate/organizational communication be made the core competencies of AB English curriculum. Students must not only be thought general communication theory and practice, but more so be geared to specific communication purposes, that of sharing information within a business.

*Competency Requirements from AB English LP Trainees*

Using the 21st Century Competencies developed by Melbourne University as a gauge, varied local industry that are willing to accommodate AB English Language Practicum trainees are asked about their competency requirements. The findings reveal pieces of information that are reflective of the dynamism even in the local workplace.

Table 4 shows the findings on the competencies required by the local industry from the Language Practicum trainees.

**Table 4.** Competencies Required by the local Industry from LP Trainees 2013

| Competencies | Frequency | Percentage | Rank |
|---|---|---|---|
| Collaboration and Teamwork | 31 | 100.0 | 1 |
| Critical Thinking, Problem Solving and Decision-making | 30 | 96.8 | 3.5 |
| Life and Career | 30 | 96.8 | 3.5 |
| Learning to Learn, Metacognition | 29 | 93.5 | 5.5 |
| ICT literacy | 29 | 93.5 | 5.5 |
| Communication | 28 | 90.3 | 7.5 |
| Information Literacy | 28 | 90.3 | 7.5 |
| Personal and Social Responsibility | 27 | 87.1 | 8 |
| Citizenship, Civic Literacy | 26 | 83.9 | 9 |
| Creativity and Innovation | 22 | 71.0 | 10 |
| Environmental Awareness | 7 | 22.6 | 11 |

By their ranks, these competencies are ordered as: collaboration and teamwork; critical thinking, problem solving; life and career; ICT literary; communication; information literacy; personal and social responsibility; citizenship/civic literacy; creativity and innovation; and environmental awareness.

These are all valuable, but top in the list are collaboration and teamwork; critical thinking, problem solving; and life and career. This is an enlightening information because not finding communication on top five, which previously was seen as the reason why AB English trainees/graduates are valued in the job market, calls for deeper insight. It is possible that it is not solely communication skills that land trainees in the specific jobs mentioned, but other competencies they possess, especially critical thinking, problem solving and decision making. The AB English curriculum so prides itself with the built-in intent to develop communication and critical thinking skills. In fact, Mateos, et al found out that in the 2014 enhanced AB English curriculum, communication ranked first among the competencies embedded in most courses. Critical thinking, problem, solving and decision making came second with one hundred thirty-nine (139) competencies classified under it (Mateos, et al., 2015).

Collaboration and teamwork as a competency means being able to work with other individuals in a team. "It is the ability to work with another person or group in order to achieve or do something" (Finegold & Notabartolo, 2010). While individuals who could work independently used to be valued, today's world seemingly prize more people who could work harmoniously with others in achieving a goal, and in working for a common purpose.

Critical thinking means "making reasoned judgments that are logical and well thought out. It is a way of thinking in which you do not simply accept all arguments and conclusions you are exposed to but rather have an attitude involving questioning such

arguments and conclusions. It requires wanting to see what evidence is involved to support a particular argument or conclusion" ("What is critical thinking?" 2015).

Life and career is the ability to navigate the complex life and work environments in the globally competitive information age (McLean, 2013). Simply put, one must possess "skills for living in the world," and must continue to learn so that he could adapt to the changes in his work and life environments.

The data on the competency requirement from Language Practicum trainees could already be valid basis for advancing recommendations urging the strengthening of these competencies. It is not only enough that these competencies be embedded in the upcoming curriculum for AB English, but to demand as well that these must be inculcated in the trainees while they are on practicum.

**Conclusions**

These are the conclusions derived from the findings, and the recommendations advanced in the light of these findings:

1. The industry that accommodated the AB English Language Practicum trainees 2013 are mostly government agencies and private companies. No school/educational institution and media centers accommodated the trainees. It is thus a valid conclusion to make that the educational preparation of AB English Language Practicum trainees 2013 is best suited for work in the government and private business sectors. Hence, it is recommended that: (a) The Language Practicum trainees be fielded in government agencies and private business sectors; (b) The competencies intended for development in the AB English curriculum be made to complement the competencies needed in the government and private business sectors.

2. The types of industry most willing to accommodate the AB English Language Practicum trainees locally in the future are the government agencies and the private business companies. In Manila, showing promise are the government agencies and the media centers. On the international level, the thriving private business sector also provides opportunities for student interns. Thus, AB English Language Practicum trainees have the best chance in these three industry types, depending on where they wish to hold their student internship. It is recommended then, that: (a) The Language Practicum trainees be fielded in government agencies and private business sectors locally; in government agencies and media centers, nationally; and in private business sector, internationally; (b) Provide guidelines that will allow AB English student interns to hold internship in Albay, Manila or Asia, if possible.

3. The top 3 job description/position available for AB English Language Practicum trainees are: clerk, communication assistant, encoder/translator. It is therefore concluded that AB English students are better suited for work related to specific communication purpose, that of sharing information within a business or organization. The recommendations are,

that: (a) AB English curriculum be geared more to core competencies related to the business world, particularly on corporate/organizational communication; (b) Language Practicum insists that sponsoring organizations train students to hone these competencies more, and not solely to provide extra manpower to do menial tasks which are part of the job description.

4. The 21$^{st}$ century competencies mostly required from the AB English Language Practicum trainees are collaboration and teamwork, critical thinking and life and career. It is recommended that: (a) AB English courses be so defined to incorporate all 21$^{st}$ century competencies particularly collaboration and teamwork, critical thinking and life and career; (b) The micro-competencies targeted for inclusion in the curriculum must be aligned to specific needs business/organizational needs of the job market for AB English.

## References

Aringo, J. A., Bares, M.H.N., Custodio, J.A., & Lecaros, M.S. (2010). Comparative analysis of assumed jobs and on-the-job trainings: Basis for identifying career options for BS Management graduates (Undergraduate thesis, Bicol University, 2010).

Balingasa, J. & Quimpo, M. (2010). Problems encountered by the BU-IPESR students in their Out-Campus Practice Teaching, SY 2009-2010 (Undergraduate thesis, Bicol University, 2010).

Bartolata, J.I. (2015). The Language Practicum learning experience of AB English 2013. (Unpublished Research Report, Bicol University).

Domo, M.G.D. (2009) The on-the-job training experiences of the Bicol University graduates of the Department of Sociology, Academic Year 2006-2008 (Undergraduate Thesis, Bicol University, 2009).

Finegold, D. and Notabartolo A.S., (23 June 2010) 21st-century competencies and their impact: An interdisciplinary literature review. Retrieved from http://www.hewlett.org/uploads/21st_Century_ Competencies _Impact.pdf

Focus group discussion on the AB English language practicum 2013 and beyond. 12 May 2015. Legazpi City.

Hermosa, K.A.R., Martinez, N.G., & Ordiales, M.H.N. (2014) The applicability of the new AB English curriculum to work performance as gleaned from Language Practicum 2013" (Undergraduate thesis, Bicol University, 2014).

Kirkpatrik's learning and training evaluation theory, (n.d.) Donald Kirkpatrick's learning evaluation model 1959; review and contextual material Alan Chapman 1995-2014. Retrieved April 24, 2013 from http://www.businessballs.com/kirkpatricklearningevaluationmodel.htm

Lumbo, A.C. (2010) Performance of Bachelor of Physical Education in practice teaching batch 2009-2010 (Undergraduate thesis, Bicol University 2010).

Malate, M.M. & Ronda, R.G. (2011). An assessment of the in-company training in Bicol Region of the Bicol University College of Arts and Letters (BUCAL) Journalism students (Undergraduate thesis, Bicol University, 2011).

Mateos, L., Baeza, J.A., Latigay, J., Latorre, C.V., Ludovice, G. (2015) 21st century competencies embedded in the AB English enhanced curriculum (Undergraduate thesis, Bicol University, 2015).

McLean, N. (10 January 2013) What would be your list of the 21st century skills that all students must be exposed to? Retrieved from http://www.sec-ed.co.uk/best-practice/how-do-you-define-21st-century-skills

Nevarez, J.P. & Merenciano, K.T.E. (2008). An assessment of the in-company training of the fourth year Journalism students (Undergraduate thesis, Bicol University, 2008).

"OJT" Retrieved July 1, 2013 from http://en.wikipedia.org/wiki/OJT

Scribner, S. &. (n.d.). Retrieved July 1, 2013, from Laboratory for Cognitive Studies of Work, The Graduate School and University Center, City University of New York: http://education.eserver.org/on-the-job-training.txt

Sergio, J., et al. (2011) Bicol Region's industry demand for graduates of AB English and AB English Language/AB Literature (Undergraduate thesis, Bicol University, 2011).

Stufflebeam, D.L. & Shinkfield, A.J. Evaluation theories, models and spplications. Retrieved April 22, 2013 from https://books.google.com.ph/books?id=xx6UgC6UdFMC&pg=PA57&dq=objectives-based+evaluation+by+tyler&hl=fil&source=gbs_toc_r&cad=4#v=snippet&q=an%20 evaluation%20theorist%E2%80%99s%20idealized%20conceptualizations%20for%20 conducting%20program%20evaluation&f=false

Taladtad, S.G., Bala, M.K.R., & Rodelas, M. 12 January 2010. Factors that affect the on-the-job training of BSBA Practicumers of the University of Manila: An assessment. Retrieved July 1, 2013 from http://www.slideshare.net/taladtad/factors-that-affect-the-on-thejob-training-of-6528978

What does an information officer do? (January 27, 2015) Retrieved from http://www.wisegeek.com/what-does-an-information-officer-do.htm

What is critical thinking? (April 9, 2015) Study.com. Retrieved from http://study.com/academy/lesson/what-is-critical-thinking-definition-skills-meaning.html

# *Job Performance of Bicol University Language Practicum Trainees 2013*

Ma. Celina Eladia G. Meneses, Bicol University, Philippines

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

The main objective of this research is to evaluate the first batch of Language Practicum (LP) trainees among the AB English majors of Bicol University, from the viewpoint of sponsoring organizations. It composes the second part of a research project titled "The AB English Language Practicum 2013 and Beyond". It particularly determined the level of attainment of objectives of the practicum; the level of knowledge, skills and attitude (KSA) development of the trainees; and the over-all assessment of the language practicum learning experience. It is anchored on the quasi-evaluation approaches/model of program evaluation. It uses survey-questionnaires deriving information from employer evaluations on the attainment of objectives. It is also qualitative in nature as descriptions of learning experience and job performance are derived from feedback forms from sponsoring organizations. Responses were validated through a focus-group discussion (FGD) among representatives from sponsoring agencies, and other stakeholders.

Results show that sponsoring agencies found the Language Practicum 2013 to have achieved its objectives, giving it a superior rating. The development of KSA is rated outstanding, with knowledge, skills, and attitudes placed at the superior level. Some respondents, however, found a few problems with regard to trainees' job performance, particularly in listening to instructions; suitability to the task; using computers and applications; and writing skills. Overall, sponsoring agencies found the implementation of LP 2013 to be remarkably successful. Guidelines to be crafted can profit from a few practices that can be deduced from this implementation and carried over to the next batch of trainees.

**Keywords:** *practicum, on-the-job training, supervisors' assessment, AB English*

iafor

The International Academic Forum
www.iafor.org

**Introduction**

This research is the second of three studies that make up a research project forming a quasi-evaluation of the AB English Language Practicum 2012-2013. Largely, the intention is to use findings to propose policy recommendations and guidelines for the improved conduct of the Language Practicum, now only on its third year of implementation. The research looked into the attainment of objectives of the newly-implemented requirement for graduates, the training experience of the students, and the job performance of the Language Practicum Trainees. It also went as far as industry profiling of host organizations willing to accommodate AB English trainees in the future.

Consequently, the research aims to bridge the gap between competencies and jobs available. The continuity in information exchange, with schools updating the students about the trends in employment and with the Industry providing such information, hopefully, will resolve the pervasive mismatch between academe and industry, on a micro level at the least.

The main objective of this study, the second phase of the research project, "The AB English Language Practicum 2013 and Beyond", is to evaluate the first batch of Language Practicum trainees among the AB English majors of Bicol University, from the point of view of the sponsoring organizations.

Specific objectives are as follows:

1. Determine the level of attainment of objectives of the Language Practicum 2013 from the point of view of the sponsoring organizations;
2. Determine the level of knowledge, skills and attitude (KSA) development of the Language Practicum trainees; the most/least developed learning domain in particular, as assessed by immediate supervisors;
3. Find out from sponsoring agencies which academic skills are most/least applicable to job performance of language trainees;
4. Identify the problems in terms of job performance of the trainees encountered by training supervisors throughout the duration of the Language Practicum; and
5. Establish the sponsoring agencies' over-all assessment of the language practicum learning experience, at the same time, deduce the good practices derived from the experience.

**Research Framework**

This research is anchored on the quasi-evaluation approaches/model of program evaluation.

The researchers adhered to the restraint of the source in using the term evaluation theory, referring to the "more advanced" notion of evaluation. Evaluation Theory is here reserved for "creatively developed yet more rigorously tested conceptualization of program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63). Because more demanding requirements and higher standards are required for the meaning of theory, the term model/approaches is preferred. This refers to "an evaluation theorist's

idealized conceptualizations for conducting program evaluation" (Stufflebeam & Shinkfield, 2013, p. 63).

The question-oriented approaches address specified questions (often employing a wide range of methods) and the method-oriented approaches typically use a particular method. Whether the methodology or questions addressed in these approaches are appropriate for assessing a program's merit and worth are secondary consideration. The questions-oriented begins with a set of questions and the methods-oriented may start with an overriding commitment to employ both qualitative and quantitative methods. Both approaches stress that it is usually better to answer a few pointed questions well than to attempt a broad assessment of a program's merit and worth (Stufflebeam &Shinkfield, 2013).



Figure 1. Research Model

This study operates within the same framework as the first study of the larger research project, but data are gathered from the sponsoring agencies. All data are validated via a triangulation methodology, the focus-group discussion, for a richer and more qualitative information-gathering. The findings are deemed relevant in the crafting of a comprehensive set of guidelines for a much improved Language Practicum implementation.

Equally important is the anchoring of the research on Kirkpatrick's Training Evaluation Model which seeks to meaningfully measure learning in organizations through the four levels: "reaction (what they thought and felt about the training),

learning (the resulting increase in knowledge or capability), behavior (extent of behavior and capability Improvement and implementation/application), and results (the effects on the business or environment resulting from the trainee's performance)" ("Kirkpatrick's Learning", 2013). These components are addressed in the ensuing questions, except for level 4, which may be a subject of subsequent studies. Level 3 on the other hand is modified to focus more on the learning in the academe as applied to job performance, instead of the intended application of learning from the training to the actual job.

**Materials and Methods**

A descriptive type of research, this study used survey-questionnaires deriving information from employer evaluations of the attainment of objectives. However, it is more qualitative in nature as descriptions of learning experience and job performance were derived from feedback forms/evaluations by sponsoring organizations. Respondents include a total enumeration of the thirty (30) sponsoring employers.

For validation purposes, the results of the research project were presented to a small group of fifteen, made up of sponsoring employers, representatives from the academe, and former trainees. The focus-group discussion (FGD) yielded more qualitative data meant to enrich the discussion of results.

**Results and Discussion**

*Attainment of Objectives of the Language Practicum 2013*

Sponsoring agencies have found the Language Practicum to have achieved its objectives, garnering a weighted mean of 4.40 or Superior. This means that for the most part, the immediate supervisors of the AB English trainees consider the practicum to be useful in terms of providing the students with additional learning through the exposure they acquired in the workplace. Table 1 gives the details.

**Table 1.** Ratings on Attainment of Objectives

| Objective | Rating | Description |
|---|---|---|
| 1. Provide students with practical training on the job supplemented by related theoretical instruction | 4.31 | Superior |
| 2. Offer students a venue to translate their communication and related skills to actual job performance | 4.51 | Outstanding |
| 3. Give students the opportunity to acquire the work values required of the job market | 4.43 | Superior |
| 4. Afford students actual venue for job prospecting, networking and over-all development of professional work relationships | 4.35 | Superior |
| **Average** | **4.40** | **Superior** |

This is a direct confirmation of the assumption that not everything can be learned in the classroom, thus, the need for additional avenues for learning, such as that offered by training in companies or agencies where AB English graduates may hired. This affirms the importance of requiring a Language Practicum as part of the AB English

Program, where students are provided additional and highly significant input in terms of skills, knowledge, and attitude which they will need as future professionals.

The objectives of the Language Practicum (LP) are four-fold. Primary among them is the provision of practical training in an actual job and supplemented by related theoretical instruction coming from the LP professor. As assessed by the sponsoring agencies through the trainees' immediate supervisors, this objective has been achieved, having gained a mean rating of 4.31 or Superior.

The second objective is to offer students a venue to translate their communication skills, as well as other related skills, to actual job performance. This was given a mean rating of 4.51 or Outstanding. This rating is also a reflection of the level of communication skills the trainees have, being an indication that the supervisors were in fact satisfied with the way the trainees used the communication skills they had learned in the classroom, in specific tasks required of them in their training stations. It has to be assumed that the students had good communication skills to start with.

The third objective, which is to give students the opportunity to acquire the work values required of the job market, gained a mean rating of 4.43 or Superior. The sponsoring agencies therefore agree that exposing students to an actual workplace gives them the venue for learning not just skills and knowledge but also work values which the trainees will need once they find themselves in the professional world.

Finally, the Language Practicum was conceived to afford students an actual venue for job prospecting, networking and over-all development of professional work relationships. This objective acquired a mean rating of 4.35 or Superior. Being in an actual workplace allows the trainees to assess what it is like to be working in the company or agency in which they trained, based on which they can decide whether such is the kind of work or place they wish to find themselves in after they graduate from college. They also get exposed to other agencies and offices with which their sponsoring agencies do business with, expanding their knowledge about the world of work. They also have the opportunity to build friendships and other business relationships which they may find useful when they start looking and applying for jobs.

In the focus-group discussion (FGD) held to validate findings of the research, it was affirmed that student-trainees are able to make use of classroom-learned skills in the workplace. The representative from the Department of Social Welfare and Development (DSWD), Ochoa, particularly mentioned that the trainees are given the tasks of organizing events and trainings, and writing about as well as documenting them. These are tasks that require the application of communication skills, which is one of the major skills developed in the AB English program.

*Development of Knowledge, Skills, and Attitude*

The development of the trainees' Knowledge, Skills, and Attitude (KSA) is rated 4.56 or Outstanding. As detailed in Table 2, Knowledge domain is rated 4.52 or Outstanding; Skills domain is 4.53 or Outstanding; and Attitudes domain is 4.61 or Outstanding.

**Table 2.** Ratings on Knowledge, Skills, and Attitude

| Learning Domain/Indicators | Rating | Description |
|---|---|---|
| **Knowledge** | | |
| Knowledge on the key functions of the job | 4.44 | |
| Management of office/work procedures | 4.36 | |
| Task accomplishment and productivity | 4.75 | |
| Average | **4.52** | **Outstanding** |
| **Skills** | | |
| Writing of documents, letters, memos and reports | 4.07 | |
| Speaking in both formal and informal situations | 4.61 | |
| Listening and following of instructions | 4.81 | |
| Use of technology in the workplace | 4.63 | |
| Average | **4.53** | **Outstanding** |
| **Attitudes** | | |
| Desirable Attitudes as self-esteem, positivity and assertiveness | 4.60 | |
| Personal appearance or professional image | 4.60 | |
| Work qualities and habits | 4.61 | |
| Business ethics with executives and coworkers | 4.64 | |
| Relationship with clientele | 4.59 | |
| **Average** | **4.61** | **Outstanding** |
| **Weighted Mean** | **4.56** | **Outstanding** |

The results of the assessment of the trainees' skills, knowledge, and attitude as shown in Table 2 indicates the high level of success of the Language Practicum. It is an assurance that the training has been able to provide AB English students with the venue in which to practice what they have learned in the classroom, and reinforce the same, side by side with acquiring a work attitude which may not be simulated in simple class activities.

*Knowledge*
In terms of knowledge, rated highest among the indicators is the trainees' task accomplishment and productivity, with mean rating of 4.75. Some improvement can be done in terms of knowledge on key functions of the job, which received a mean rating of 4.44, and in the management of office or work procedures, which has a mean rating of 4.36. This is understandable, though, considering this is the first time most of the trainees would have been exposed to real work settings, and could not have been made immediately familiar with such procedures. However, this setback is surely compensated by the trainees' ability to accomplish tasks assigned to them, as indicated by their Outstanding rating for productivity and task accomplishment. Whatever their lapses in knowledge of procedures, they make up for knowledge in finding ways to ensure that the work is done.

*Skills*
Under the skills domain, highest rating is given to listening and following instructions, with mean rating of 4.81. Following are the use of technology in the

workplace, and speaking in both formal and informal situations, which received mean ratings of 4.63 and 4.61, respectively. Lowest rating was given to writing of documents, letters, memos, and reports, with only a 4.07 mean rating.

Having a high rating in listening and following instructions definitely supports the earlier finding that the trainees excel in task accomplishment and productivity. Though found slightly lacking in knowledge of office procedures and key functions of the job, they are found to be good listeners which make them effective in following instructions. Their likewise favorably assessed ability to use necessary technology and to use good speaking skills to communicate what they need to accomplish the task, must have made them very skilled in accomplishing their tasks properly, making them highly productive in the workplace.

*Attitude*
Work attitude is considered just as important as skills and knowledge. It is therefore greatly reassuring that this has been rated by the sponsoring agencies as Outstanding. Particularly assessed were self-esteem, positivity, and assertiveness which gained a mean rating of 4.60; personal appearance or professional image with a mean rating of 4.60; work qualities and habits with 4.61; business ethics with executives and coworkers with 4.64; and relationship with clientele with 4.59.

With minimal differences in the ratings, it can be generalized that the AB English trainees have impressed their immediate supervisors with the work attitude they displayed and also developed in the workplace, be it in terms of self-expression or in their interactions with supervisors, co-workers, or clients.

These findings, however, especially that on skills, were somewhat contested during the FGD. Despite the outstanding ratings given by the supervisors to the trainees, some FGD participants pointed out the observed lack of skills in terms of computer literacy. For instance, according to Ochoa of DSWD, they do not know "more complicated aspects of MSExcel such as formulas and generating other web sheets". However, according to the FGD participants who are AB English graduates and former Language Practicum trainees, the training was successful in the development of skills, knowledge, and attitude.

Latigay, a 2015 graduate, declared, "There were skills we had already before the training started and others that we had to learn during the job itself, especially when the job you are given is not relevant to your course, [but] that way you can adjust and adapt to the work environment. Either way, I learned a lot from the training."

Rasco, a 2013 graduate, related how challenges became opportunities for learning, particularly when it came to the lack of ICT skills. "We were only able to resolve that issue by being honest and asking questions on how to do the task asked to be done. Communicating your difficulties and weakness to your supervisor effectively is the key in surviving the training…." This is a clear example of positive attitude in facing challenges in the workplace.

*Academic Skills Most/Least Useful*
One of the objectives of this study was to find out from the sponsoring agencies which academic skills they find most and least useful in the workplace. These skills

are those that the trainees are assumed to have learned in the classroom, in their four years of study, and based on the subjects they took up since their first year in college. Considered as useful are those with mean ratings of 4 and above, while least useful are those with mean ratings of 2 and below.

Organizational communication and interpersonal skills were rated to be the most useful academic skills needed during the training, and therefore in the trainees' future jobs. This is an affirmation of the results under attainment of objectives which show an Outstanding rating for translation of communication skills to actual job performance. The respondents find this skill most useful, and they also think that the trainees have excelled in applying this skill in the workplace.

Table 3 details the skills found most useful by the sponsoring agencies.

**Table 3.** Academic Skills Found Most Useful

| Academic Skill | Rating | Rank |
|---|---|---|
| Organizational Communication | 4.95 | 1 |
| Interpersonal Skills | 4.90 | 2 |
| Critical, Analytical & Reflective Thinking | 4.87 | 3 |
| Listening | 4.85 | 4 |
| Cooperative Planning & Teamwork | 4.72 | 5 |
| Social Responsibility | 4.60 | 6 |
| Leadership | 4.49 | 7 |
| Reading Comprehension | 4.35 | 8 |
| Workplace –readiness | 4.31 | 9 |
| Oral Presentation | 4.28 | 10 |
| Data Gathering | 4.27 | 11 |
| Oral Expression | 4.26 | 12 |
| Grammatical | 4.23 | 13 |
| Statistics/Mathematical | 4.18 | 14 |
| Business Letter Writing | 4.17 | 15 |
| Non-Verbal Communication | 4.03 | 16 |
| Information Technology | 4.00 | 17 |

Most of the rest of the skills rated 4 or higher are communication-related, and therefore leads to the conclusion that most companies/agencies need employees who are good communicators, both in written and oral forms.

Table 4, which details the least useful academic skills, lists Literature-related skills and physical education skills as least useful. This runs parallel with the move of the Commission on Higher Education (CHED) to realign the AB English curriculum so that it deals more on Language and less (or even no longer) on Literature. The skills of playing sports and dancing have understandably been given low ratings because they have little, if any, relation to the job.

The study of Sergio, et al. (2011), for instance, yielded the result that schools in the Bicol Region who offer AB Literature have little or no enrollees and will be phasing out the course. CHED itself has not pursued a once-proposed plan of creating a

ladder program for AB English for students to choose between language and literature as they move up to the third and fourth years.

**Table 4.** Academic Skills Found Least Useful

| Academic Skill | Rating | Rank |
|---|---|---|
| Literary Evaluation | 1.90 | 34 |
| Playing Sports | 1.82 | 35 |
| Comparing & Contrasting of Literary Masterpieces | 1.68 | 36 |
| Literary Interpretation & Analysis | 1.64 | 37 |
| Literary Performance | 1.54 | 38 |
| Writing of Literary Criticism | 1.51 | 39 |
| Defining of Literary Terminologies | 1.42 | 40 |
| Folk & Ballroom Dancing | 1.32 | 41 |

The finding that skills learned in Literature subjects are among the least useful was picked up during the focus-group discussion. The reactions were mostly against the removal of the subjects, but more for reducing the number of course offerings. Most insistent about their retention were the AB English graduates themselves, who find much use for literary skills in the workplace. Rasco shares:

> "On the issue that literature subjects are not that necessary for students to be job ready, I do not agree with that. My writing skills were developed because of the literature subjects I have gone through and I was and still am able to apply it in my day-to-day task as an administrative aide for Mayor Alsua as I am tasked to also write some of her speeches, presentations and reports. I am able to apply literature values and writing skills."

Mora of the Department of Tourism (DOT) similarly shares her experience, being an AB English graduate herself: "I also believe that literature and English subjects are of great help in developing communication skills, organizing skills, comprehension and critical thinking which make AB English students proficient in oral and written English and ultimately job-ready especially for government agencies." She adds: "I think Literature subjects develop our critical thinking skills; we may not see its importance right away but it does help students become more proficient in communication such as writing."

The respondents, however, agree that some literature subjects can be set aside and exchanged for more technical subjects. In Ochoa's words, "I think they are helpful and it serves as their edge but maybe it could be lessened and focus on other technical subjects." Mora concurs, saying: "The AB English curriculum hones you and leads you to the academe. Maybe the curriculum may be adjusted in a way that we can incorporate more technical subjects which develops skills that are required by the work industry." Latigay suggests, "Lessen and remove other literature subjects that seem redundant all throughout the course of the program." She explains, "Though we appreciate those literature subjects, I think some are no longer necessary to prepare us for the corporate world."

The current study therefore contributes to the bases for adding more language-related subjects to any new curriculum to be designed for AB English, and lessen literature subjects.

*Problems Encountered by the Sponsoring Agencies in the Language Practicum*

The sponsoring agencies found a few problems encountered with regard to job performance of trainees. The most complaints were about the very short duration of the training. A number of respondents felt that the 200 hours allotted for the training was not enough for the trainees.

When validated during the FGD, participants had different answers. Ochoa said that for them it is not enough because their project-based workloads require more than 200 hours, therefore that would mean the trainees may have to leave in the middle of a project and leave them hanging or with lack of manpower. For Tuason of the Government Service Insurance System (GSIS), however, "200 hours is enough, so long as it is continuous. We do not appreciate students leaving during office hours because they have a class." According to her, this leaves much of the work unfinished.

Another problem identified was the trainees' non-suitability to the task. Respondents observed that the AB English students were more suited to work in law offices or schools. To this, FGD participants did not agree. Tuason states: I do not agree. I think AB English students have good communication skills which is a great foundation to land any job in any industry. So long as you know the basics of the job...." Mora adds, "AB English students can work in any government agency but need to start small such as administrative officer, administrative aide (as entry points) and just work their way up the career ladder."

Some complained that the Language Practicum was not well coordinated with the agencies, thus some companies had jobs for the trainees that were not relevant to their course. This was validated by the participants. Ochoa explains: "Some applicants go to our office very late, or the communication from schools comes in late that we decline because of time constraint. We prefer that notice be given a month before so we could plan their assignments, the number of students we would need, etc. Otherwise we would already be full because other schools also apply for OJT." Tuason adds, "Proper communication and endorsement is requested from the schools so we could accommodate the students right away."

Respondents also mentioned the need for improvement of writing skills such as memos, letters, etc., need for improvement in the use of computer and applications; and no chance to observe the trainees' communication and related skills to actual job performance. According to FGD participants, however, as far as their experience is concerned, they are able to give proper supervision to their trainees. Tuason claims, "…in our office students are assigned to a specific supervisor who monitor and eventually grade them." This is seconded by Ochoa, who states, "There is an immediate supervisor to the students who guide, monitor and grade them monthly. They are also required to submit accomplishment reports." Likewise in DOT, where "there is close supervision but centralized to the administrative officer alone due to our small population in the office."

Isolated problems mentioned were difficulty in listening to instructions, need to improve computer skills and applications, need to improve writing skills such as needed in preparing memos, letters, etc., and the absence of a chance to observe the

trainees' communication and related skills to actual job performance. These problems may have occurred due to job requirements which may have been more than what the students could handle, the standard or expectations of the supervisor, or the student trainees' own capabilities. Not being able to observe the trainees' use of skills in some agencies, may be due to lack of time spent with the trainees, or the possible mismatch of the job, identified earlier as another problem.

As to the lack of computer skills, including using computer applications, FGD participants, particularly the AB English graduates agreed that they did not have enough training in school on the matter. According to Latigay, what they learned were mostly general information and concepts about computers and their history, and what other knowledge they gathered were mostly theoretical.

Ochoa of DSWD narrates,

> "When it comes to the use of computer, we have observed that they are able to use Microsoft Word and Microsoft Excel but when it comes to the more complicated aspects of Excel such as formulas and generating other web sheets, they do not know how to do it. So recently, we addressed that problem by preparing web sheets with formulas ready and all they really do is input the data alone and by that, they were able to observe and learn how the application works."

Latigay furthers, "I believe that students must be given the necessary training to use various programs in the computer such as Microsoft Excel beyond the basics of the program, preparation of AVPs, photoshop, etc., because these are now required of the students and job applicants especially now that we are in the 21$^{st}$ century."

*Overall Assessment of the Language Practicum by the Sponsoring Agencies*

Judging from the assessments of the Language Practicum sponsoring agencies, the implementation of LP 2013 was remarkably successful. Based on the findings, and gaining insights from a few practices observed in the conduct of this first Language Practicum of the AB English program, guidelines will be crafted such that they will benefit the next batches of trainees.

This assessment is echoed by participants of the FGD. While there were problems pointed out like limitations on tasks due to privacy and confidentiality concerns and issues about agencies not following the contract, the FGD participants who were also trainees are unanimous in saying that the Language Practicum program was successful.

**Conclusions**

These are the conclusions derived from the findings, and the recommendations advanced in the light of these findings:

1. Sponsoring agencies find the Language Practicum 2013 to have attained its objectives, though not to its full extent. Recommendation is to address problems encountered in order that this may be achieved.

2. Immediate supervisors find KSA development to be outstanding, that is, the training has been able to greatly improve Language Practicum trainees' skills, knowledge, and attitude through exposure in an actual workplace. Recommendation is towards the continuance of the Language Practicum, with careful planning of specific tasks that would particularly lead to this.

3. Academic skills are most applicable to job performance of language trainees are communication skills, particularly those required for public relations. Least applicable are literature-related and sports-related skills. Recommendation is to add courses that focus on organizational and interpersonal communication, and phase out or at least lessen courses on literature and sports.

4. Problems encountered in terms of job performance of the trainees during the Language Practicum are varied yet minimal and easy to address. Recommendation is to study solutions to each one in order to maximize the partnership offered through this program, with the industry and academe mutually benefitting from it.

5. Sponsoring agencies' over-all assessment of the language practicum learning experience is that it has been remarkably successful. Its continuance is hereby recommended.

## References

Aringo, J. A., Bares, M.H.N., Custodio, J.A., & Lecaros, M.S. (2010). Comparative analysis of assumed jobs and on-the-job trainings: Basis for identifying career options for BS Management graduates (Undergraduate thesis, Bicol University, 2010).

Balingasa, J. & Quimpo, M. (2010). Problems encountered by the BU-IPESR students in their Out-Campus Practice Teaching, SY 2009-2010 (Undergraduate thesis, Bicol University, 2010).

Domo, M.G.D. (2009) The on-the-job training experiences of the Bicol University graduates of the Department of Sociology, academic year 2006-2008 (Undergraduate thesis, Bicol University, 2009).

Focus group discussion on the AB English language practicum 2013 and beyond. 12 May 2015. Legazpi City.

Hermosa, K.A.R., Martinez, N.G., & Ordiales, M.H.N. (2014) The applicability of the new AB English curriculum to work performance as gleaned from Language Practicum 2013" (Undergraduate thesis, Bicol University, 2014).

Kirkpatrik's learning and training evaluation theory, (n.d.) Donald Kirkpatrick's learning evaluation model 1959; review and contextual material Alan Chapman 1995-2014. Retrieved April 24, 2013 from http://www.businessballs.com/kirkpatricklearningevaluationmodel.htm

Mateos, L., Baeza, J.A., Latigay, J., Latorre, C.V., Ludovice, G. (2015) $21^{st}$ century competencies embedded in the AB English enhanced curriculum (Undergraduate thesis, Bicol University, 2015).

Lumbo, A.C. (2010) Performance of Bachelor of Physical Education in practice teaching batch 2009-2010 (Undergraduate thesis, Bicol University 2010).

Malate, M.M. & Ronda, R.G. (2011). An assessment of the in-company training in Bicol Region of the Bicol University College of Arts and Letters (BUCAL) Journalism students (Undergraduate thesis, Bicol University, 2011).

Nevarez, J.P. & Merenciano, K.T.E. (2008). An assessment of the in-company training of the fourth year Journalism students (Undergraduate thesis, Bicol University, 2008).

"OJT" Retrieved July 1, 2013 from http://en.wikipedia.org/wiki/OJT

Scribner, S. &. (n.d.). Retrieved July 1, 2013, from Laboratory for Cognitive Studies of Work, The Graduate School and University Center, City University of New York: http://education.eserver.org/on-the-job-training.txt

Sergio, J., et al. (2011) Bicol Region's industry demand for graduates of AB English and AB English Language/AB Literature (Undergraduate thesis, Bicol University, 2011).

Stufflebeam, D.L. & Shinkfield, A.J. Evaluation theories, models and spplications. Retrieved April 22, 2013 from https://books.google.com.ph/books?id=xx6UgC6UdFMC&pg=PA57&dq=objectives-based+evaluation+by+tyler&hl=fil&source=gbs_toc_r&cad=4#v=snippet&q=an%20 evaluation%20theorist%E2%80%99s%20idealized%20conceptualizations%20for%20 conducting%20program%20evaluation&f=false

Taladtad, S.G., Bala, M.K.R., & Rodelas, M. 12 January 2010. Factors that affect the on-the-job training of BSBA Practicumers of the University of Manila:  An assessment.  Retrieved July 1, 2013 from http://www.slideshare.net/taladtad/factors-that-affect-the-on-thejob-training-of-6528978

*Physics Lesson with Animations*

Hatice Kirmaci, Sisli Anatolian High School, Turkey

**Abstract**

Physics Courses are typically a lesson that students have difficulties with. Because in addition to mathematics, students are expected to develop their abilities to review and logic. Students need to do experiments and observations. Because of insufficient laboratory conditions and less time, it is extremely difficult to handle courses by observation and experiment. Thus, students have difficulty understanding the physics lesson. To solve this problem; I tried to find animations of Physics lecture on internet and various sources. When I saw The Adobe Flash Program I wanted to make my own animations. I learned how to make animations on the internet. Then I did some Physics Lesson Animations for Physics Classes.

Photoelectric Effect (3 Animations)
X Lights (1)
Dynamic (4Animations)
Linear Motion (6Animations)
Acceleration (5Animations)
Optics (30 Animations)
Motion (6 Animations)
Electricity (8 Animations)
Waves (6 Animations)
Force (6 Animations)

Newton's Laws of Motion (First, Second, Third) (4 Animations).
After making animations, I chose two classes - close to Success-I taught the subjects the course without using animations. Then, I taught the subject classroom lessons using animations in the other class.
Although the levels of students are similar in both classes, the class in which I taught the lesson through animations comprehended the subjects more quickly than the other class. I applied a short quiz at the same time in both classes... As I expected; Classes using animations did well. When they saw an event to own eyes they understood more quickly.

iafor

The International Academic Forum
www.iafor.org

*There Are Some of My Animations Photos;*
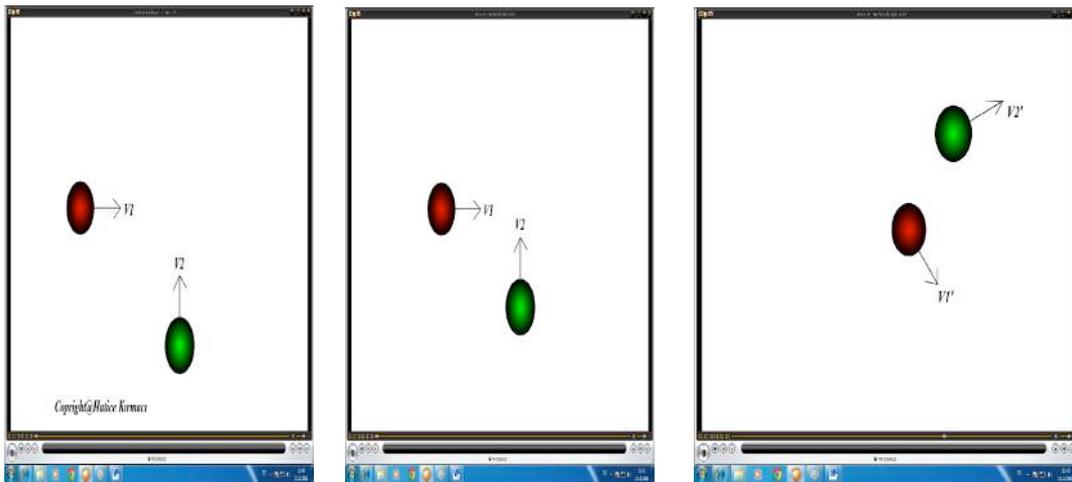


*Linear Momentum Animations Photos*

Momentum of the system is conserved in all collisions; kinetic energy of the system is not conserved in inelastic collisions.
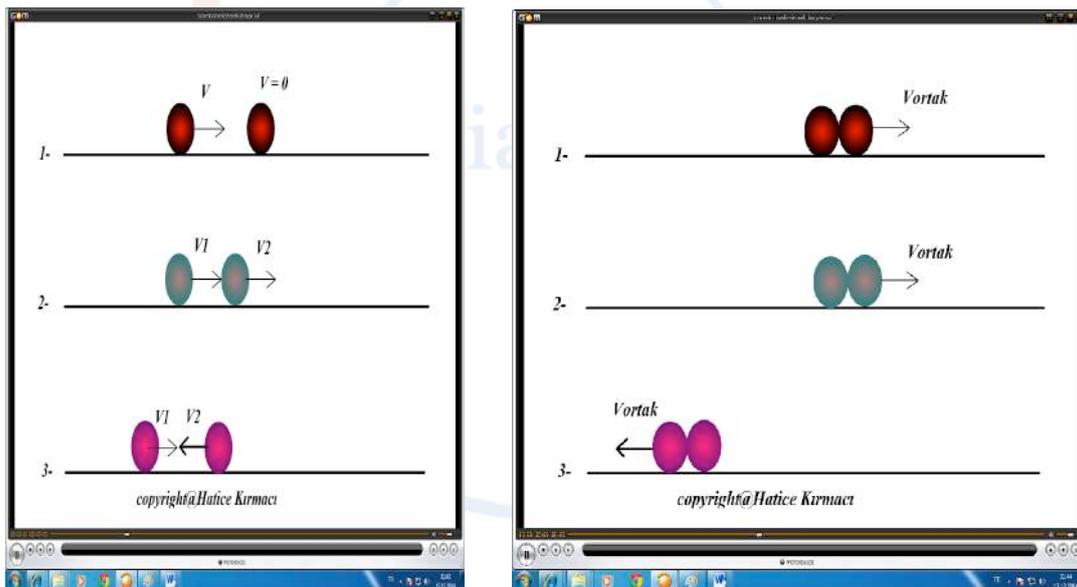


*Linear Momentum Animations Photos*

Momentum of the system is conserved in collisions, but kinetic energy of the system is not conserved in inelastic collisions
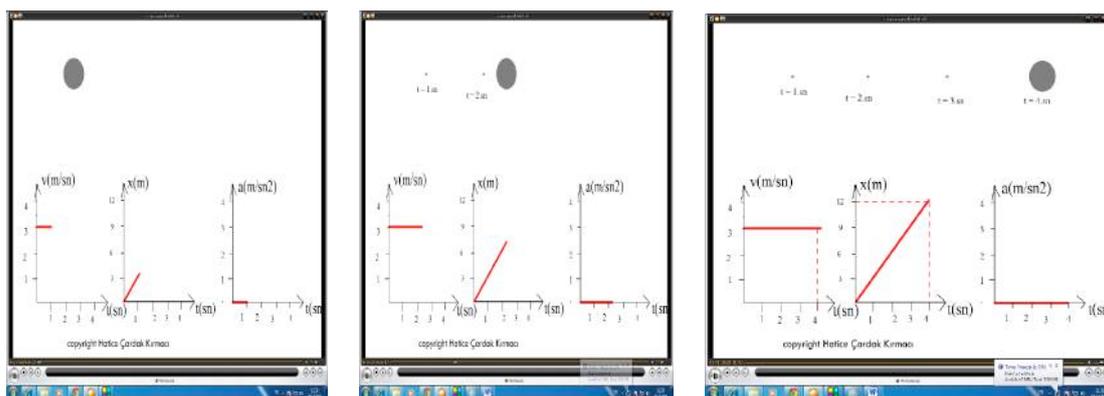
*Motion    Animations Photos (a =0)*

If the velocity-time data for such a ball were graphed, then the resulting graph would look like the graphs at the upward. Note that a motion described as a constant, positive velocity results in a line of zero slope (a horizontal line has zero slope) when plotted as a velocity-time graph.
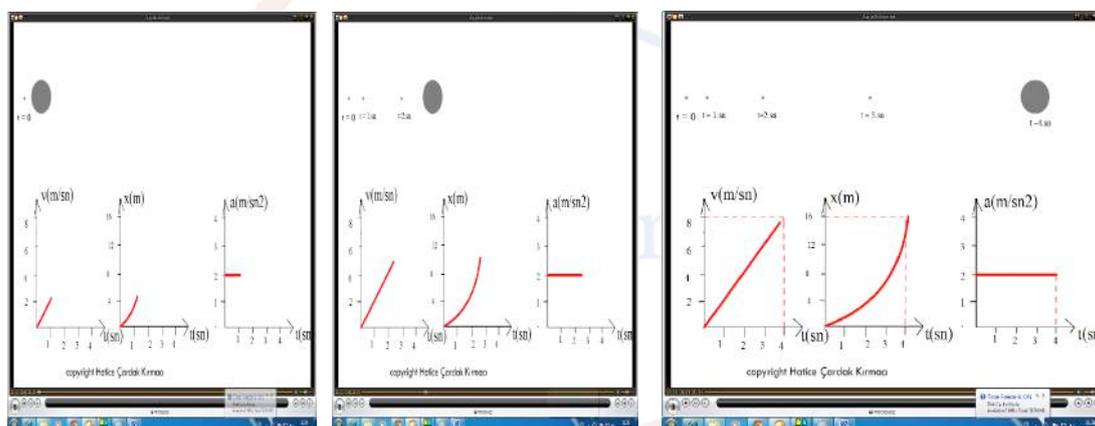


*Rectilinear Motion Animations Photos ( +a )*

If the velocity-time data for such a ball were graphed, then the resulting graphs would look like the graph at the upward. Note that a motion described as a changing, positive velocity results in a sloped line when plotted as a velocity-time graph. The slope of the line is positive, corresponding to the positive acceleration.
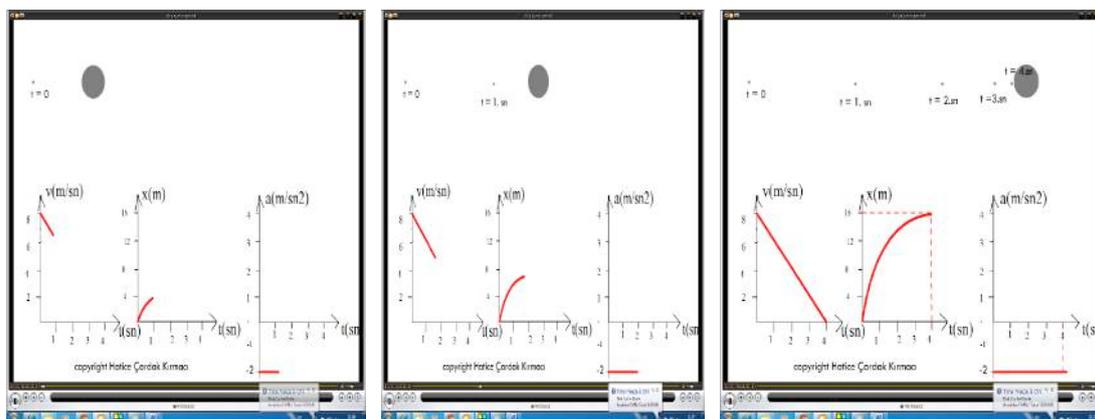
## *Rectilinear Motion Animations Photos (-a)*

If the velocity-time data for such a ball were graphed, then the resulting graphs would look like the graph at the upward. Note that a motion described as a changing, negative velocity results in a sloped line when plotted as a velocity-time graph. The slope of the line is negative, corresponding to the negative acceleration.
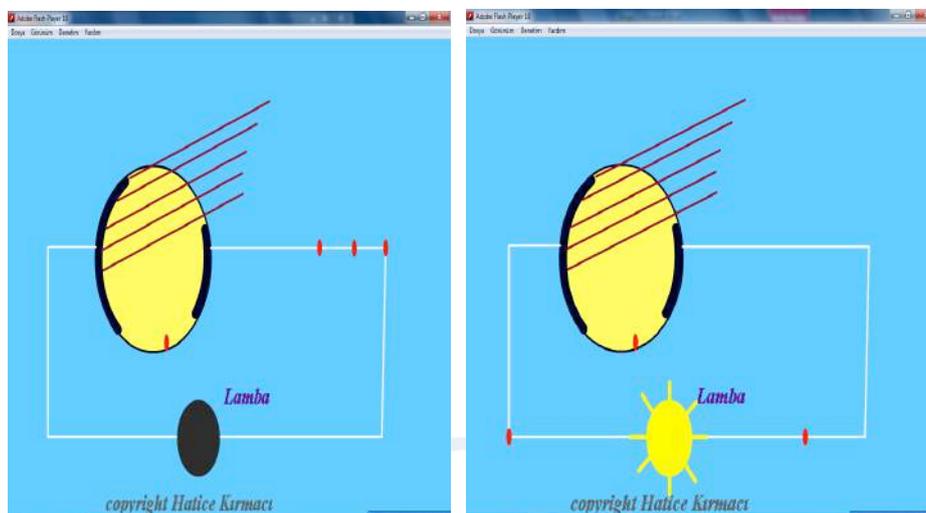


Lights strikes photocell bulb; photoelectrons are ejected from plate. Electrons moving from cathode to anode constitute a current in the circuit.
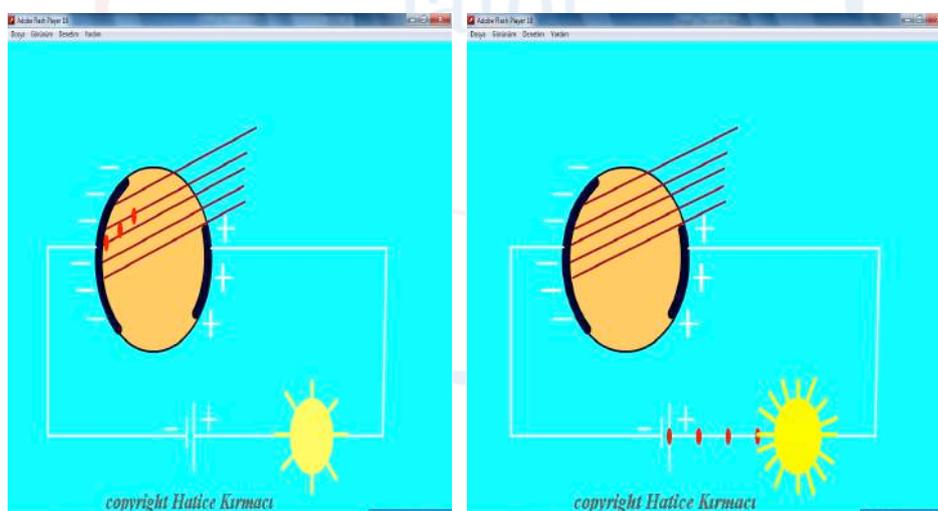


Negative pole of the generator is connected to photocell cathode the positive pole of the generator is connected to Anode. The number of photoelectron increases because of the effect of electrical current which is reaching the anode. This increases photoelectric current bulb will be light up brighter. After a certain value of the potential difference reaches a maximum value and bulb lights with this maximum value and it will not change anymore.
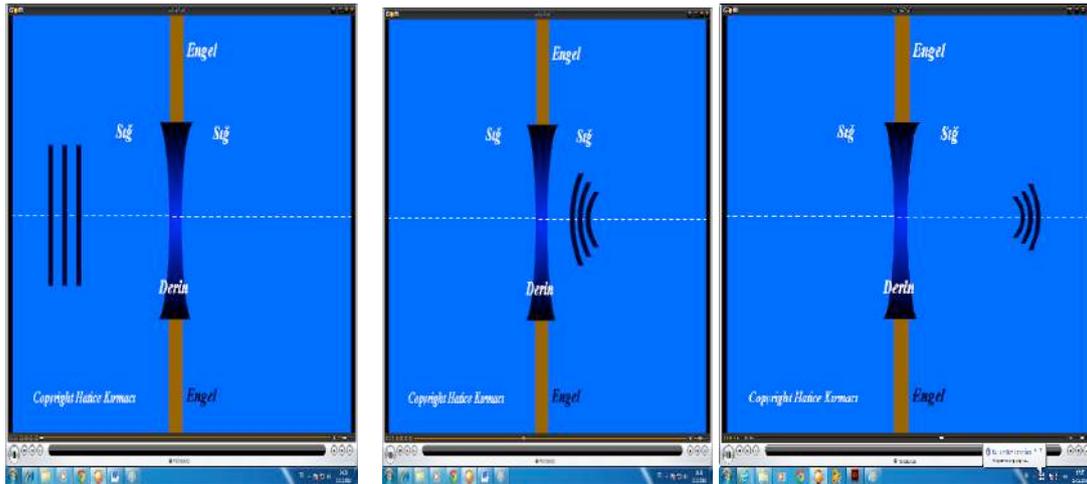
***Water Wave Animations Photos***

First two ends of the linear wave enter to the deep water, so velocity of these points increase and linear wave becomes circular wave.
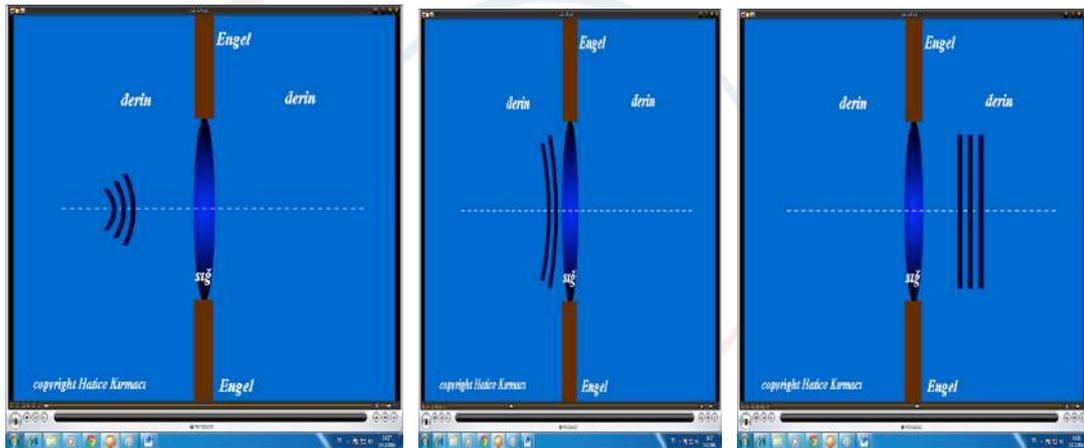


***Water Wave Animations Photos***

Circular wave enters to the shallow water, so velocity of these points decrease and circular wave becomes linear wave.
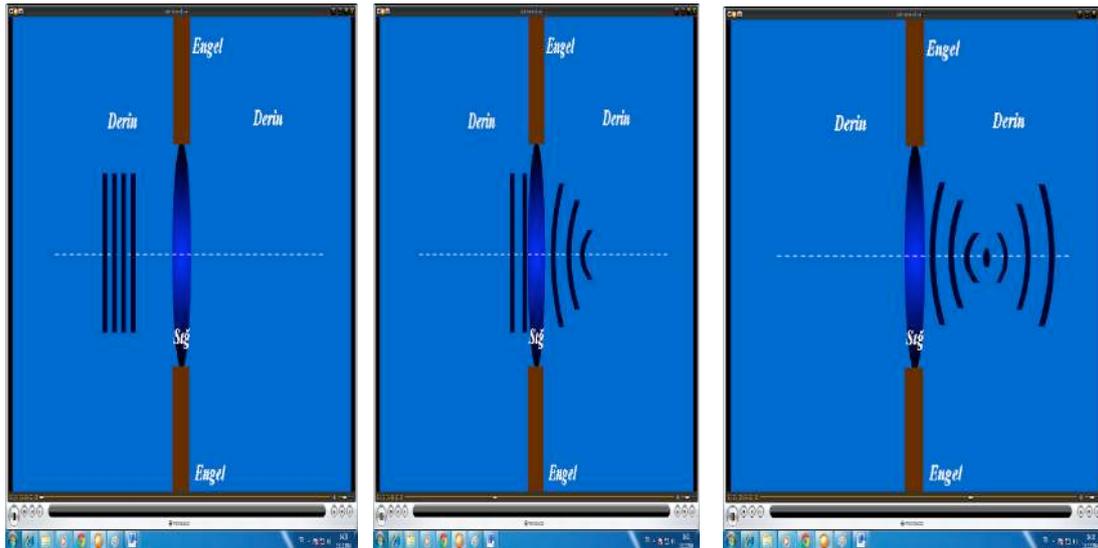
*Water Wave Animations Photos*

First two ends of the linear wave enter to the shallow, so velocity of these points decrease and linear wave becomes circular wave.
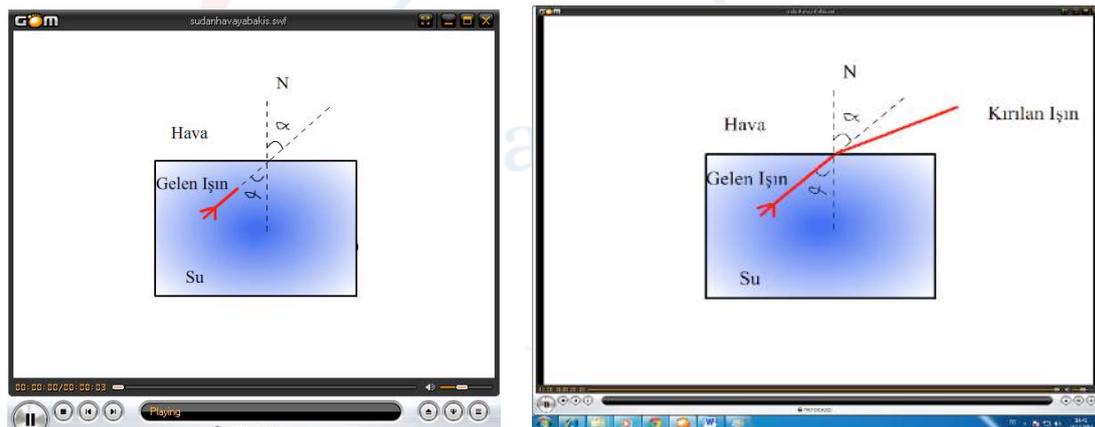


*Refraction of Light Animations Photos*
Lights coming the water surface, can you see out of the water if it looks toward the surface at an angle bigger than critical angle.
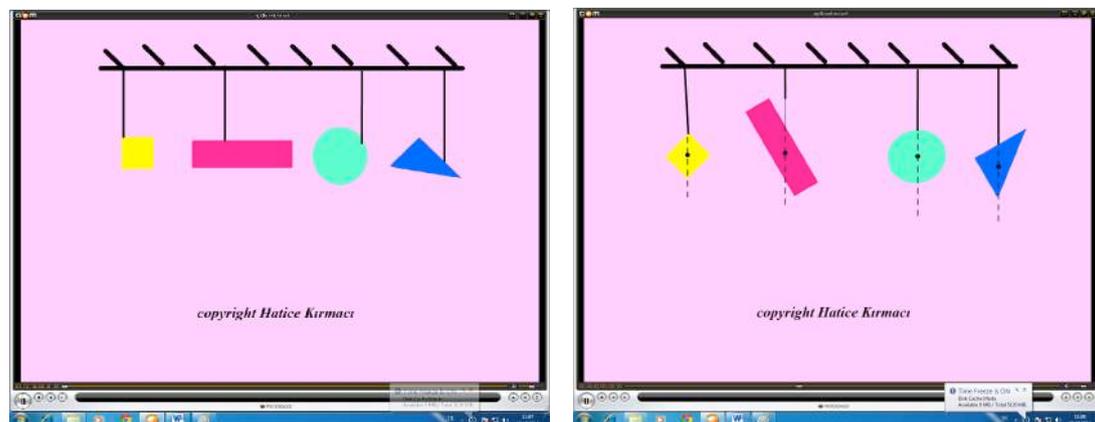
*Origins of Gravity Animations Photos*

An object placed on a tilted surface will often slide down the surface. The rate at which the object slides down the surface is dependent upon how tilted the surface is; the greater the tilt of the surface, the faster the rate at which the object will slide down it.
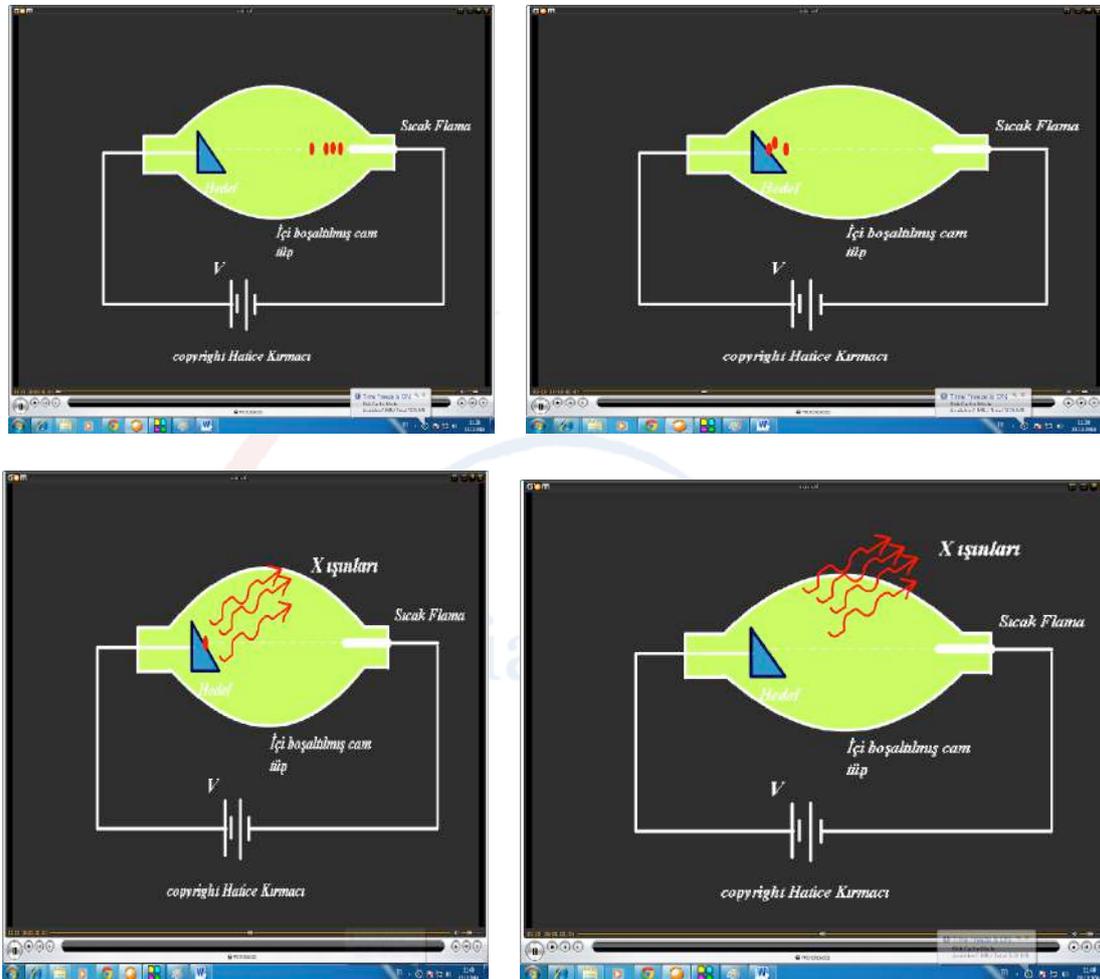


*X Lights Animations Photos*

The x-ray light will be generated by Self-Amplified Spontaneous Emission (SASE), where electrons interact with the radiation that they or their neighbours emit. The result is spontaneous emission of tightly bunched packages of radiation that are amplified like laser light.
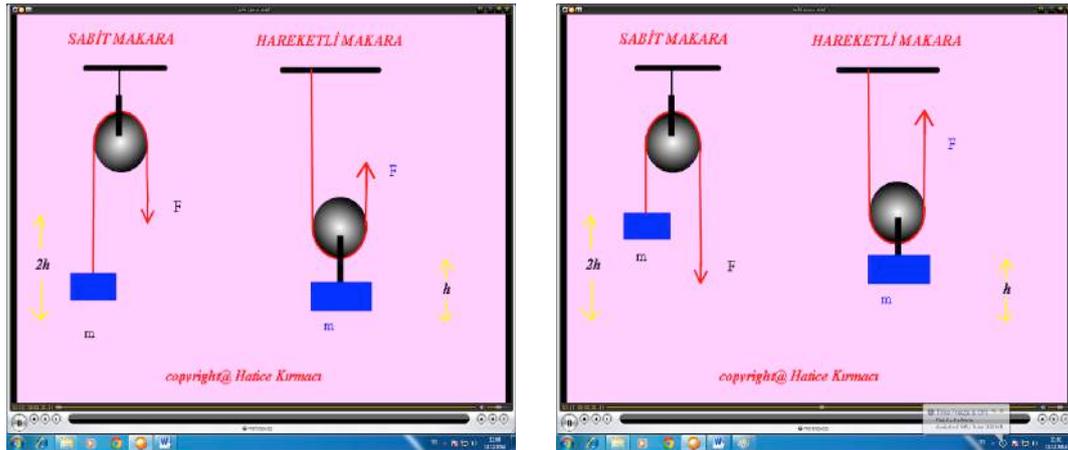
Pulleys Animations Photos

A pulley is a simple machine consisting of a wheel turning on an axle. Pulleys are often used singly and in combinations to do work. If energy is conserved for a machine, then the work done by the machine must be equal to the work put into the machine.

After making animations, I chose two classes -close to Success-I taught the subject the course without using animations. Then; I taught the subject classroom lessons using animations in the other class. Although the levels of students are similar in both classes, the class in which I taught the lesson through animations comprehended the subject more quickly than the other class. I applied a short quiz at the same time in both classes... As I expected; Classes using animations did well.
When they saw an event to own eyes, they understood more quickly.

By watching the animations, Students can understand the event he/she has to imagine.

**References**

Serway R., & Jewel J, (2003), Physics for Scientist and Engineers with Modern Physics, California State Polytechnic University-Pomona

Nilsson , J . (1993). Electric Circuits, Iowa State University

Yamayee Z., & Bala J, (1994), Electromechanical Energy Devices and Power System www.yazarlikyazilimi.meb.gov.tr

You can see my other animations in this website
https://www.youtube.com/channel/UC7ydX6EZJ4HPn6BI37x2J_Q

e-mail: haticecardak@hotmail.com

### The Relevance of History in an Impoverished Society: An Analysis of a Discipline Going into Extinction in Nigeria Since 1960

Dr. Iyela Ajayi, Federal College of Education, Okene, Kogi State, Nigeria
Enesi Prince Habib, Federal College of Education, Okene, Kogi State, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
The discipline of History is as old as modern educational curriculum. In the old Greek State of Athens, it was seen as a noble discipline meant for members of the Royal families and Nobles. This discipline was also adopted in Europe in the renaissance era where people were taught their roots. For this reason, seasoned historians have defined history as the mother of all disciplines because of its relevance in the development of man and the society. However, this all important discipline has become endangered in the Nigerian Society where the drive for money or material gains influences majorly the discipline one studies. In this light, most ivory towers where history is being taught were forced by the dictates of the time to affiliate the discipline with other "marketable" disciplines to attract students to study history. The impoverished status of the Nigerian society could largely be blamed for this development as economic gains now precedes academic gains. Educational pursuits are no longer for knowledge acquisition and societal development, rather, for the monetary benefits that will accrue to the certificates. Thus, the glory of history as a discipline is gradually going into extinction. This study therefore looks at the concept and relevance of history in a financially induced and impoverished society.

**Introduction**

When a student in the congregation of other students in Nigeria introduces himself as a student of medicine, international relations, architecture, engineering etc., such a student is given more regards than a student who introduces himself as a student of history. This apathy towards the discipline has become so high probably because of its perceived irrelevance. Several works have been done on the relevance and irrelevance of the discipline of history in the present day Africa. Thus, the relevance of history in an impoverished society like Nigeria is worthy of studying which is the focus of this paper. To non-historians, history teaches no particular skills since the primary focus of history is the past. To young historians or prospective history students, the fear of gainful employment is the beginning of self-denigration. This fear especially, led to the call for the obliteration of history as a subject in our school curriculum. This all-important discipline has become endangered in the Nigerian Society where the drive for money or material gains influences majorly the discipline one studies. In this light, most Nigerian universities where history is being taught were forced by the dictates of the time to affiliate the discipline with other "marketable" disciplines like diplomacy, international studies, strategic studies and the likes to attract students to study history.

This paper therefore looks at the concept of history as a discipline and its importance to the society and national development. The paper also looks at poverty in Nigeria and the relevance of history in such impoverished society. It finally discusses the gradual extinction of the discipline powerfully aided by the policies of the government and the Nigerian universities.

**Methodology**
This research applies both the thematic and analytical method of historical reconstruction. It used the oral history method where personal interviews and informal chats are conducted. The research also made use of secondary sources such as journals, periodicals and other relevant literature.

**Concept of History**
History as a concept is as broad as the discipline itself. It means different things and viewed in various perspectives by different historians. History which originates from the Greek word *historia* meaning to 'investigate' or 'inquire' has been defined by Collingwood as a research or inquiry of actions of human beings that have been done in the past. In this vein, He sees history as a science that quizzed the past in a scientific manner.[1] Collingwood also postulated that history is the science of res-gestae which is an attempt to answer questions about human actions in the past. Malcom Yapp defines history as an aspiration to comprehend the totality of past human experiences and implicitly to discern in it some messages of present and future utility on the basis of reflecting on the situation.[2] In essence Yapp believes that history has an inherent lesson to be learnt by the present.

E. H. Carr simply views the discipline of history as the continuous and unending interaction/dialogue between the past and the present. He opines that there was no way in which the past can be divorced from the present and vice – versa because the past and the present are intertwined and as such, there will always be an unending

relationship between them.[3] He further posits that the past which a historian studies is not a dead past, but a past which in a sense is still living in the present.

Barraclough defines history as the study of the significant aspect of the past on the basis of imperfect and fragmentary evidence.[4] Historians have come to view Barraclough's definition as thorough because it espoused the art of the historian. According to Barraclough, history is not the study of the entire past but the significant aspects of the past using evidences which cannot be sought from a single source but from various sources for the purpose of historical reconstruction.

**Importance of History**
The importance of history to man and his society cannot be over emphasized. History provides us with a collective memory. It gives man a sense of connection to place, time and community. History studies man and society in motion. In doing so, history aims to know the elements of the present by understanding what came to the present from the past, for the present is simply a developing past. History also concerns itself with human affairs such as politics, economics, changes and civilizations, religion, relationship and many more.[5]

You can imagine a society that does not know its history; the society will be like a man without memory, living every day like its first. History is for self-knowledge and it's just proper that a person should know himself. J. H. Clark, a historian an educator viewed history as a clock that people use in telling their political and cultural time of the day. He further said that history is a compass that people use to find themselves on the map of human geography.[6] Marcus Mosiah Garvey, the Pan Africanist while arguing on the importance of history said that "a people without the knowledge of the past history, origin and culture is like a tree without roots."[7]

One fact that is almost infallible is that no individual can run away from himself and as such, it will be impossible for any nation to estrange itself from her history. The truth however, is that nations are free to be guided by accurate sense of history and be saved or neglect history and be destroyed as it was clearly demonstrated by Hegel when he opines that History leads the Wiseman and drags the fool.[8] Little wonder, the former president of Nigeria, Chief Olusegun Obasanjo in year 2000 stated that the problem of Nigeria is the problem of not knowing her history. According to Uzoigwe, *"History is like Mother Nature, you cannot cheat it. It hangs over the head of every nation like the sword of Damocles. It is difficult to move, but whenever it moves, it is purposive and unsmiling. It makes those who provoke it or try to cheat it pay dearly"*[9] History is a discipline that seeks to study man and his society, it thus becomes dynamic since man and the society is not static but dynamic characters. This makes history not only focus on the past but also take a look at the present and peeps into the future if it is to keep pace with the ever changing character of man and society. It is against this backdrop that Greco opines that "to remain ignorant of things that happened before you were born is to forever remain a child."[10]

History has tremendously helped nations to unravel their past achievements. For instance, the discovery of the Stonehenge in Salisbury, south western England gave the British a sense of pride as they relish in the ancient civilization symbolized by the Stonehenge. Similarly, the Arabs take pride in their ancient architecture and civilization which pre-dates the western civilization.

In Africa, we have heard of the great Mali, Songhai, Ashante, Kanem-Borno and the Oyo empires; how they developed their system of administration and governance, how buoyant their economies were which negates the idea that the European colonialists brought civilization, system of administration and economic progress to Africa. Egypt also boasts of a rich heritage in their ancient technology of embalmment when Europe was still in the dark ages. She also prides herself with the invention of the earliest writings – the hierographics, and having one of the great pyramids which was revealed through the study of history.

Nigeria is not left out of the past achievements as the knowledge of history espoused the Nok, Oyo, Igbo and indeed the Nigerian civilization as seen in the Nok terracotta, the Oyo bronze, and the igbo-ukwu culture. Without history, how will we have known the great achievements of these Nigerian societies?

History also serves as an indispensable tool in unraveling the unknown. Things happen in societies and the inquisitive nature of history will provide its tool of research to dig for the cause of such actions. Thus, history becomes an imperative tool to fish out such hidden and unknown facts.

Man is created with a natural instinct to puzzle over his environment. Man thus looks at the beauty of the cosmic environment and tries to know the essence of their creations and why they came to be. This inquiry also takes us to the past to understand the nature of the cosmic environment.

The knowledge of history also serves as a correction tool to avoid the mistakes of the past. It is often said that history has repeated itself. That is to elucidate on the propensity of actions to boomerang if not corrected. The great errors of the past are very useful so as to put in measures to avert such mistakes. According to Voltaire, the madness of the theological quarrels of the late 11th century and the horrors that resulted if not known to the public, the disaster of that time may re-arise because no one will take plans to prevent them. The history of Adolph Hitler will prevent a nation from giving absolute powers to a ruler or an arm of government as seen in the German's parliament passing of the German enabling act of 1933 which gave legal dictatorial powers to Adolph Hitler which Hitler used to the fullest.

History also serves as a tool of comparative analysis. This is because individuals and nations desires development and progress as time advances, how do we then measure progress and development if not an analytical comparism of your past with your present? Thus, history now at this point serves as a tool of comparative analysis for individuals and societies that desire progress.

History has also been a viable tool for nation building. It is used by nation builders in the much desired unity and national integration and cohesion. The proponents of Nigerian independence deployed her rich history to forge a common front to gain independence from Britain. Nation builders in order to carry the masses along aquaint them with the struggles of the heroes past which should not be allowed to 'be in vain'. Thus, the nationalists and nation builders explored Nigeria's cultural similarities to achieve independence and nation building due to the knowledge of history.

Oyeranmi while arguing on the very essence and importance of history made the following postulations;

1. No society can develop without deep sense of its history
2. No nation can survive without knowledge of its origin and people
3. No nation can live up to its potentials without adequate knowledge of its past
4. A society that neglects its history is on the surest path to self-destruction
5. Most importantly, any people, nation, and any race that genuinely desire development, such people, such nation and such race needs the study of its past.[11]

**Poverty in Nigeria**

Nigeria is a relatively large country which occupies about 923,768 square kilometers of mass land. Nigeria is the most populous country in Africa and indeed in the black nations of the world with a population of 140 million people based on the 2006 National Population Census and 163 million based on National Population Commission's estimates.[12] Nigeria population has been in the increase from 15.9 million people in 1911 to 140 million people in 2006.[13]

The most pathetic feature of the Nigerian society is that a majority of its members are living in a state of destitution while the remaining relatively insignificant minority, are living in affluence. These skewed economic relations do not reflect the geographic spread of resource endowment; rather, it is a product of classical greed, injustice and selfishness, which is beyond any economic principle.[14] Though, it is true that where one comes from can be a strong determinant of one's economic status because of difference in opportunities and constraints but what is happening in our society today differed too much from this. Though, the incidence of poverty is much higher in rural areas than in urban centers.[15]

Nigeria is a poor nation both by the income and non-income dimension of poverty. The income dimension of poverty defines poverty as a situation of low income or low consumption. This has been used for constructing poverty lines.[16] Accordingly, people are counted poor when their measured standard of living in terms of income or consumption is below the poverty line. The non-income dimension of poverty defines the poor as those who are unable to obtain an adequate level of education and cannot satisfy their basic health needs. They have no or limited access to basic necessities of life such as food, clothing, decent shelter, and are unable to meet social and economic obligations.[17] With this, statistics have shown that over 50% of Nigerians live below one dollar per day and can also not access the basic needs of life, thus making Nigeria unarguably a poor society.[18]

According to the National Bureau of Statistics, in a survey conducted in 2010, the proportion of Nigerians living in poverty is increasing every year despite the much ado about the paradoxically growing Nigerian economy. Below is the statistics of the poverty incidence, estimated population, and population living in poverty over the years from 1980 to 2010.[19]

| Year | Pov Incidence (est) | Pop Poverty(%) | Million |
|------|---------------------|----------------|---------|
| 1980 | 27.2 | 65 | 17.1 |
| 1985 | 46.3 | 75 | 34.7 |
| 1992 | 42.7 | 91.5 | 39.2 |
| 1996 | 65.6 | 102.3 | 67.1 |
| 2004 | 54.4 | 126.3 | 68.7 |
| 2010 | 69.0 | 163 | 112.47 |

From the above table, it is no gainsaying that the poverty level of Nigerians is increasing at an alarming rate where about 70% of the population cannot afford shelter, lack adequate clothing and cannot access basic healthcare provision not to talk of affording a decent meal per day. This brings us to the next section of this paper which is the relevance of the discipline of history in this kind of society.

**The relevance of History in an impoverished Society**
Having critically examined the impoverished nature of the Nigerian society which has more than half of her population impoverished as seen above, what then is the fate of a discipline which is not a money spinner and can add little or nothing to ameliorate the financial status of her citizens. As stated elsewhere in this paper, parents will not naturally want their children to study a discipline like history because of its seemingly non-economic advantage. Parents and even students will prefer to study disciplines like Accounting, Law, Medicine, Engineering, and all other courses that are 'marketable'; 'marketable' in the sense that, the employability of holders of such degrees is higher than the holders of degrees in history. In a nation where there is high rate of unemployment, the propensity to study a discipline that could make one self-reliant and self-employed is more so as to be able to set up private practice if the government job is not forthcoming. Apart from its 'marketability', these courses command respect amongst students and the general populace in the Nigerian society unlike history which is seen as nothing but a 'grandmother's tale'

It is also a common knowledge in Nigeria that parents send their children to school not because they want their children to be better citizens and contribute their quota to the nation's development but principally to be able to cater for themselves and their families financially. University degrees therefore have been reduced to just 'meal tickets'. Thus, the motivating factor for scholarship in Nigeria is finance and not enlightenment for national and human development. Mr. Usman Sadiq, an administrator in one of Nigeria's universities confirmed that students' apathy to the discipline of history is alarming. He said out of 3,550 students who applied to his university in the 2011/2012 academic session, only 4 students applied for history while disciplines like Accountancy, Economics, Law, Medicine and Pharmacy were over-subscribed. He further said that most students that ended up studying history in Nigerian Universities did not apply for history but were forced to read history when they had no other choice.[20] Statistics from the Joint Admission and Matriculation Board further revealed that in the last ten years, less than 0.2% of applicants who sat for the University Matriculation Examinations applied to study pure History in Nigeria's tertiary institutions.[21]

From the fore-going, despite the enormous importance of history in the life of a society, people see the study of the discipline as a waste of time and resources as people who study history are not gainfully employed which literarily translates that

there would be little or no finances to cater for their numerous economic needs. Thus, education to the impoverished Nigerian society is nothing but a means to an end and any discipline that does not meet the goals of bringing meals to the table is not worth studying. For this reason, history is becoming endangered and gradually going into extinction. Aiding this extinction is the systematic affiliation of the discipline with perceived 'marketable' but related disciplines like diplomacy, international studies, strategic studies and the likes to attract students to study history as will be discussed below. It may interest you to note that students of history with such combined disciplines do not see themselves as historians but 'diplomats'.

From the analysis above, the discipline of history seems very irrelevant in the Nigerian impoverished society, however, the discipline cannot be totally neglected by any nation who desires progress as one of the problems of the Nigerian nation today can be traced to the failure to accord history its rightful position in the scheme of affairs. As much as this paper encourages diversification of knowledge and an Information Technology driven nation, students should also know the basis of her nationhood. Little wonder, all disciplines have a segment of its history. For example, you cannot be a student of computer science, medicine, nursing and the likes without being taught the history of computer, the evolution of medicine etc. This greatly underscores the very importance of history in the life of a nation.

**Gradual extinction of History**
The discipline of History among the disciplines of study is the most castigated and scorned. It is one of the most rejected courses in Nigeria's tertiary institutions. The discipline is seen as old fashioned, grandma's stories and the lots but O.E. Tangban dismissed the perception that history is old fashioned or concerns itself with just stories of the past. He succinctly puts it thus,
"History is a study of the past; it tells us what happened in the past, how it happened, and more importantly why it happened. It provides examples of the past that are relevant to contemporary challenges. Indeed, there is hardly any contemporary challenge that has no antecedents, and such antecedents are provided by history. A contemporary society or state may avoid the mistakes of the past, if and only if the policy makers and those who implement the policies make reference to history." [22]
Lamenting the sorry state of the discipline and reminiscing on the years before and after independence, Obaro Ikime asserts:
"…. *History and historians provided our politicians with additional ammunition for the battle against colonial rule. History gave us pride in ourselves, helped to establish us as worthy members of the comity of nations. No one in the Nigeria of those years would have dared to suggest that History is a useless discipline which should not be taught in the educational institutions of our land. The value and use of History was then appreciated by all.*"[23]

It is not very clear when the discipline of History began this inglorious journey to perdition, but according to Chukwuma Osakwe, the long years of military rule with its aversion to search and freedom of speech couple with the penchant for secrecy may have stifled the historian's rigor and quest for knowledge.[24] Osakwe also cited complications arising from the country's economic challenges. He said that economic challenge resulted in the emphasis in science and technology over disciplines such as History. The cumulative effect of the economic challenges is the emphasis parents placed on the choice of discipline their children study. They always encourage their

children to pursue a discipline that could allow for self-employment such as medicine, pharmacy, law, accountancy, architecture, engineering etc. Thus, the discipline suffers a setback as the history curriculum was practically chased out of the primary and secondary schools, and it is barely hanging on a tiny thread in Nigeria's tertiary institutions.[25] Attempt will be made to analyse the gradual extinction of the discipline of history through the actions or inactions of two powerful institutions – the government and the Nigerian Universities.

**The government Policies**
The government being influenced by the drive to be information technology compliant and sees science and technology as the driving force for a nation's development systematically neglected the same force that spring rolled them to independence and nationhood. It is now seen that modern societies has transcended beyond romancing with past relics called history to the advanced level of science and technology, ICT and globalization. And that since the human society is progressively advancing, and history has consistently continue to busy itself with the past of human society, it becomes imperative for the human society to part ways with history which has become a clog in the wheel of progress. Thus, in 1883, a Nigerian federal minister, Alhaji Bilyaminu Usman asserted that:
*"The country needs technological and result oriented education so as to prepare for the future. America and Russia did not go to the moon by studying history, philosophy, English language etc but did so by encouraging technological growth."*[26]

You will now realize the damage done to the discipline of history with that ministerial public pronouncement barely 23 years after the same discipline helped in the actualization of Nigeria's independence. The National Education Research Council (NERC), an agent of the government saddled with the responsibility of reviewing the curriculum of schools also over time frustrated the teaching of history. In the late 1980's only federal government owned and few state and private schools offer history in the secondary schools. The subject of history was replaced with government probably to be in tune with the dictates of the time. It is no gain saying that at this period, history has been completely erased from the curriculum of the primary schools in Nigeria. Thereafter in 2009, the subject of history was 'christened' civic studies in public and private secondary schools in Nigeria. All these policies were to muzzle out history into extinction.

A discipline as important as history in policy formulation and crisis resolution was not taken into account when delegates for the 2014 National conference was constituted to discuss the way forward for Nigeria as an entity. In a delicate and all important matter as Nigeria's sovereignty, nationhood, agitations of ethnic groups, and threat of disintegration, the historians were not even taken into account. What meaningful deliberation and resolution could be achieved without knowing what happened that led us to this fragmented state? It took the concise and agitated effort of the Historical Society of Nigeria to make a case for their representation at the National conference. As E.H. Carr rightly stated that the past which a historian studies, is not a dead past, but a past which in a sense is still living in the present. So, for the nation to move forward especially at a round table such as a conference, the professional historians needed to be consulted because they are the repository of the knowledge of the past that brought us to this present quagmire of nationhood in the first place. Nations like Nigeria where the government does not recognize the importance of historians and

history, how do you expect the ordinary citizens to treat the discipline? Thus, governmental polices set the pace for the gradual extinction of the discipline of history.

## Policies of the Nigerian Universities

The Nigerian Universities also aided the gradual extinction of the discipline of history. Apart from the first generation universities and some of the second generation universities that offer pure history, all of the third generation universities, all state and private universities offer history in affiliations with those disciplines they refer as 'marketable' disciplines as stated earlier in the paper. The universities could not be solely blamed for the decadence of the discipline because the government does not provide a thriving ground for the historians. More so, the low patronage accorded the discipline made authorities of the universities to devise strategies to attract students to the discipline and it had paid off as students are now being enticed to study history because of the affiliations.

In the Kogi State University for example, when the school was established in the year 2000, the department of history was part of the foundation departments. Only three students agreed to be admitted into the department. The students agreed in the sense that they did not initially apply to read history but had no choice now as their initial choice was not given to them. Later in year 2001, students' enrolment increased to 18 in the department and as at 2010, students that enrolled to study history rose to 257. The reason for this was not farfetched as the discipline of history was affiliated to International Studies in 2001 thus attracting a large number of students whose ambition is to work as diplomats or in the Foreign Service office not as professional historians.

## Conclusion

This all-important discipline of history with its attendant mechanism for providing solutions to societal and national problems have been relegated to the backdrop because of its non-money spinning nature like other disciplines such as medicine, accounting, architecture and the rest. More so, the economic status of Nigerians where about 70% of its populace are impoverished makes parents and students alike prefer disciplines which can easily fetch them gainful employment. This is so because, the mentality of the average Nigerian is that education is just a means to an end and that end is food. Thus, education has been reduced to a means to acquire just meal tickets. The lukewarm attitude with which the government handled the discipline in no small way aided the gradual extinction of the discipline. Government agencies gradually and systematically watered down the syllabus of the discipline and later reduced the mother of all subjects to civic education. It should be noted that most developed and nationally conscious nations in the world makes history of their nation a core subject which every student must study. History may look irrelevant in an impoverished society thus leading to a gradual extinction, it should be noted that History cannot be erased from every facet of an individual or nation's life because we are living history.

**1. R. G. Collingwood, The Idea of History, London: Oxford University Press, 1961, p.9**

2. Malcom Yapp, *The Historiography of Universal History,* New York: Microsoft, 2009, p.2

3. E. H. Carr, *What is History,* London: Macmillan Press Ltd, 1961, p.24

4. O. E. Tangban, *Methodology in History,* Unpublished P.G Lecture series, N.D.A., Kaduna, 2011

5. O. S. Oyeranmi, "The Place of History in the 21st century African Communities – The Nigerian Experience" in *African journal of Social Sciences,* Vol. 2, No.23, 2011, p. 3

6. J. H. Clark, *African People in World History,* New York: Microsoft, 2009, p.10

7. O. S. Oyeranmi, "The Place of History in the 21st century African Communities…, p. 3

8. G. W. Hegel, *Lectures on Philosophy of World History,* Translated by H. B. Nibet, Cambridge: Cambridge University Press, 1975, p.19

9. G. N. Uzoigwe, *History and Democracy in Nigeria,* Inaugural Lecture of the 34th conference of the Historical Society of Nigeria, Benin City, 1989

10. Cited in I. A. Onoja, "History: The ill-Fated Child? A Case for its relevance in the 21st Century and Beyond" in *VUNA Journal of History and International Relations*, Vol. 1, No. 1, Nigeria: Vast Publishers, 2013, p.217

11. O. S. Oyeranmi, "The Place of History in the 21st century African Communities…, p. 11

12. Report published by the National Population Commission, 2007

13. Report published by the National Population Commission, 2007

14. T. S. Osinubi, *Urban Poverty in Nigeria: A Case Study of Agege Area of Lagos State,* An Unpublished M.A. University of Ibadan, 2003, p.3

*15.* T. S. Osinubi, *Urban Poverty in Nigeria: ...,*2003

*16.* The Harmonized Nigerian Living standards Survey 2009/2010 published by the National Bureau for Statistics, 2010

*17.* The Harmonized Nigerian Living standards Survey 2009/2010

*18.* The Harmonized Nigerian Living standards Survey 2009/2010
*19.* Oral Interview with Mr. Usman Sadiq, Civil Servant, 48 years, Ayingba, November 18, 2014

*20.* Statistics obtained from the information office, joint admission and matriculation Board, Abuja, October 2014

*21.* O. E. Tangban, *History and the Quest for Unity in Nigeria,* a paper presented at the third inaugural lecture of the Nigerian Defence Academy, Kaduna, February 2013

*22.* O. Ikime, The Historian and the Nation; The Voice of a Nigerian Historian, Ibadan: Heinemann Educational Publishers, 2006, pp 14 – 15

*23.* C. Osakwe, "War, History and Tertiary Institutions" in *VUNA Journal of History and International Relations* Vol. 1, No. 1, Nigeria: Vast Publishers, 2013, p.7

*24.* C. Osakwe, "War, History and Tertiary Institutions…,2013

25. Cited in I. A. Onoja, "History: The ill-Fated Child? A Case for its relevance…, p.214
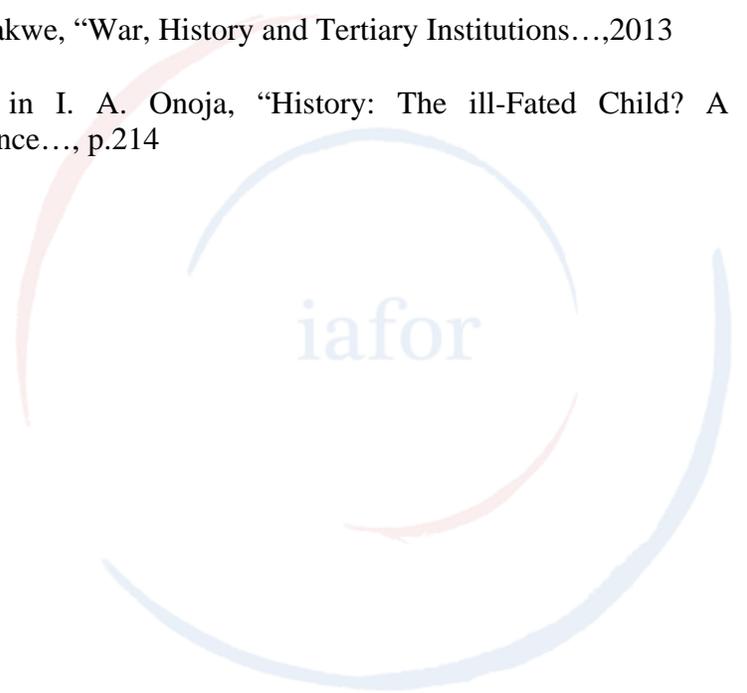
# Bibliography

Carr E. H. (1961) What is History, London: Macmillan Press Ltd

Clark J. H. (2009) *African People in World History,* New York: Microsoft

Collingwood R. G. (1961) *The Idea of History,* London: Oxford University Press

Hegel G. W. (1975) *Lectures on Philosophy of World History,* Translated by H. B. Nibet, Cambridge: Cambridge University Press

Ikime O. (2006) The Historian and the Nation; The Voice of a Nigerian Historian, Ibadan: Heinemann Educational Publishers

Onoja I. A. (2013) "History: The ill-Fated Child? A Case for its relevance in the 21st Century and Beyond" in *VUNA Journal of History and International Relations*, Vol. 1, No. 1, Nigeria: Vast Publishers

Osakwe C. (2013) "War, History and Tertiary Institutions" in *VUNA Journal of History and International Relations* Vol. 1, No. 1, Nigeria: Vast Publishers

Osinubi T. S. (2003) *Urban Poverty in Nigeria: A Case Study of Agege Area of Lagos State,* An Unpublished M.A. University of Ibadan

Oyeranmi O. S.(2011) "The Place of History in the 21st century African Communities – The Nigerian Experience" in *African journal of Social Sciences,* Vol. 2, No. 23 Report published by the National Population Commission, 2007

Statistics obtained from the information office, joint admission and matriculation Board, Abuja, October 2014

Tangban O. E. (2011) *Methodology in History,* Unpublished P.G Lecture series, N.D.A., Kaduna

Tangban O. E, *History and the Quest for Unity in Nigeria,* a paper presented at the third inaugural lecture of the Nigerian Defence Academy, Kaduna, February 2013

The Harmonized Nigerian Living standards Survey 2009/2010 published by the National Bureau for Statistics, 2010

Uzoigwe G. N, *History and Democracy in Nigeria,* Inaugural Lecture of the 34th conference of the Historical Society of Nigeria, Benin City, 1989

Yapp Malcom. (2009) *The Historiography of Universal History,* New York: Microsoft

**Oral Interview**
Oral Interview with Mr. Usman Sadiq, Civil Servant, 48 years, Ayingba, November 18, 2014  and other people through informal chat.

# The Development of Local History Curriculum based on Place-Based Education Approach for Primary School Students

Omsin Jatuporn, Naresuan University, Thailand
Amornrat Wattanatorn, Naresuan University, Thailand

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
The main objective of this paper is to describe the process of developing the local history curriculum based on place-based education approach for primary school students in the area of upper Chao Phraya river community, Nakhon Sawan Province, Thailand. The sub-objectives aimed to 1) study the local history contents and locally-related contexts for defining the local history curriculum framework and 2) develop the local history curriculum based on place-based education approach for grades 4 to 6 primary students. The development of curriculum followed the research and development (R & D) model. The research phase was conducted by using qualitative methods. In-depth interview was employed to collect local history contents, locally-related contexts and local history teaching and learning strategies from local historians, knowledgeable people and experienced social studies or history teachers. The additional information for designing the curriculum was obtained from the thorough analysis of locally-related historical documents. The development phase was characterized by defining curriculum framework including scope and sequence of the local history curriculum and developing the prototype of curriculum. The prototype of curriculum was assessed by 7 specialists including local history educators, curriculum and instructional academics and experienced social studies or history teachers. The revised version of the curriculum was implemented in 3 primary schools in Nakhon Sawan province. The result shows that the prototype of curriculum was given a good score by the teachers. It can increase the students' knowledge of local history, develop local historical research skills and improve sense of community and belonging.

**Keywords:** curriculum development, local history curriculum, place-based education approach, context-based learning

# iafor

The International Academic Forum

www.iafor.org

**Introduction**

The debates about the potential threat of globalization to the local identity, society and culture have prompted a growth of local studies in history in Thailand. These challenges have led the parsons and the enthusiastic amateurs to study about local and regional histories from a variety of perspectives. In the education context, the study of local history was promoted by the Ministry of Education as one of the student-centered learning approaches since the educational reform era in B.E. 2542. Therefore, the study of local history has grown over the years due to the contribution of local history educators, educational researchers, secondary and primary school teachers and students participating in the projects funded by Thailand office Research Fund (TRF). The "local youth historical research for students based learning reform" projects were funded by TRF in all regional parts of Thailand and have had major influences upon many teachers and students. The research showed that these projects benefited the participant students directly especially their conscience and pride in their community. It was believed that the research results satisfied the government educational policy of basic education core curriculum B.E. 2551 (A.D. 2008) that our society needed good and responsible citizens; the citizens that were happy, loved their community and its members (Rittidet, 2011).

The study of local history projects have corresponded with the visions and goals of basic education core curriculum B.E. 2551 (A.D. 2008) as well as learners' key competencies and desirable characteristics (Ministry of Education, 2008). In addition, the school-based curriculum development is under the decision-making of school administrators, educational committees, stakeholders, teachers and students of each school. Therefore, the school-based curriculum provides the opportunity for teachers to construct curriculum that relates to socio-cultural, historical and community contexts (Wattanatorn & Thongthew, 2007). The advantages of the curriculum based on local contexts include the connection between families and society's needs and interests with the goals of the country's education at national level (Collins, 2001). It can also give the students an opportunity to develop knowledge, skills, and attitudes relevant to local community contexts and thus increase their ability to contribute to the development of their districts or provinces (Kraipeerapun & Thongthew, 2007).

It is also interesting to note that from the educational point of view, the inclusion and integration of local history and community contexts such as local stories, places, cultures and ways of people's lives into the school-based curriculum can also be expected to make the learning experiences more interesting, authentic and contextualized for primary school students (Sobel, 2005; Theobald, 2006). Although local history content oriented learning did not provide an outstanding learning achievements comparing with the traditional teaching methods, this kind of learning can increase the students' knowledge of local history, process of local historical research and sense of community and belonging (Aktekin, 2010).

In this study, the local history curriculum for use in the rural central region of Thailand, is used as a case example of one approach to incorporating local history and community contexts such as local stories, places, cultures and ways of people's lives into the curriculum development process. The study was carried out in the upper Chao Phraya river community in Nakhon Sawan Province which is situated in the fertile delta of Chao Phraya river in the central region of Thailand. The local history

curriculum was developed after conducting qualitative research to understand and analyze local history and community contexts provided in this region and what counts as historical and local knowledge and skills which are required to prepare their students to live well in the community. The local history curriculum was designed by adopting the place-based education approach (PBE) into developing curriculum. The ultimate aims of this approach are to help students develop local-related knowledge, build stronger ties to their community, enhance their appreciation for the natural world, and create a commitment to serving as active, contributing citizens (Gruenewald, 2003; Sobel, 2005). The place-based education approach proposes curriculum and instructional framework for educators to design the thematic and integrated curriculum, authentic learning unit and contextualized teaching and learning (Smith & Sobel, 2010). In this paper, I incorporated the local history and community contexts information with the intent on developing a local history curriculum for grades 4 to 6 primary students in the primary schools around Chao Phraya river community, Nakhon Sawan Province, Thailand. I believe that this case example would be responsive to Thai local history, wisdom and community knowledge which are strongly emphasized in the current curriculum (Thongthew, 2011). In addition, the curriculum may be of use to others who are interested in creating curriculum that take advantage of the place students inhabit, it will be contextual scaffold for students' authentic learning in the community.

## Objectives of the study

The main objective of this study was to describe the process of developing the local history curriculum based on place-based education approach for primary school students in the area of upper Chao Phraya river community, Nakhon Sawan Province, Thailand. The specific objectives of this study were as follows:
1) To study the local history contents and locally-related contexts for defining the local history curriculum framework.
2) To develop the local history curriculum based on place-based education approach for grades 4 to 6 primary students.

## Study site

The community chosen as the study site was purposely selected based on accessibility, convenience, size, and voluntary school staff. The voluntary school staff was considered as an important aspect. Therefore, the study site is Ban Krok Phra which is historically established in the area of the upper Chao Phraya river community. It is located in Nakhon Sawan province in the central part of Thailand. This community is about 250 kilometers from Bangkok. In addition, the rationales for selecting this community as the study site were from the unique community contexts (Collins, 2001). Firstly, Ban Krok Phra is situated along the Chao Phraya bank and is considered as a community which contributed to the economic growth of Nakhon Sawan province since the beginning of Rattanakosin period. This geographical location contributed greatly to the establishment of watering community and peoples' ways of being in this place. Secondly, the people in this community aspired to preserve the local contexts such as tradition, occupation, wisdom, and etc. In addition, they wanted the young generation of the community to study learning contents connected from the day-to-day lives of the community.

**Research methodology**

The development of the curriculum followed the research and development (R & D) model, i.e. Research ($R_1$), Develop ($D_1$), Research ($R_2$) and Develop ($D_2$). However, this paper would only represent the first and second phases that have been conducted. 1) The research phase was conducted by using qualitative methods. In-depth interview was employed to collect local history contents, locally-related contexts and local history teaching and learning strategies from local historians, knowledgeable people and experienced social studies or history teachers. The additional information for designing the curriculum was obtained from the thorough analysis of locally-related historical documents.

2) The development phase was characterized by defining curriculum framework including scope and sequence of the local history curriculum and developing the prototype of curriculum which consisted of 6 components: vision, goals, contents and learning experiences structure, learning management guidelines, learning materials and resources, and evaluation and assessment guidelines. The prototype of curriculum was assessed by 7 specialists including local history educators, curriculum and instructional academics and experienced social studies or history teachers. The revised version of the curriculum was implemented in 3 primary schools in Nakhon Sawan province.

**Research instruments**

Research instruments in this study were classified according to the first and second phases that have been conducted.
1) Research instruments for collecting data in the research phase included: 1.1) semi-structured interview form for collecting local history contents, locally-related contexts and local history teaching and learning strategies from local historians, knowledgeable people and experienced social studies or history teachers 1.2) locally-related historical documents collecting form for collecting local additional information for designing the curriculum.

2) Research instruments for collecting data in the development phase included: 2.1) the evaluation form for assessing the prototype of curriculum 2.2) the learning achievement test for assessing students' knowledge of local history 2.3) the observation form for evaluating students' local historical research skills and 2.4) the learning diary for assessing students' sense of community and belonging and personal writing

In addition, the curriculum is considered as one of research instruments. I therefore categorized the local history curriculum framework including scope and sequence of the local history contents and local history curriculum based on place-based education approach for grades 4 to 6 primary students into the curriculum development phase.

This study employed both qualitative and quantitative approach. Mostly, the focus was put to qualitative techniques such as semi-structured interview and field-based observation. I had one research assistant. She was a female teacher in the nearby school community. She conducted the research with me in the field since she was considered as a local staff member. More importantly, she had educational

background in Master of Education in Curriculum and Instruction. She helped me in transcribing the tapes to text files.

**Research procedures**

1) The study of the local history contents and locally-related contexts in the area of upper Chao Phraya river community, Nakhon Sawan Province for defining the local history curriculum framework: this main step was designed based on the role of researcher. First, taking the researcher stance, I had conducted in-depth interview to obtain local history contents, locally-related contexts and local history teaching and learning strategies from local historians, knowledgeable people and experienced social studies or history teachers respectively. At this step, the field study method was applied to collect the data. The study revealed a broad variety of the local history contents and locally-related contexts of upper Chao Phraya river community and appropriated local history teaching and learning strategies for the teachers' application of these contents into the classroom teaching contexts. Second, the additional information for designing the curriculum was obtained from the thorough analysis of locally-related historical documents.

2) The development of local history curriculum based on place-based education approach for grades 4 to 6 primary students: there were 6 steps in the process of the curriculum development as follows.
2.1) Defining the curriculum framework by setting scope of the local history contents and sequence the local history contents in the local history curriculum, I as a researcher and two experienced social studies or history teachers got together to plan the curriculum framework. We decided together what ground to cover and what style of teaching to adopt and design the curriculum framework by using content mapping grids which represent the scope and sequence of the local history contents and learning experiences from grades 1 to 6 primary level. The scope and sequence of the local history curriculum demonstrates the development of student 'learn about' and 'learn to' content across a stage in relation to the identified scope and sequence. By mapping all essential contents across the stage, schools would ensure that teaching-learning programs address all essential knowledge and understanding content in the stage and present a comprehensive and balanced development of the skills and prescribed focus area content.

The curriculum framework including scope and sequence of the local history curriculum was assessed by 7 specialists including local history educators, curriculum and instructional academics and experienced social studies or history teachers. The criterions were set up based on the principles of vertical and horizontal organization and the criterions as follows: students' maturity, prior experiences and capabilities as well as the difficulty, up-to-date and balance between the breath and the depth of the local history contents (Ornstein & Hunkins, 2008).

2.2) Development of the prototype of local history curriculum: Based on the previous process, the curriculum framework including scope and sequence of the local history curriculum was assessed by 7 specialists. Then I and two experienced social studies or history teachers each was responsible for particular grades from 4 to 6 local history courses, making decision and writing up statements of general aims, list of topics to

be covered. The prototype of curriculum was expected to use for grades 4 to 6 primary students and thus it would be implemented in grade 6 primary students.

2.3) In accordance with the scope and sequence of the local history contents and learning experiences from grades 4 to 6 primary level, I and two experienced social studies or history teachers collaboratively designed the local history curriculum based on place-based education approach. The integrated, holistic and authentic learning is a core learning philosophy of this approach. Therefore, we designed the theme-based learning units and drafted the details of the integrated learning contents under the identified theme which were composed of 6 theme-based learning units and required study period in one semester.

2.4) Due to previous steps of local history curriculum development based on place-based education approach for primary school students, I had got the prototype of local history curriculum that could portray the overall curriculum contents and learning experiences. In this step, I set the meeting. The meeting was set for specialists including local history educators, curriculum and instructional academics and experienced social studies or history teachers and the knowledgeable community people who also served as the school board committee. I would gather their opinions and suggestions to the prototype of curriculum. These opinions and suggestions enabled the integration of the local community contexts with the contents from the basic education core curriculum B.E. 2551 (A.D. 2008). The integration was done using the identified themes in each theme-based learning unit from the previous step.

2.5) Evaluating the prototype of curriculum: All curriculum related materials and the overall curriculum structure were reviewed by 7 specialists including local history educators, curriculum and instructional academics and experienced social studies or history teachers and the knowledgeable community people who also served as the school board committee. The specialists evaluated the antecedent situations in the curriculum by comparing knowledge, skills and dispositions available in the curriculum with that was supported to be covered as previously agreed upon. The specialists reviewed the curriculum to assure the educational attainment and possibility of its transaction. The results were that the curriculum had components which were appropriate and related to local history and community contexts and it had a high level of quality. In addition, it was suitable for implementation. The specialists considered that it could be used as a tool in teaching the values and identities of community contexts including knowledge, wisdom, local resources and cultural traditions.

2.6) The revised version of the curriculum was implemented in 3 primary schools in Nakhon Sawan province. In this implementation step, I emphasized students' engagement by being co-researcher in the learning process. Students would play significant role as local history junior researcher (Thongthew, 2001). Their main responsibilities concerned using research skills such as seeking fundamental data, making decision, selecting appropriate data, interviewing and note-taking in order to obtain local history contents and locally-related contexts from the community. In this step, it was done by having 50 students in grade 6 of Wat Huadong Nuea school, Wat Na klang school and Wat Tha Sud school collect the local history contents and locally-related contexts in the area of upper Chao Phraya river community. All these activities covered people's ways of life, living conditions, local knowledge, careers

and livelihood, and others. The steps were taken as follows: 1) Teachers trained the students how to study and collect data 2) students studied the research skills for action research through project-based activities from a science teacher and a social studies teacher and 3) students were divided into small groups to collect data from the community. The involvements of community in this context mean sources from local community such as record offices, libraries, websites, buildings, magazines or newsletters, contacts with ex-teachers or pupils, local history groups, local newspapers, the church and old people's homes. Local people can also be used as consultants, classroom helpers and audience (Aktekin, 2010). The data which students obtained by conducting observation, interview, and field note were methodological triangulated by the researcher, school teachers, community people and students as well. The triangulation technique was employed in this step because each offers unique perspectives. The methodological triangulation can support or contradict previous data findings and clarify insights about the data (Bogdan & Biklen, 2001).

## Research results

The research results were presented based on research procedures which were undertaken in two main steps as follows:
1) The study of the local history contents and locally-related contexts in the area of upper Chao Phraya river community, Nakhon Sawan Province for defining the local history curriculum framework:

As a result of the study of the local history contents and locally-related contexts in the area of upper Chao Phraya river community, Nakhon Sawan Province by the researcher, the obtained data included the local history contents such as the origin of Chao Phraya river community, the story of historical sites and antique places, the waterway transportations and the private travel of King Chulalongkorn in the area of Chao Phraya river community. Regarding to the locally-related contexts, these included customs, traditions, folktales, legends, music and oral histories. A history teacher of 20 years of teaching experiences who was interviewed about local history teaching and learning strategies commented: *"I really believe in this program. I see the students' enthusiasm, excitement for learning, and the growth they've made as far as how much they've learned about their history, place and community. They want to learn more about local stories and beliefs."*

2) The development of local history curriculum based on place-based education approach for grades 4 to 6 primary students:

In this step, I will propose the results into 3 parts: 1) the local history curriculum framework: scope and sequence of the local history curriculum from grades 1 to grades 6 primary level 2) the characters of the prototype of curriculum and 3) the curriculum implementation.

2.1) The local history curriculum framework: scope and sequence of the local history curriculum from grades 4 to grades 6 primary level.

Grade 4: The grade four local history curricula focuses on helping students learn about their roles as members of a family and school community. The development of identity and social interaction are stressed. The students explore self, family, and

school through the five standards. Students learn about families now and long ago, studying about different kinds of families that existed in different societies and communities. Students also begin to locate places on maps and learn how maps serve as representations of physical features and objects.

Grade 5: The grade five local history curricula, students explore rural, urban, and suburban communities, concentrating on communities in the area of upper Chao Phraya river community, Nakhon Sawan Province. The student's own community can serve as an example for studying about and understanding other communities. Students study about communities from the perspectives of the five social studies learning standards. Community studies should include content examples from cultures other than the students' own, and from a variety of perspectives including geographic and socioeconomic. Students continue to learn how to locate places on maps and how different communities are influenced by geographic and environmental factors. They also study about the rights and responsibilities of citizenship in their communities.

Grade 6: In the grade six local history curricula, students study Thai local history and national history examples from a variety of geographic areas. The five social studies standards form the basis for this investigation as students learn about the social, political, geographic, economic, and historic characteristics of different watering and land communities. Students also begin to learn about historic chronology by placing important events on timelines. The historic study of local communities focuses on the social/cultural, political, and economic factors that helped to shape these communities. Students study about the significant people, places, events, and issues that influenced life in their local communities. Students can investigate case studies to make connections between local events and issues and their links to national events and issues.

2.2) The characters of the prototype of curriculum: the results can be derived from the local history curriculum based on place-based education approach that has the following characters.

2.2.1) It is an integrated curriculum. The integration was done using the identified themes in each theme-based learning unit from the first and second step of research procedures. The local history curriculum included 6 components as follows: vision, goals, contents and learning experiences structure, learning management guidelines, learning materials and resources, and evaluation and assessment guidelines. The local history curriculum based on place-based education approach for primary school students consisted of six units as follows: 1) Boats, watering and Chao Phraya river way of life 2) History and development of Chao Phraya river community 3) Festivals, folkways and culture 4) Stories, beliefs and language wisdom 5) Local history junior researcher and 6) Junior participation in local community.

2.2.2) It is an integrated curriculum developed by using the local history as the study of the past of smaller communities such as town, rural, suburban area or a city neighborhood and local community contexts as its base.

2.2.3) It is a curriculum emphasizing the development of the students to be the persons who have more knowledge of local history, develop local historical research skills and improve sense of community and belonging. The aims of the curriculum

also prioritize good citizenship before knowledge. The sense of community and belonging which was implanted in the students will immunize them through wisdom to solve problems in terms of life conditions, social, economy, and politics.

2.2.4) It is a curriculum with emphasis on the integrated teaching and learning within content-areas and local community contexts, set flexibly in terms of its time schedule and learning contents.

2.2.5) It is a curriculum that promotes the students to develop the sense of community and belonging through place-based learning and learning from the authentic contexts.

2.3) The curriculum implementation: The implementation of curriculum in the opinion of teachers were good and useful for students, schools and communities. One of the primary social studies teachers, who joined the implementation process of the local history curriculum based on place-based education approach, commented as follows:

*"I have learned more about the community in which I am teaching than anywhere else. This kind of knowledge helps me see what I am doing critically and reflectively. Apart from that, it inspires me as a teacher to have more understanding of my students and the community."*

Students were proud of their participation and had positive attitudes towards the implementation of the curriculum. The learning achievements of the students were revealed that students had knowledge of local history passing the criterion score after using the curriculum. Regarding to students' local historical research skills, the results from analyzing the observation form were satisfied and students' sense of community and belonging were satisfied after using the curriculum.

Teachers noticed the learning enthusiasm in their students and commented on the effect that learning about the unique history of their community had on students. A local teacher of more than 30 years of teaching experiences commented:

*"It makes an impact. Students have to first feel proud of this place because of the burden that is put on them as children and future citizens and they're starting to realize the power they have… the power to change their community."*

Therefore, the result shows that the prototype of curriculum was given a good score by the teachers. It can increase the students' knowledge of local history, develop local historical research skills and improve sense of community and belonging.

**Discussions**

From the local history curriculum based on place-based education approach to be used in arranging the learning activities, the researcher had found the issues that arise from the curriculum development process which can be discussed as the followings.

1) The study of the local history contents and locally-related contexts in the area of upper Chao Phraya river community, Nakhon Sawan Province for defining the local history curriculum framework:  the local history contents and locally-related contexts

in the area of upper Chao Phraya river community included the local history contents such as the origin of Chao Phraya river community, the story of historical sites and antique places, the waterway transportations and the private travel of King Chulalongkorn in the area of Chao Phraya river community. Regarding to the locally-related contexts, these included customs, traditions, folktales, legends, music and oral histories. The local history contents and locally-related contexts in the area of upper Chao Phraya river community derived from the in-depth interview method provided data by local historians, knowledgeable people and experienced social studies or history teachers. The steps of collecting essential data for developing authentic and meaningful curriculum are also consistent with Thongthew (2002) who proposed the guidelines based on the collaborative concepts as the forces to arrange activities or projects successfully in developing the sense of community and belonging in rural primary schools.

2) The development of local history curriculum based on place-based education approach: in this step, I will divide the discussion into 2 parts as follows: 1) the local history curriculum framework and the characters of the prototype of curriculum and 2) the curriculum implementation.

2.1) The developed local history curriculum is a proper and feasible curriculum to be used for arranging the learning activities for students because the scope and sequence of curriculum is meaningfully defined based on the principles of vertical and horizontal organization and the criterions as follows: students' maturity, prior experiences and capabilities as well as the difficulty, up-to-date and balance between the breath and the depth of the local history contents (Ornstein & Hunkins, 2008). In addition, it is composed of the local history contents, locally-related contexts and the history learning contents from the basic education core curriculum B.E. 2551 (A.D. 2008) which are authentic and useful for students (Ministry of Education, 2008). Its success appeared from the cooperation from the researcher, teachers across subjects and the knowledgeable community people who have knowledge and understanding about the learning contents and the community learning resources (Thongthew, 2002). This adheres to the national education act B.E. 2542 (A.D. 1999) and revision 2nd edition in B.E. 2545 (A.D. 2002) that encourages the stakeholders and communities to take part in arranging the education for the benefits of students' both physical and spiritual development (Office of the National Education Commission, 2003).

2.2) The curriculum implementation: the result shows that the prototype of curriculum was given a good score by the teachers. This is because the curriculum contents reflected the identities of historical community-based contexts including knowledge, wisdom, existing way of life, local resources and cultural values. It can increase the students' knowledge of local history, develop local historical research skills and improve sense of community and belonging. This resulted from the cooperation from the researcher, teachers across subjects and the knowledgeable community people participating in the curriculum development process. More importantly, the students learned more on their community, cultivate pride in their background of their community, and are eager to learn from other community learning resources (Thongthew, 2011). If this good trend can be maintained, the educational crisis would be reduced. The new educational spirit will not separate the students out of their own local communities (Kaewdang, 1998; Wattanatorn & Thongthew, 2007). Finally, the

students will be proud of their own culture and locality, and make their community the better place for sustainable living (Kajornsin & Potisook, 2001).

**Recommendations**

1) Recommendations in developing the local history curriculum based on place-based education approach: the utilization of historical and community-related contexts as part in its curriculum development should have the relevant contents to the community especially in the social studies, religions and cultures learning substance, environmental science learning substance and arts learning substance. The relevant contents make the learning indicators and standards from the basic education core curriculum B.E. 2551 (A.D. 2008) more authentic and meaningful for the students in community.

2) Recommendations for future research: the development of curriculum based on place-based education approach must come through continuous collaboration with family, school, temple and community. It was important that students participate in the community activities and they were encouraged to take part as an active participant of those activities so they realized their own values and had the feeling of attachment and relationship with the community.
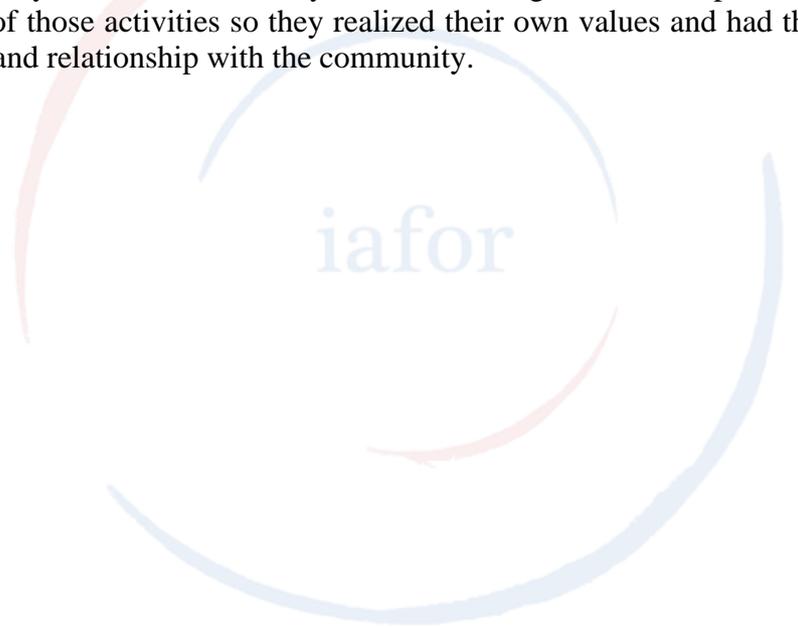
## References

Aktekin, S. (2010). The place and importance of local history in the secondary history education. *Journal of Theory and Practice in Education*, 6(1), 86-105.

Bogdan, R.C. & Biklen, S.K. (2001). *Qualitative research for education: An introduction to theories and methods*. 5th ed. Boston : Pearson Education.

Collins, T. (2001). Rural schools and communities: Perspectives on interdependence. *The ERIC Review*, 8(2), 15-24.

Gruenewald, D. A. (2003). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal*, 40(3), 619-654.

Kaewdang, R. (1998). *Thai educational reform*. Bangkok: Matichon Publishing House. (in Thai).

Kajornsin, B. & Potisook, P. (2001). *The application of the local curriculum development process in dairy farming to various other contexts*. Bangkok: P.N. Printing. (in Thai).

Kraipeerapun, K. & Thongthew, S. (2007). The development of ethnobotany curriculum for students in rural schools: An approach that incorporates the needs and insights of local communities. *International Education Journal*, 8(1), 64-70.

Ministry of Education. (2008). *Basic education core curriculum B.E. 2551 (A.D. 2008)*. Bangkok: The express Transportation Organization of Thailand. (ETO). (in Thai).

Office of the National Education Commission. (2003). *The national education act B.E. 2542 (A.D. 1999) and revision 2nd edition in B.E. 2545 (A.D. 2002)*. Bangkok: Prigwann Graphic, Co. Ltd. (in Thai).

Ornstein, A. C. & Hunkins, F. P. (2008). *Curriculum: Foundations, principles and issues*. Boston : Allyn and Bacon.

Rittidet, P. (2011). Local youth historical research for students based learning reform, northeast Thailand. *Journal of Social Sciences*, 7(2), 224-227.

Smith, G.A. & Sobel, D. (2010). *Place-and community-based education in schools*. New York, NY : Routledge.

Sobel, D. (2005). *Place-based education: Connecting classroom and communities*. Great Barrington, MA: The Orion Society.

Theobald, P. (2006). A case for inserting community into public school curriculum. *American Journal of Education*, 112, pp. 302-315.

Thongthew, S. (2001). *The development of a local curriculum on young tourist guides for the wood-carving handicraft village of Bann Thawai: A case study at Bann Ton-*

*Kaew school, Hang Dong district, Chiangmai province.* Bangkok: Thailand Research Fund (TRF.). (in Thai).

Thongthew, S. (2002). *Principle and guideline for school-based curriculum development: A case study of science subject in primary education level.* Bangkok: Center for Innovations, Textbooks and Academic Papers, Faculty of Education, Chulalongkorn University. (in Thai).

Thongthew, S. (2011). An alternative conceptualization for curriculum development: The case of educational project for cultural diversity context in the southern border schools of Thailand. *Journal of Education, Naresuan University*, 13(3), 189-196.

Wattanatorn, A. & Thongthew, S. (2007). The development of Bann Thawai's mediated economics curriculum for sustainable wood-carved business. *Journal of Population and Social Studies,* 16(1), 105-116.

**Contact email:** ajarn.hon@gmail.com

# Learning Experiences of Libyan Master's Students at a UK University: Learning as Social Participation in Multicultural Class

Kamila Algwil, University of Huddersfield, UK
Ann Harris, University of Huddersfield, UK

**Abstract**
This paper addresses the learning experiences of Libyan students studying master's courses in different disciplines at a UK University. It uses community of practice theory as a framework to highlight the significance of the knowledge and skills that are developed through social interaction with colleagues and tutors within the master's community. The aim of the research was to explore the nature of the interaction between Libyan students and their international and Libyan colleagues. The study was qualitative and interpretive and employed semi-structured interviews and observations to explore the perceptions of the Libyan student sample. Data analysis was done manually and presented according to apriori and emergent themes. The findings reveal that there is limited engagement between Libyan students themselves owing to tribal loyalties and political divisiveness that relate to the effects of the civil war and ongoing conflict within Libya. However, the findings also indicate that this prompts Libyan students in multicultural classes to create new communities of practice and an interaction and shared activity with international colleagues to acquire aspects of intercultural communicative competence and complementary contribution that nevertheless constitute a positive learning environment.

**Key words**: Libya, international students, intercultural interaction, community of social participation.

iafor

The International Academic Forum

www.iafor.org

**Introduction**

Most of the studies about the experiences of international students have problematized a stereotypical representation of their challenges (Ryan and Viete, 2009). Although some research adopts in-depth qualitative research to investigate international students' learning experiences, it has tended to focus on a deficient model, for example, Chinese students and their cultural learning styles (Doherty and Singh, 2005; Gill, 2007). Little has been documented about what is involved in the process that international students undergo to adapt to a new academic environment, although there has been awareness of the challenges that they face and their need for support (Tran, 2011). Thomas, 2007 (cited in Thomas and Sanderson, 2009, p. 7) highlights the lack of academic evidence in the previous literature about the experiences of postgraduate students, particularly the nature of the interaction amongst students from different cultural backgrounds. Understanding the nature of the interaction between Libyan students and their colleagues and tutors in shared practices and the effect of that on learning is significant in order to have a complete picture of the student experience.

**Literature review**

International students tend to belong to three social networks: 1) they may maintain their cultural behaviour within co-national network; 2) they may have interactions with host people who might facilitate academic success and from whom skills could be learnt, and 3) they may also have friendship with students from other cultures who might offer mutual support and social activities. These are classified as 'mono-cultural', 'bi-cultural' and 'multi-cultural' networks respectively (Ward, Bochner and Furnham, 2001). Each of the three are significant in different ways in assisting international students to overcome challenges and achieve success (Zhou, Jindal-Snape, Topping and Todman, 2008). This study examines the nature of the interaction between Libyan students and their colleagues (other Libyans and international students) and its effects on their learning.

Maundeni (2001) and Fontaine, Gao, and Narui (2010) demonstrate that social support is a powerful coping strategy for international students, owing to the fact that interpersonal communication with family, friends, home students and other international students plays an essential role in reducing stress and facilitating students' adjustment. Maundeni states: "Communication with flatmates and host families facilitated their adjustment as they provided support in the form of information and companionship" (Maundeni, 2001, p.265). However, Mallinckrodt and Leong (1992) have found that when international students are faced with an educational problem, they are likely to seek help from academic staff such as tutors. They further argue that "quality relationships with faculty [...] can provide a strong protective function against the development of depression in international students" (Mallinckrodt and Leong, 1992, p. 76). The interaction between international students and their tutors has the potential to enhance students' understanding of the requirements of their course and to facilitate their adaptation (Tran, 2011). The study considers the nature of the interaction Libyan students have with their tutors and the effects of that interaction on their learning and adaptation to their master's course.

Ward and Rana-Deuba (2000, p. 292) notes that a co-national network (colleagues and friends from the same nationality) assists international students to reduce stress

and enhance psychological adjustment. Social support from students of the same culture can reduce feelings of loneliness and isolation Furnham and Alibhai (1985, cited in Ward and Rana-Deuba, 2000, p. 291). Moreover, Maundeni (2001) and Fontaine, Gao, and Narui (2010) demonstrate that by communicating with their families and friends from their home country, students receive emotional and spiritual support, such as consolation, encouragement and advice. Furthermore, Pitts states:

> Within co-national network, sojourns are able to refine and create new expectations for study abroad through everyday talk. This process reduces expectation gaps enabling sojourners to adjust over time.

(Pitts, 2009, p.450)

It can be inferred that interaction on a regular basis with colleagues from the same nationality provides solidarity and assists students to adjust to their new academic environment. Overseas students, it seems are likely to prefer friends from the same culture (Zhou et al., 2008, p.70). Similarly, Lee (2009) points out that it is common for international students from the same cultural background on the same course to have regular interaction. This is because they are likely to meet outside the classroom in other social interactions. This study suggests; however, this is not the case for Libyan students because the Libyan context with its complexity and tensions adversely affects the relationship between Libyan nationals even outside the country.

Pedersen, Neighbors, Larimer, and Lee (2011) state that when international students adapt to a new socio-cultural context, they may choose either to integrate with the host culture and its people or to separate themselves from them. Those who have difficulty in integration with a host people and their culture tend to experience "differentiation" and own identity as a "foreigner" rather than as "temporary member" of the host country (Pedersen et al., 2011, p.883). Experiences of differentiation from a host culture may lead to a feeling of exclusion, loss of comfort, and identity confusion, whereas identification with the host culture leads to success integration and cultural awareness (Pedersen et al., 2011, p.883). The investigation explores whether Libyan students are able to integrate with their international colleagues within their master's community as temporary members of the academic community and/or how they differentiate themselves. This study also examines the role of the social network in assisting adaptation and adjustment to the new culture of teaching and learning and the sociocultural context. During acculturation, individuals might choose either to "withdraw" from the host country or to "change in an individual" in order to decrease conflict and increase "congruence" between the host environment and an individual (Navara and James, 2002, p.696). Little research has been conducted comparing one group's degree of acculturation to another. It seems reasonable to assume that different groups will perceive a host culture in an alternative ways. Understanding how Libyan students adapt to the academic environment and the socio-cultural context is important for understanding their acculturation.

## Methodology

This research is a qualitative study examining the learning experiences of Libyan students, their perceptions, perspectives, expectations and aspirations in the UK HE system. Case study is defined as "an inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries

between phenomenon and context are not clearly evident" (Yin, 2009, p.18). It can be inferred that the case study aims to describe and explore an event or phenomenon in depth and in its natural context. Stake (1995, p.3) characterised two main types of case study: "intrinsic and instrumental case study". For the purpose of this study, intrinsic case study has been chosen because of the significance of the case. Crowe, Robertson, Huby, Avery, and Sheikh state that "The case is selected because of its uniqueness, which is of genuine interest to the researchers" (Crowe et al. 2011, p.5). This research forms a case study because it focuses on Libyan students. As a case, they represent a group of people seeking higher educational experiences, but coming from a country that has experienced civil war and is experiencing ongoing conflict. Libyan students comprise a case, but within that case, there are narratives and strands that comprise the different disciplines and individual experiences.

The purposive sample was selected according to the following criteria: they are full-time Libyan students, studying master's taught courses in a Yorkshire university (pseudonym) in different disciplines (Education, Humanities, Computing and Engineering, Applied Science, and Business) in order to compare and contrast any differences that might emerge in their perspectives or perceptions. They all obtained Bachelor's degrees from their home country before coming to the UK and this is their first time studying in the west. They also volunteered to participate in the study. However, they are different in terms of age, gender, starting dates of their master's courses and they are from different cities in Libya. Thirty students completed the questionnaire, of these: four males and nine females were interviewed three times and observed in class. The number was reviewed after the first phase of research process in order to ensure there is sufficiency and appropriately rich data.

**Ethical issues**
These students had experienced civil war and came from a country where there is ongoing conflict. The ethical issues permission, informed consent, confidentiality, anonymity and sensitivity were paramount (BERA, 2011).

**Data generation**

**Semi-structured interviews**
There are three types of interviews, they are: "structured, semi-structured and unstructured interviews" (Robson, 2011, p.278). In this study, semi-structured interviews with open-ended questions were the main source of a significant data because Libyan students were interviewed over a period of time: in the first semester, in the middle, and during the dissertation stage in order to monitor change and development during their educational experience. Semi-structured interviews were appropriate for this study because allowed flexibility and responsiveness by which a participant might supply additional information stimulated by the situation and, in doing so, develop her or his thinking. Semi-structured interviews also give an opportunity to follow up the interviewees' answers and to ask for clarification or to probe unexpected responses (Kvale, 2007).

The questions in the first phase focused on initial thoughts and feelings, students' motivation, their attitudes to the UK HE system, expectations, challenges and academic and socio-cultural adjustments. The questions in the second stage of interviews which were conducted during the next semester were intended to evaluate

their course experience; what they had learnt; what is the most academic challenging skill. They considered settling into life at the university, their experience of classroom activities, their perceptions and opinions about their learning experience in the UK, and relationship with their tutors and colleagues. The questions in the third phase of interviewing were more focused on their thoughts and perceptions about going home, what they might feel they could contribute to the new Libya after an overseas experience and how they had developed. Sensitive questions about the civil war and ongoing conflict in Libya were raised at the end after the participants had answered neutral questions, and a rapport and trust had been established through the research process.

Interviews can be face-to-face, one-one interview, group interview, and internet interview (King and Horrocks, 2010, p.28). In the present study, all the interviews were one-to-one and face-to-face because they have the potential to provide an opportunity to listen to the interviewees' voices and to view facial expressions, and physical responses which might be significant (Kvale and Brinkmann, 2009). On each occasion, the interviews lasted approximately one hour and were conducted in a university tutorial room which is quiet and comfortable place that tended to encourage informal interaction.

**Observations**
Some Libyan students in the various and separate master's classes were observed during a number of two hours taught sessions in the first and the second semesters. The observations include: 1) the nature of the interaction between Libyan students and their colleagues (international and Libyan colleagues) and tutors and 2) Libyan students' participation in classroom activities such as discussion and group work. Observation offers an opportunity to gather first-hand classroom data, rather than asking the participants or relying on second-hand data (Robson, 2011). Furthermore, observation can be a supplementary and supportive method to the interview which explores the impact of context (Robson, 2011, p.317). The aims are to develop a relationship with participants and have the possibility of sharing an experience with them to see the impact of the context on them.
There are different roles that researchers adopt in the natural setting: "Complete participant, participant-as-observer, observer-as-a participant, and complete observer" (Robson, 2011, 318). In this study, the complete observer role was implemented.

**Data analysis**
Data analysis was done manually and undertaken through identification of themes and codes, which provided an in-depth understanding of the issues being explored. The data was initially collected in Arabic, and then subsequently translated and transcribed. Thematic analysis and its five steps were followed: 1) familiarisation with data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; and 5) defining and naming themes (Braun and Clark, 2006, p.87).

**Findings and Discussion**

**Developing intercultural communication competence**
The findings suggest that some students such as Nora, Khaled, Sara, Omar, Ghada and Amina felt that being part of multicultural class and having interaction with different nationalities assisted them in developing aspects of intercultural

communication competence (ICC). Nora, for example, explained how her experience in Libya and her experience in the UK were different:

> I studied in Libya with some students from Palestine and Sudan, but I viewed them as second class. My relationship with them was formal; greeting and that is it. In the UK, I met and interacted with Kurdish, Japanese and Chinese students, and this was the first time. This helped me to get rid of negative views towards others. Studying with international students is fantastic. We always interact with each other and exchange ideas and thoughts in groups in the lecture, we respect each other, although we are different in nationality and religion. (Nora, Applied Science, interview 3)

It was clear that in Libya, Nora did not have much opportunity to meet or to interact with many other international students. Libya is underdeveloped country and at a time of civil war, and, ongoing conflict, few international students chose Libya as a destination for study. Although Nora had an opportunity to study with students from neighbouring Arab countries in Libya, her comment reveals prejudice as she stereotyped them and had limited interaction with them. There would have been few opportunities for shared activity since the Libyan education system is teacher-centred. Working with others helps students to accept differences (Thomas and Sanderson, 2009). However, Nora's experience in the UK is different because she was a member of a dynamic multicultural classroom. Her comment reveals mutual engagement between herself and her international colleagues because they interact regularly in shared activity.

According to Wenger (1998), mutual engagement requires regular interaction because members negotiate meaning of their practice on a regular basis. It appears that the mutuality between Nora and her international colleagues assisted Nora to develop respect towards people from other cultures and to acquire two essential components of intercultural communication competence, becoming more open-minded and being empathic towards others. Intercultural interaction affects the relationship within in-groups and out-groups (Yue and Li, 2012). It could be that because she was herself an international student in the UK, she learnt the meaning of being an international student. It appears that she learnt ways of engaging with others and she developed certain expectations about how people treat and work together. Nora's view is consistent with the view of Leki (2001), who pointed out that the collaboration and mutual engagement help to undermine and eradicate stereotypes about other cultures. Intercultural interaction assists the production of new ideas that may be different from the ideas that already present within either one of them (Evanoff, 2006). Lave and Wenger (1991) recognise the impact of learning as social participation in shared practice on one's competence (Fuller et al., 2005, p.66), but they do not elaborate. In the context of this study, Nora developed two aspects of intercultural communication competence (ICC): becoming more open-minded and being empathic towards others.

Nora's situation endorses Williams (2005) who suggested that students who study abroad have enhanced intercultural communication skills (i.e. open-mindedness, empathy) owing to their exposure to different cultures. This change is significant for all international students because the ICC enables individuals to live and work effectively with those from different cultural backgrounds. ICC facilitates

intercultural adaptation because developing an intercultural mind-set extends students' possibilities and their view of the world (Masgoret, 2006). Wenger (1998) has argued that diversity is a matter of homogeneity which makes engagement in practice possible and productive. However, his argument about diversity is that a community of practice includes young and old, conservative and liberal members. They see each other daily; they work together; they talk with each other, they exchange opinion and information together, and they affect each other's understanding. He does not elaborate further to discuss diversity in terms of old-timers and newcomers who come from different cultural backgrounds and the influence of their intercultural interaction on their competence. In the context of this study, the data indicated that Nora developed essential aspects of intercultural communication competence because of her membership in the master's community and mutual engagement with international colleagues. Yet, for the Libyan students in this study the engagement did not seem to extend to people within their own country, which will be explained in relation to the emergent theme 'The Consequences of the Civil War and Ongoing Conflict'.

**Complementary contribution**
The majority of the participants indicated that they learnt through social interaction and participation in shared practice with international students (mid-newcomers) and tutors (dominant old-timers) in a situated context. For example, Laila, who was struggling with the "Designing Websites" module that required specialist knowledge of language programs, reported that working in group with mid-newcomers was significant:

> The international students, with whom I worked, already had expertise, so I learnt a lot from them. Group work is helpful because a student might give an idea that you might not pick up in the lecture and in turn you might have an idea that others do not share. Thus, we complete each other. (Laila, Computing and Engineering, interview 2)

Laila's comment illustrates the advantages of learning as social participation in shared practice with international colleagues within her master's community. Her view confirms that of Lave and Wenger (1991) and Colley, James, Tedder and Dimen (2003) that learning as process of social participation enabling newcomers to learn from more experienced colleagues. Laila emphasised the value of group work activity, which was "complementary contributions" (Wenger, 1998, p.76) because all members within her group complemented each other's competence, and learnt from each other rather than each member trying to know everything by him or herself. This is in line with Wenger (1998, p.152) "our competence gains its value through its very partiality […] It is a certain way of being part of a whole through mutual engagement".

Learning does not only depend on the ability of an individual, but it depends on the abilities of others in a community of practice (Hammersley, 2005, p.6). Arguably, mutual engagement involves both a student's competence and the competence of others in order to contribute to the knowledge of other members within the community. Therefore, even for a group coming, as Libyans do from conflicted background in all its complexity, the fact that Laila could say working with the other students 'we complete each other' was significant. She was

actually talking about international students rather than the whole group, but it was very powerful statement. Lave and Wenger's (1991) ideas of old-timers are not involved and the newcomers are perhaps developing an independent community of practice. She continued:

> We spent most breaks together and involved in discussions. We learn together and we become friends. We visit each other in occasions and we are always in touch. (Laila, Computing and Engineering, interview 2)

Laila perceived informal meetings within the group and interaction on regular basis (i.e. mutual engagement) were part of her learning as well as being sustained and social. Askell-Williams and Lawson (2005) point out classroom activities such as discussion increase students' motivation; however, there is limited evidence in the previous literature so far about communicative practices that assist international students to adjust and adapt to a new academic environment. Lave and Wenger (1991) make clear that learners learn by building social relations with others through their 'co-participation' in shared practices (Fuller, 2007, p.19). For Laila, the attainment of a level of informality helped her to build a relationship with her colleagues. This confirms Wenger's (1998) view that mutual engagement is the basis for building the relationships essential for a community of practice.

When people from different cultural backgrounds negotiate meaning of their practices with each other, mutual engagement can be achieved (Berry, 2005). It was clear that mutual engagement between Laila and her international colleagues was beneficial to learning for all of them as members of the same master's community because the daily routine of interaction with her peers assisted Laila to construct knowledge and to develop relationships. Encouraging students to develop their learning through collaboration and interaction supports their academic success and equips them for lifelong learning (Skalicky and Brown, 2009). This might be because cooperative learning provides a supportive learning environment and scaffolded learning for newcomers and is a developmental process. However, it is noteworthy that Laila did not only learn through social participation and mutual engagement with her international colleagues, she also learnt individually and independently.

## The Consequences of the Civil War and Ongoing Conflict

### Avoidance of Contact and Limited Integration
The majority of Libyan students indicated that the interaction between them and their Libyan colleagues was limited because they were on opposing sides politically and tribally during the civil war. Despite a shared experience of conflict, differences emerged from those who were in opposition. Sara, for example, reported:

> When I interacted with my Libyan colleagues who were anti-Gaddafi, we started fighting. Therefore, I prefer not to speak to them. (Sara, Education, interview 2)

Sara's comment illustrates that she was pro-Gaddafi and, therefore, she isolated herself from those who had different affiliations in order to avoid confrontation. Prior to the conflict, tribal and political differences were not overtly significant,

rather groups of Libyan students tended simply to divide on a gender basis for cultural reasons. Sara appreciated mutual engagement and interaction with home and international colleagues rather than the Libyans within her master's community:

> I prefer to join the international students or British students rather than other Libyans. I don't want problems. I sat with my classmates from Britain, China, Poland, and Spain in the library in the break times. We study together, we always discuss together. (Sara, Education, interview 3)

Nora revealed her own personal tragedy:

> Sadly, the situation that I now saw depressed me; nothing new in Libya. The situation was worse than before. 'How nice to remember that palmy days!' My brother was killed because of the retaliation (cry and silence). (Nora, Education, interview 3)

Nora expressed her sadness and disappointment because despite the conflict and loss, she did not observe any progress since the fall of the old regime. It felt like her brother had died in vain. She even now inclined towards Gaddafi's rule for security and safety reasons. Her comments revealed the extent of loss and trauma in a situation where there is widespread use of weapons. However, even, in the UK, Nora was fearful of her compatriots. Her previous experience had adversely affected her socialisation with Libyan colleagues within the master's community:

> When you told me that you were Libyan, I was fearful of you and you must have been scared of me, weren't you, weren't you? I prefer not to interact with any Libyans. (Nora, Education, interview 3)

Only Omar said that:

> I have two Libyan colleagues and, if I have any inquiry, I ask them. I feel they are able to understand me speaking in Arabic better than others. I never ever ask them about their political affiliation. I do not want to deepen my relationship with them. I do not have confidence in them. (Omar, Computing and Engineering, interview 2)

Omar maintained a relationship with Libyan colleagues to some extent because he was diplomatic and subtle. For him, it was better to seek assistance from Libyans because they had a lot in common, such as the same language, a similar background and a shared education system. However, his comment revealed that his relationship with his Libyan colleagues was very superficial, and it did not reach a level of integration and mutual engagement owing to lack of trust. During the conflict, Libyans were divided by their allegiances, and this created a climate of distrust between individuals. Clearly, this political divisiveness is something that is interesting and significant, though not necessarily unique. Libya as a country is new to political divisiveness and with its tribal loyalties, political ideology contributes to the current volatility of Libyan society. The findings of this study were different from the findings of previous studies about the experiences of international students such as (Lee, 2009; Maundeni, 2001; Fontaine et al., 2010; Pitts, 2009).

**Conclusion**

The presence of Libyan students as a case from civil war and ongoing conflict in multicultural classroom and their social interaction in shared activity with international colleagues is significant in terms of their learning and the acquisition of intercultural communication competence. Furthermore, since there was little integration and mutual engagement between Libyan students and their fellow Libyans owing to the consequences of the civil war and ongoing conflict, this made them seek others with whom to interact.

# References

Berry, J.W. (2005). Acculturation: living successfully in two cultures. *International Journal of Intercultural Relations*, *29* (2005), 697-712.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.
Colley, H., James, D., Tedder, M., & Diment, K. (2003). Learning as becoming in vocational education and training: class, gender and the role of vocational habitus. *Journal of Vocational Education and Training*. *55*(4), 471-498.

Crowe, S., Creswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, S. (2011). The case study approach. *Journal of Medical Research Methodology, 11*(100), 1-9.
Doherty, C. & Singh, P. (2005). International student subjectivities: Biographical investments for liquid times. In *paper presented at the AARE Education Research Conference, University of Western Sydney, Australia*. Retrieved from http://www. eprints.qut.edu.au/2868/1/2868.pdf [accessed 24April 2014].

Evanoff, R. (2006). Integration in Intercultural Ethics. *International Journal of Intercultural Relations*, *30*(2006), 421-437.

Fontaine, **G.,** Gao, F., & Narui, R. (2010). *International students' choices for support groups and communication media*. Retrieved from http://dus.psu.edu/mentor/old/articles/100108gf.htm

Fuller, A., Hodkinson, H., Hodkinson, P., & Unwin, L. (2005). Learning as peripheral participation in communities of practice: a reassessment of key concepts in workplace learning. *The British Educational Research Journal*, *31*(1), 49-68.

Fuller, A. (2007). Critiquing of learning and communities of practice. In J., Hughes, N., Jewson, & L. Unwin (Eds.), *Communities of practice: critical perspectives* (pp.17-28). London: Routledge.

Gill, S. (2007). Overseas students' intercultural adaptation as intercultural learning: a transformative framework. *Journal for International and Comparative Education*, *37*(2), 167-183.

Hammersley, M., & Atkinson, P. (2007). *Ethnography: principles in practice* (3[th]ed.). London: Routledge.

Hammersley, M. (2005). What can the literature on communities of practice tell us about educational research? Reflections on some recent proposals. *International Journal of Research and Method in Education*, *28*(1), 5-21.

King, N., & Horrocks, C. (2010). *Interviews in qualitative research*. London: Sage.

Kvale, S. (2007). *Doing interviews*. London: Sage.

Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation.* Cambridge: Cambridge University Press.

Lee, J. (2009). Culture and co-experience: Cultural variation of user experience in social interaction and its implications for interaction design. In Proceedings of HCII'09, Springers.

Leki, I. (2001). A narrow thinking system: non-native-English-speaking students in group projects across the curriculum. *TESOL Quarterly, 35*(1), 39-67.

Mallinckrodt, B., & Leong, F. (1992). International graduate students, stress, and social support. *Journal of College Students Development*, *33*(1), 71-78.

Marshall, C., & Rossman, G.B. (1999). *Designing qualitative research* (3rd ed.). Newbury Park: Sage.

Maundeni, T. (2001). The role of social networks in the adjustment of African students to British society: students' perceptions. *Journal of Race, Ethnicity and Education, 4*(3), 253-276.

Navara, G., & James, S. (2002). Sojourner adjustment: does missionary status affect acculturation? *International Journal of Intercultural Relations, 26*(6), 694-708.

Pedersen, E.R., Neighbors, C., Larimer, M.E., & Lee, C.M. (2011). Measuring sojourner adjustment among American students studying abroad. *International Journal of Intercultural Relations, 35*(6), 881-889.

Pitts, M.J. (2009). Identity and role of expectations, stress, and talk in short-term student sojourner adjustment: an application of the integrative theory of communication and cross cultural adaptation. *International Journal of Intercultural Relations*, *33*(6), 450-462.

Robson, C. (2011). *Real world research* (3th ed.). UK: TJ International.

Ryan, J., & Viete, R. (2009). Respectful interactions: learning with international students in English-speaking academy. *Journal of Teaching in Higher Education*, *14*(3), 303-314.

Stake, R. (1995). *The art of case study research*. London: Sage.

Skalicky, J., & Brown, N. (2009). Peer learning framework: a community of practice model. In *Centre for the Advancement of Learning and Teaching, University of Tasmania.* Retrieved from http://www.utas.edu.au/__data/assets/pdf_file/0017/334106/Peer-Learning-Framework_UTAS.pdf

The British Educational Research Association (Bera) (2011). *Ethical Guidelines for Educational Research*. London: NMC.

Thomas, P., & Sanderson, P. (2009). *The Oldham and Rochdale youth identity project final report: the issue of identity, segregation and cohesion in young people's lives*. Huddersfield: University of Huddersfield.

Tran, L.T. (2011). Committed, face-value, hybrid or mutual adaptation? The experiences of international students in Australian higher education. *Journal of Educational Review, 63(1), 79-94.*

Ward, C., & Rana-Deuba, A. (1999). Acculturation and adaption revisited. *Journal of Cross-Cultural Psychology*, *30*(4), 422-442.

Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock. East Sussex*, UK: Routledge.

Wenger, E. (1998). *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.

Williams, T. (2005). Exploring the impact of study abroad on students' intercultural communication skills: adaptability and sensitivity. *Journal of Studies in International Education*, *9*(4), 356-371.

Yin, R.K. (2009). *Case study research: design and methods*. 4th ed. London: Sage.

Yue, Y., & Le, Q. (2012). From cultural Shock to ABC Framework: development of intercultural contact theory. *International Journal of Innovative Interdisciplinary Research*, issue 2, ISSN 1839-9053, 133-142.

Zhou, Y., Jindal-Snape, D., Topping, K. & Todman, J. (2008). Theoretical models of culture shock and adaptation in international students' higher education. *Studies in Higher Education*, *33*(1), 63-75.

**Contact email:**
u0873409@hud.co.uk
Kamila_15w@yhoo.co.uk
a.harris@hud.co.uk

# Psychological Empowerment of Students Using Cross-Pollination Class Projects

Daniel R. Coleman, Schreiner University, USA
Charles Salter, Schreiner University, USA

**Abstract**
Over the course of the past two semesters, experiential cross-pollination projects were incorporated into the classroom in a small (1100 students) private university's Marketing Education program as a means of empowering the learner to develop cross-functional skills. This report highlights the second cycle of cross-pollination projects (Fall 2014), which involved traditional discipline-related classes [Marketing and Advertising]. In this cross-pollination project, seven teams from a Principles of Marketing Class developed and administered an on-campus survey of the Freshmen Class regarding attitudes toward their recent college selection process. Upon completion of the survey, the Marketing Teams compiled the collected data and provided a final summative Marketing Research Report to four teams from the Advertising class. Using the Marketing Research Report, the Advertising Teams developed and formally presented four unique Advertising Campaigns designed to increase the University's appeal to the 2015 class of graduating seniors, to a panel of university administrators. Completing the cross –pollination process, prior to presenting to the administrative panel, the Advertising Class presented their respective plans to the Marketing Class for critique and evaluation.
While the results are of a qualitatively anecdotal nature, this study intuitively concluded that the self-efficacy associated with student psychological empowerment is beneficial to student learning. Further the cross-pollination class approach engaged student team skills and developed communication competencies needed in the contemporary job market.

Keywords: Student Empowerment, Classroom Learning Strategies, Marketing Education

iafor

The International Academic Forum
www.iafor.org

## Introduction

Delivering graduates with "soft skills" who are comfortable working on cross-functional teams and capable delivering a final product appears to be a worthy goal of higher education if the needs of contemporary business are to be met (Wiseman, 2013)(Johnson, 2011). Conger and Kanungo (1988) suggested that empowerment is an intrinsically valued concept, which enables workers to finding meaning in their work. Thomas and Velthouse (1990) further stated that the individual's intrinsic value associated with psychological empowerment consists of the following four scholarly accepted dimensions: meaning, competence, self-determination and impact. Meaning refers to an individual's perception of the goals, objectives, and values of the work based on the individual's own value systems. Competence or self-efficacy refers to one's perception of his or her ability to complete the work. An individual's ability to control their work is considered Self-Determination and Impact refers to the extent to which an individual can affect the results of an organization's or groups work, all of which have intrinsic value and are satisfying to the constituent.

Intuitively, one would suggest that self-efficacy through psychological empowerment of students through this form of cross pollination experiential learning can only have positive benefice to the student and the system overall. Therefore, the general notion of preparing university marketing students with applicable skills to meet the demands of the marketplace seems ubiquitous in today's tight labor market, and what better way to prepare students to the rigors of the business world than placing them in experiential psychological empowerment scenarios based on their ultimate success through learning processes. Developing a classroom learning environment, which is both useful in developing these adaptive and collaborative skills as well as being pragmatic, would seem to be an ongoing challenge of college educators (White, 2013). Prior to the Spring semester of 2014, the notion was considered that a variation in the traditional team concept in the form of cross-pollination (cross-class) experiential learning might empower students to contribute to the learning process. While an inter-class cooperative project may have been tried before, the literature seems to yet be proffered. This particular project (Fall 2014) is the second such effort in which our Principles of Marketing class and Advertising class have been partnered on a single endeavor.

## Project Development:

In an attempt to replicate the business environment which requires creativity, cooperation, time management, and accountability, the following cross-pollination class project was developed. With an end game of developing an Advertising Campaign which would attract graduating Texas high school seniors in the class of 2015 to our university, the first stage of the project was for the Principles of Marketing (POM) class (28 students) to develop a survey which would give insight into the college decision making process. For the purposes of this project, it was quickly determined that the most accessible and logical source of information would be in fact our own freshman class. Upon the suggestion of a POM student, it was decided that the school's required freshman inter-disciplinary classes (IDST 1301) was the best viable method of administering the survey to the majority of freshman on campus. The POM class formed teams (7) which developed questions that were included in the survey. The contributions of the various teams were formed (by the

instructor) into a single page survey which could be administered within the target time of fifteen minutes. Survey in hand, the POM teams were assigned one of 17 classes to contact, schedule and administer the survey. Two weeks later, all but three surveys had been returned and the POM teams sorted and compiled the data. Each team assimilated a portion of the survey and produced a summative of the results. These summative results were combined (by the instructor) into a final Marketing Research Report which was delivered to the anxiously waiting Advertising Class (AD) of 14 students.

Following an in-depth analysis as a class, the AD teams (4) began the process of developing ideas through several idea-storming and sound-boarding sessions (with the instructor). The formative AD team discussions were conducted in isolation as the final product was to be original and unique. After three weeks of preparation, the final AD campaigns were presented to (and evaluated by) an Administrative Panel (which included the Provost, VP of Marketing, VP of Student Enrollment, Dean of Professional Studies and the Assistant Vice President of Student Enrollment). As a rehearsal for the final presentation, each Ad team was required to present their plan to the POM class which had provided the original data. As part of their grade, the POM class was required to evaluate each of the Ad Campaigns. The following comments are provided as supporting evidence of the effectiveness of this Cross-Pollination project.

**Supporting Evidence of Teaching Effectiveness**

**Student Remarks Regarding Cross-Pollination Projects:**

**Marketing Students:**

Cody S. - "The marketing research was very fun to deal with in how we got to survey freshman on why they came to Schreiner in order to [provide a] platform for Advertising."

Lauren P. -"My experiences with the Marketing Research Project were very interesting because being a graphic design major I had never done something like that. …,"

Tawny P. - "I feel the marketing research project was quite demanding for the short amount of time we had to put it together."

Marshall M - "The marketing research project differed in comparison to my other projects in the sense that it directly applied to what I was learning in each class period. I could see the strategies and terms that we are being told to develop in the research that I was doing…You also could not wait till the last minute to do these projects, they took time and preparation and true research to understand the concepts. I liked them because they were things that I might actually use in my adult life. Some class projects and research papers seem not as important to me because I do not see myself applying them to what I am going to do, but these projects allowed me to explore areas I was uneducated in and have a better sense and understanding of how they work."

Hannah M. - "…. I thought it was a little more fun than the other LBD [Learning by Doing Projects] projects because we got to be creative with the questions instead of just researching something and talking about it. As opposed to other classes, I liked it because it was different and it is something that we got to see the results of. I feel that many projects that we are required to do in school do not serve any purpose other than to teach us something (which I know is valuable), but I liked that this project allowed us to see actual results of the work that we put in."

Kathryn K. -"I really enjoyed doing the marketing research products, it provided me with an idea of to expect in my upcoming classes and also in my major. Gathering information, finding out what the freshmen thought, and how to give a formal presentation these are all things that I definitely appreciated while taking this class. Each project served as a learning tool for me in on how to become more successful in major. And what's expected from me in class and in a possible career."

Bradley H. -"The marketing research project was the first and only project that I have done here at Schreiner that has the potential to actually effect the university as whole. I find it quite interesting that just helping develop a questionnaire and disbursing the surveys could have a dramatic impact on Schreiner's future admissions. I think this project was much more hands-on than the other LBD projects we did primarily because we actually did something that someone would do in an everyday business environment."

Sofia G. -"When my team chose to come up with questions for the freshman survey, we took into consideration about what we thought as freshman, and what other recent freshman thought. After we came up with the questions we submitted them. When the survey was created we had to go to freshman IDST classes in order to collect the information needed for the results of the survey. This was a very big product because it used so many people to conduct the survey, and to take the survey. This differs from other classes because typically in my past research projects the information is right in front of you, but for this project I had to go out and find it."

Ian B. –"The marketing research project was interesting as it used actual stats to find information and be used for real world purposes. The project using actual data for a(n) easily seen objective was good as it allows the lesson to be seen in a real-world perspective. This creates more interest in the project as the aims and results are tangible. Most projects I have done were hypothetical scenarios that are removed from the student's day to day life. …, this was also different as we got to see what the data was used for. Most times when I have given data for projects the data goes away and I never hear of it again. Seeing the data being used gave it a weight I have not seen in other projects. The project was a good way to see how marketing influences thoughts in the world, how it is done, and how all these independent ideas are put together to create a plan.

**Advertising Students:**

Brian A. –"The advertising plan and campaign we had to create this semester was probably one of the most challenging projects I have done since beginning college, but it was also the most fun and rewarding. One of the challenges that we faced as a team was deciding how to best translate the results of the survey conducted by the marketing class into a viable, and realistic advertising campaign that we felt could really work if it was implemented. Another challenge was deciding on a unique theme and slogan for our campaign that reflected some of the best aspects of Schreiner University without sounding cheap or contrived. Our team met several times outside of class and communicated via email and text on a daily basis with new ideas and improvements for our campaign. To prepare for our formal presentation in the marketing class we created a PowerPoint of our presentation and rehearsed in the library the night before. After our first run-through we fixed some of the problems we found and smoothed out our transitions and met one more time the morning of our presentation. All in all this was the best group I have worked with since coming to Schreiner University and I think we all thrived on the competitive aspect of the assignment. It felt like an example of what might be expected of us when we actually get jobs in our field so I enjoyed the opportunity to explore my more creative side as well as improve my presentation skills.

Laurel B. –"My experience during this process was honestly a challenging one like most projects in your class. You want us to think and gain experience which is something that was definitely done. We gathered the survey that the marketing department (class) created for us and summarized that information to fit what our twist on Schreiner would be. We then furthered our research and went to Harper High School in Harper, Texas. We asked a senior class if they had thought about college and of course all of them had but when it came to if the students had thought of Schreiner only 1 student raised his hand because it was close to home. The others students didn't want to come to Schreiner for that reason, it was too close for comfort. We created a Prezi presentation and created a very watered down theme and a very unprofessional promotional video to send to H.S. counselors. With the practice round we found out how much improvement we needed to cover and improve on our video and theme. We then regrouped and improved on our presentation and fixed our video so it was more professional looking. Because I experienced two similar projects with a practice and a final round I was more comfortable going into the presentation but with any presentation still nervous. Over all I think this was a good project so we could get a rough kind of feel for how an adverting company campaign would work.

Christopher B. –"Challenges: The most challenging of this project was just being able to get everyone on the same schedule and making sure that everyone was communicating. Moreover, working within a group that was focused on other projects other than the advertising project. Other challenges working with the grouped was just trying to get everyone to be business professional with this project, such as dressing out for the presentation. Available time: The time that was given was adequate. However because it was the end of the year it made it harder with all the other projects and issues going on."

Melanie D. - "When my group first started to develop our advertising campaign, we evaluated what the marketing surveys said about the current freshmen. Our goal was to build an advertising campaign that will expand the enrollment at Schreiner University. We aimed most of our advertising campaign towards the San Antonio area, hill country, because more than half of the freshmen were from those areas. Are main goals were to expand on Schreiner's academic excellence, create SU brand awareness, while expanding enrollment at the same time. We can up with three concepts such as high school night, an Instagram scholarship, and football games. All these ideas are cheap, easy, and can reach a big audience in a short amount of time. My group didn't have many challenges, because we all bring different ideas to the table. During the process of creating our campaign, we had to brainstorm several times, which was the creative and fun part of this project. The practice presentation was very successful for my group. It gave us the option to see what we needed to change for our formal presentation, as well as what we were doing well. Overall, our formal presentation went well. We presented our ideas very professionally and confident. Our judges ended up rating our campaign the best out of everyone else. I'm really happy that I was assigned this project, because it made me realize that I might want to be in the advertising world."

Cole F. -"…the formal presentation was not as bad as I had expected and although we did change the video and fix the target audience. I don't feel we had a stronger enough plan, like how are we going to get more high school seniors to enroll, then what can we use or do to entice them as well. It was a good group, and the presentations went over well, just didn't perform like we could have. I thought it was a good idea to keep other groups in the dark or not know what our goal was and how we presented to the 4-5 members who are not students. It showed how once can improve on the original goal and continue brainstorming to achieve the specific goal. Laurel, Ashley, and I were able to get the plan together and work together with little to no conflicts."

Tim F. -"The Adverting Plan that we worked on for Schreiner University previously had many challenges and a lot of processes that we had to work and figure out. The challenges were actually the plan that we made itself and having to figure out ways to out beat our competition to have a better plan than them and finding a way that would advertise Schreiner University out to people in the best way possible. The available time that we had was more than enough to develop our plan. When we gave our formal presentation to the marketing class, we were a little shaky and did not perform our best presentation. After doing so we got the necessary tips to do better next time and then when we had to present in front of higher officials for Schreiner University in the main conference room in the Library I was excited because of where we were presenting. It felt a lot more professional and like I was actually in a real life job setting presenting in front of my boss or different executives. We improved substantially in our final presentation where we looked at all the Schreiner University Officials, didn't turn our back once, explained our adverting plan better, and slowed down our speech and learned that if you just take the extra time to sit down, work out all the kinks, and

really pay attention to the work that you are doing and the work that we have to present then we can finally come together to make something extremely creative and worth everyone's time."

Katherine H. -"I was very proud of my group's performance overall. I felt that the available time given for the project was sufficient because my group was very dedicated to our ideas and the project campaign itself, so we got a start on it as early as possible. I felt that we were able to tie our project into all the correct advertising themes such as promotion, publicity, brand awareness, and sales incentives. We did face challenges during the process such as time for a successful number of group meetings (considering it was due around the same time other final projects were due), but it worked out in the end. Our practice presentation went smoothly, but we were short on time and didn't get to touch on everything as fully as we had hoped or answer any questions from the class. It was also too close to the actual presentation date, so we didn't get the greatest amount of feedback from the marketing class, but were told that it was positive so continued on with no severe changes. The venue of the formal presentation was a great change because it made us feel professional, and we had wonderful high-tech technology at our fingertips. We were able to access all aspects of the smart board technology and I felt it really added to the overall effect. I feel my group did great in our presentation and we displayed this because of the practice we put in. I really appreciated my group's efforts and have never had a group before care as much as I do myself. We were given some feedback on our campaign slogan R15Eabove, in which we should have clarified whether this was planned to be a one year campaign or not, but they really seemed to enjoy our high school night for the Hill Country and that made us proud. This was my favorite project of the year because it really gave us free reign to be creative and feel important. It was like a real-life situation in which we could be professional adults in an advertising agency of our liking and that made it fun."

Ibhar H. -"The developed advertising plan for this class was quite challenging. It was a major project that required a lot of time and commitment. However, during the same period of time I had to work on big projects for entrepreneurship and internship class. The first stage of development was interpreting the data given by the marketing class. It seemed difficult to put together all the relevant information provided. After this point, my team and I decided to base the campaign on a current one that Schreiner has already. The goal was to improve the current one by adding a few more things. The time to work on the project was fairly good. It was plenty to work on, however due to the projects due in other classes it seemed difficult to manage everything at once. The practice presentation was very helpful because it helped us realize that we needed to take a different direction with our campaign. We started from scratch and after consulting with Dr. Coleman we came out with "just a hop, skip, and jump". This seemed like a catchy phrase that could be used to add different ideas at the end of it. BY doing this, we were representing a major factor that attracts students to Schreiner (distance/location), but at the same time we were adding more ideas to the campaign such as sports, friendly campus, small classes, etc. The formal presentation was very well planned in my opinion. …Some of the improvements I would recommend will be more

direction on what was expected from the advertising plan. The requirements that we needed to have, and not putting so much importance on how the class evaluates because it can be biased sometimes. Making it a little bit fairer. I learned a lot of about the process and development of an advertising campaign and it will benefit in my future career."

Steven H. -"Challenges- The main challenges we faced when coming up with our campaign was narrowing it down to one single campaign. We had many good ideas when we presented to the marketing class but we were scattered all over the place. The time given was sufficient but having this project right after our entrepreneurship project was tough. The entrepreneurship project took a lot of our energy and focus away from this project and I feel we did not perform our best because of it. I like the practice presentation the marketing class and it help a lot with narrowing down our final project. I also like it because you get to present in front of people that you don't know. Having the marketing team come and watch the advertising class present was a great idea. From the notes that I received we gave them several ideas that they were interested in implementing. The formal presentation was very professional and presenting it in the Scarle Philips room [Formal Board Room] made it that much better. I believe that people that attended were very pleased and it will definitely help bring them back for future classes."

Landry N. -"When facing down this project, it seemed that the main challenge was time management. I'm not sure what the business majors had to face down, but it seemed that for me as a Communications major I had everything due on the same date. So on top of this project being due, I had 3 others due around the same time for my Communication classes alone. …, I will say that if we were to improve anything, I would say that we need to improve how we presented our presentation (my dress code, and my partners' method of speech delivery) and we also should have been more clear about what we wanted to give the target audience and what we wanted our plan to be about; I think one of our main problems is that we decided what our slogan was, but we all had different interpretations of what the message of our slogan was, and that was evident in what we were presenting.  If I am to be honest, I thought that our Advertising Plan and Presentation overall was a disaster. The only positive that I can come up with is that our plan to hit up the smaller schools and communities, put something in the target audience's hands, and to target Houston and Austin was a good plan. Unfortunately, we couldn't put a face or identity to the plan."

Luis S. -"It was a little time consuming but that's just because a couple days before our entire group had a major project as well in another class and had to put both projects in our time. Other than that I think it went smoothly with our group … developed [a program] that was called hop, skip and jump. In the practice presentation we didn't do terrible, we had many great ideas but we were not executing them correctly which what lead us to re due our ad campaign to hop, skip, and jump. Our formal presentation went great. I really believed that the judges had great things to say even though your idea wasn't the best. Our grouped improved greatly from the practice to the formal presentation in the practice like I said before we could not execute on one idea

which lead us to confusion to many people. In the formal we executed the hop, skip, and jump and the judges and also Dr. Coleman were pleased on our ideas and how we presented them. The positives of this project that we actually presented to the ad committee here at Schreiner they were open to many ideas and we also got a taste like what we will be expect in a job we might have later."

Ashley W. - "For this project the challenges where simple compared to other projects I have worked on. My group was really good about coming up with ideas for the problem and finding cool and unique ways to go about answering the questions that were presented in this project. The only real challenge we faced during this was sometimes people had to leave our meetings early and sometimes a person forgot to show up/show up late due to the fact that they had forgot but overall the challenges faced where no problem for my group. For available time, my group was very on top of finding a good time for everyone to meet during the week and on the weekends. The practice presentation and the formal presentation were also very easy with this group. We all knew what we were supposed to talk about and what slides we had to cover so presenting to the Marketing class helped because we than took from that what needed to be fixed for the formal presentation which wasn't all that much. The venue for the formal presentation was, in my opinion, very different and creative. While most formal presentations for a class would have been in front of your peers in the class, this formal presentation was in front of important people at the school, who could then use our ideas."

## Panel Member's Comments

"Very well thought out – w/ different geographic. Your tag line is better than our current ad agency. Good presentation style - professional."
"Love the Tag Line - needed to explain why it might work. Nice Spanish additions. "Hop Skip and Jump - novel concepts."
"Nice Presentation Skills! Why focus on communities where we already recruit from?"
"Slogan Tied to year requires change."
"Excellent Presentation, excellent research. High School Night at Basketball game - great idea! Fear the Neer! Rise above Yes! "
"Well organized love the stats! Love the concepts. Well Done."
"What did the survey say? Would have liked to hear from all the members at the beginning. Pay attention to body language and apprehensiveness. My Computer will not play a CD."
"Good slogan."
"Great idea. Needed additional research. Ambassadors goes to each school- love the idea. Brand Ambassador- Very Creative."
"Liked the Brand Ambassadors idea in the schools. Not so sure about the CD. Printed plan needs to be more professional."

## Conclusions, Limitations and Final Thoughts

From previous experiences of conducting cross-pollination projects (in the Spring semester of 2014) which involved external clients, the lesson learned that planning

and timing is critical was quite helpful. Team projects are generally unpopular with the students and require a tremendous amount of coaxing and encouragement (Kinser, 2007). The problem of loafers and skaters (low participation) was curbed by 360 degree team evaluations, as well as the audience evaluations [calculated into the final grade] and stern looks from the professor, but did not keep several teams from straddling deadlines and preparing last minute work. Similar to the previous cross-pollination project, the proper allowance of in-class time became increasingly apparent as students struggled to complete work within timelines established and communicate with each other (this improvement from the first go-around was mentioned in the student's comments). Class schedules, as well as general time constraints created several issues with the cooperating teams' ability to communicate or be present during the formal presentations. Notably, there was one student who breached the prerequisite requirement and ended up collecting data and participating in the Ad Plan, but this was the lone exception, and while caused the student much angst, did not bother me near as much as it did the first time it happened in the Spring semester.

As would normally be expected, some of the groups delivered more than my expectations – choosing to interpretively assess what was needed, while others simply settled on the more obvious. The risk of inviting in Administrators into a class project was not lost on me, however, this cross-pollination project was personally quite rewarding as the Administrative Panel provided a final piece of affirmation with their comments, adulation and suggestions for expansion and continuation. In addition, the project also seemed to help establish a tangential relationship between upper level students of the AD class and the sophomores of the POM class, as well as inaugurate some sort of expectation of junior-senior level classes to come for the underclassmen. Interpretively, the students were challenged by the project with some saying it was the most significant project they were assigned thus far in their college career. On this you will have to take my word as only a few alluded to this in their comments. Perhaps they were just angling for a higher grade.

While the results are of a qualitatively anecdotal nature, this study intuitively concluded that the self-efficacy associated with student psychological empowerment is beneficial to student learning. Further the cross-pollination class approach engaged student team skills and developed communication competencies needed in the contemporary job market.

**References**

Conger, J. & Kanungo, R. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*. Vol. 13, No.3 pp 471-482.

Johnson, L. (2011, December 5). Employers say college students lack job skills. Retrieved from http://chronicle.com/article/Employers-Say-College/130013/
Kinser, A. S. (2007). Using Contracts to Determine Individual Grades in Team Projects. Decision Sciences Journal of Innovative Education, 5(1), 207-221. doi:10.1111/j.1540-4609.2007.00137.x
Sigler, T. & Pearson, C. (2000). Creating and empowering culture: examining the relationship between organizational culture and perceptions of empowerment. *Journal of Quality Management* Vol. 5, pp. 27–52.

Thomas, K.W., & Velthouse, B.A. (1990, October). Cognitive elements of empowerment: An 'interpretative' model of intrinsic task motivation. *Academy of Management Review* Vol. 15 pp.666-681.

White, M. (2013, Nov 10). The real reason new college grads can't get hired. Retrieved from http://business.time.com/2013/11/10/the-real-reason-new-college-grads-cant-get-hired/

Wiseman, P. (2013, Jun 24). Firms seek grads who can think fast work in teams. Retrieved from http://bigstory.ap.org/article/firms-seek-grads-who-can-think-fast-work-teams

**Contact email:** drcoleman@schreiner.edu

## Exploring the Concepts of Traditional Inuit Leadership and Effective School Leadership in Nunavut (Canada)

Jane P. Preston, University of Prince Edward Island, Canada
Tim R. Claypool, University of Saskatchewan, Canada
William Rowluck, University of Saskatchewan, Canada
Brenda Green, Saskatoon Public School Division, Canada

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

The purpose of this paper is to document how a group of educators living in Inuit communities across Nunavut (Canada) describes both traditional Inuit leadership and effective school leadership. The data for this qualitative study were 24 semi-structured interviews, involving 14 teachers, vice-principals, and principals from Nunavut. Findings revealed that traditional Inuit leadership was about promoting the personal leadership skills, interests, and/or abilities of each community member, and it often involved Elders who fostered the linguistic, social, cultural, and spiritual wellness of students and school staff. Participants depicted the effective school leader as someone who promotes teamwork. Effective school leadership was community- and people-focused. The findings of this study align with an Inuit worldview that places great value on relationships and the concept of holism.
*Keywords*: Inuit tradition, Inuit leadership, school leadership

iafor

The International Academic Forum
www.iafor.org

**Introduction**

During the past half century, the traits associated with being an effective school leader have changed. For example, during the 1960s, the school principal often embodied authoritarian traits, emphasizing *his* power in making decisions and determining school goals (Northouse, 2012). Adaptations to this style of leadership emerged in the 1970s and early 1980s, when principals began to personify situational leadership—they needed to adapt their action based on the context at hand (Blanchard, Zigarmi, & Zigarmi, 1985). During the mid-1980s to 1990s, educational laws in North America and Europe emphasized the delivery of a quality public education for all students regardless of race, gender, or economic situation (Conger, 2010). In turn, effective leaders became transformational leaders, fostering strong relationships with and among staff. By the turn of the 21st century, accountability, technology, and data-driven decision-making influenced the culture of schools (Hargreaves & Fink, 2006). Accordingly, effective leadership was about dealing with change on a restricted budget with limited resources. When reviewing current literature on effective school leadership, countless more concepts emerge. For example, a successful school principal is an instructional leader (Fullan, 2014; Robinson, 2011), uses participatory decision-making (Kaner, 2014), and promotes the concept of leadership as a living system (Mitchell & Sackney, 2013).

The above overview represents a chronological display of popular concepts associated with effective school leadership. When reviewing this information and other published literature, one aspect given limited attention is a description of effective leadership via an Aboriginal perspective. Herein, we stipulate the term *Aboriginal* refers to the First Nations, Metis, and Inuit peoples in Canada. The Canadian *Constitution Act, 1982* recognizes these three groups as the First Peoples of Canada who, for millennia, inhabited geographical regions across the nation.[1] To help address the scholarly void pertaining to the lack of research about Aboriginal leadership, the purpose of this paper is to document how a group of educators living in Inuit communities across Nunavut (Canada) describes traditional Inuit leadership and effective school leadership.

Before articulating details of the study, it is helpful to provide information pertaining to Nunavut's history, its Inuit population, and its geographical location. Archeologists believe that about 10,000 years ago, bands of Siberian nomadic hunters crossed the Bering Strait (Indian and Northern Affairs Canada [INAC], 2005). Then about 4,000 years ago, these hunters traveled to what is now Northern Canada, and they became the first Inuit people of Canada (INAC, 2005). Fast-forwarding thousands of years, the most recent Canadian Census documented that 59,445 people in Canada self-identify as Inuit (Statistics Canada, 2013). This amount represents 0.2% of Canada's overall population (Statistics Canada, 2013). About half of total

---

[1] A term often associated with Aboriginal is Indigenous. Indigenous is a phrase commonly found within international discourse, discussions, and protocol agreements (McMillan & Yellowhorn, 2004).

Inuit populace of Canada (i.e., 27,070 people) lives in Nunavut (Statistics Canada, 2013), which, in 1999, became Canada's third territory. Nunavut is located in the Eastern Canadian Arctic, and it represents almost one-fifth of Canada's entire land mass (INAC, 2005). This large territory is divided into three regions: Qikiqtaalik (aka, Baffin Island), Kivalliq (aka, Keewatin District), and Kitikmeot (aka, Central Arctic). In Inuktitut (the Inuit language), the word *Inuit* means "the people."

## Literature Review: Inuit Culture and Leadership

The Inuit culture is reliant upon the ever-giving bounty of the land. To Inuit, the land infers all of nature—the earth, water, ice, wind, sky, plants, and animals (Nunavut Department of Education, 2007). Kuniliusie (2015) stated that the Inuit respect for the land is "immeasurable" (p. 58). Pirjuaq (as cited by Putulik, 2015) explained that the traditional Inuit lifestyle were reflective of the four seasons. For example, in the winter, the Inuit traveled by dog teams and tradition boats (*umiaq*); in the summer, the kayak (*qajaq*) was used (Kuniliusie, 2015; Ittusardjuat, 2015). In the fall, caribou offered food, clothing, and tools, and seals provided oil (i.e., rendered seal fat) to cook food and heat the living space (Ittusardjuat, 2015). Gender roles or "gender balance" (Kuniliuse, 2015, p. 59) were stark, important features of the Inuit way of life. The men hunted caribou, seal, migratory birds, and other regional animals; the women cooked, sewed, and cared for the children (Ittusardjuat, 2015; Pitsiulak, 2015). In general, Inuit values involved sharing food, sharing possessions, caring for family, and cooperating with each other (Ittusardjuat, 2015; Kuniliusie, 2015). Owlijoot (2008) indicated that, form the most part, the Inuit continue to live according to traditional values. They cherish the time spent on the land, enjoy eating country foods, and appreciate time spent with family, friends, and relatives.

With regard to Inuit culture, Elders played and continue to play an important role. Arnaquq (2015) stated that traditional Inuit camp leaders were reliable, hospitable, and fair in their daily dealings and treatment of other people. Kuniluisie (2015) explained that these decision-makers commonly represented males, who demonstrated leadership via their wisdom and knowledge. Because many people within the camp lived in such an honorable fashion, there was more than just one leader or Elder in the camp. Leon (2012) described Elders as leaders, consultants, and teachers. They are historians, philosophers, professors, and knowledge keepers of tradition and heritage (Owlijoot, 2008), traits which align with many of the features of effective Aboriginal leadership.

Although each Aboriginal group in Canada (e.g., First Nations, Metis, and Inuit) expresses its culture in unique ways, simultaneously, Aboriginal peoples throughout Canada and North America hold a similar worldview. A worldview is lens or filter through which one perceives and interprets the world (Preston & Green, in press). In two simple words, the Aboriginal worldview is one of *interconnected wholeness,* or, as succinctly stated by Atleo (2004), "Everything is one" (p. xi). Relationships,

spirituality, and the expression of traditional values are at the heart of an Aboriginal worldview.

Many authors reveal that there are also fundamental features imbued within an Aboriginal style of leadership. For example, Deloria (1994) indicated that, among American Indian[2] tribes, leadership was based on relationships and kinship responsibilities; leaders were chosen via their service to the community. Leon (2012) believed that strong Aboriginal leadership is dependent on four key points— interaction with the land, promotion of language and culture, promotion of family, and community service. Other authors describe how Aboriginal leadership is akin to transformative leadership, which is rooted in collective values and co-determined outcomes aimed at social equality and change, when needed (Benham & Murakami, 2013; Leon, 2012). Aboriginal leadership is about attending to the community's needs, above individual needs (Julien, Wright, & Zinni, 2010). Other authors expound that solid Aboriginal leadership tactics is about using consensus as a form of decision-making (Bennett & Rowley, 2004), promoting harmonious relationships (King, 2008), and incorporating spirituality into one's beliefs and actions (Felicity, 1999). Gardner (2012) and Pidgeon (2012) epitomized Aboriginal leadership through four words: relevance, responsibility, respect, and reciprocity. An overarching feature of Aboriginal leadership is that it is related to the concept of holism—the belief that all things are related, and one's actions are connected to living and non-living things everywhere.

## Research Methodology, Participants, and Data Analysis

This research assumes a qualitative methodology, because we view the data as being situational, dynamic, social, and person-specific. In other words, this qualitative research reflects how people construct meaning from individualized life experiences (Patton, 2015). Our research involved conducting 24 semi-structured individual interviews with 14 educators living in Nunavut, Canada. Participants represented teachers, vice-principals, and principals; at the time of data collection, they possessed five years to a lifetime of experience living and/or teaching in Nunavut.

To find participants, we used purposeful sampling (Marshall & Rossman, 2011; Patton, 2015). First, we sent invitations to principals of all schools located in Nunavut. One of the researchers also sent additional invitations to Nunavut vice-principals she personally knew. She also sent invitations to Nunavut teachers whom aspired to assume educational leadership positions, a point reflected by the fact that these teachers were enrolled in a Masters of Education in Leadership program. In turn, 14 participants volunteered for the study; eight were principals, two were vice-principals, and four where teachers. Four participants were Inuit and 10 were non-

---

[2] Although the word "Indian" is not a term that is politically correct within Canada, within the United States, it is a phrase that is sometimes used to describe the Indigenous peoples of that country.

Inuit. Originally, we planned to interview each participant two times; however, due to time and geographical restraints, some participants were interviewed once. In the end, nine participants were interviewed two times, and five participants were interviewed one time. Eight of these participants were female, and six participants were male. Nine interviews were conducted in person and 15 interviews were conducted over the phone. Please see Table 1 for an overview of participant details.

Table 1
*Participant Description*

| Pseudonym | Position | Gender | # of Interviews | Inuit / Non-Inuit |
|-----------|----------|--------|-----------------|-------------------|
| Becky | Principal | F | 2 | Inuit |
| Lucas | Principal | M | 2 | Inuit |
| Isabel | Principal | M | 2 | Non-Inuit |
| Evelyn | Principal | M | 2 | Non-Inuit |
| Jack | Principal | F | 2 | Non-Inuit |
| Neil | Principal | M | 2 | Non-Inuit |
| Chloe | Principal | F | 1 | Non-Inuit |
| Anna | Principal | F | 1 | Non-Inuit |
| Henry | Vice-Principal | M | 1 | Non-Inuit |
| Owen | Vice-Principal | M | 1 | Non-Inuit |
| Amelia | Teacher | F | 1 | Inuit |
| Kylie | Teacher | F | 2 | Inuit |
| Grace | Teacher | F | 2 | Non-Inuit |
| Steve | Teacher | M | 2 | Non-Inuit |

Griffee (2005) reminded researchers that raw data, such as interview transcripts, do not by themselves reveal meaning; rather, transcripts must be interpreted. In an effort to create meaning, the researchers read each participant's interview in its entirety, gaining familiarity with its overall content. Each interview was reread, but more systematically, to create categories of key ideas, phrases, commonalities, differences, and patterns embedded in the transcripts (Stake 2005). At this point, we read and reread the information and converged the multiple categorical themes into larger theme(s) in response to the research purpose (Miles, Huberman, & Saldaña, 2014).

**Researcher Identity**

To promote the transparency of this research, we present our identity. Two of the five authors were not Aboriginal (i.e., Jane Preston and Tim Claypool); however, one of these researchers experienced in-depth Medicine Wheel teachings and many Aboriginal sacred ceremonies (e.g., sweats, smudging, etc.) prior to conducting this research. Brenda Green (Wahpeton Dakota First Nation, Saskatchewan) was the research collaborator for the study. She offered the research team the knowledge, experience, and personal connections with Aboriginal principals and communities, increasing the trustworthiness and dissemination of the study. As well, Jill Martin (Listigouche First Nation, Quebec) and William Rowluck (Lytton First Nation, British

Columbia) were Aboriginal graduate students who provided their Aboriginal knowledge and academic skills during most stages of the research. Aligned with Aboriginal methodologies, during data analysis, we consulted an Aboriginal Elder who helped the researchers understand fundamental aspects of an Aboriginal worldview.

## Thematic Findings

In addressing the purpose of this study, we describe both traditional forms of Inuit leadership and effective aspects of school leadership. We found that both descriptions of leadership were based on promoting rich relationships and communal wellness.

## Traditional Inuit Leadership

With regard to traditional Inuit leadership, at its core, participants believed this concept was about fostering healthy communities by promoting the personal leadership skills, interests, and/or abilities of each community member. Participants explained that traditional Inuit leadership was embodied through Elders and the way they fostered the linguistic, social, and spiritual wellness of student and school staff. Elder leadership was also about the oral and physical dissemination of knowledge and culture. It embodied patience and promoted skill development of others. Below, these findings are explicated.

**A Sense of Community**. When asking participants to describe Inuit leadership, most responses were imbued with the concept of community or a sense of collectiveness. Kylie described this Inuit leadership as "communal." Isabel indicated, "When it comes to Inuit leadership, it's not one person. It's people." She explained that Inuit people tend to recognize the strengths of each individual person and call upon that person to lead when his/her specific skill is in need:

> You want to encourage people to take leadership roles, but you have to do it in a respectful way and in a manner that you offer a safe accepting environment. You really have to work in that relationship and that avenue to really open it up, so somebody wants to come forward.

Evelyn had a similar depiction of Inuit leadership. She said, "Inuit leadership is about having the person who has the skill in a certain area step forward … So it's a more fluid type of leadership. It depends on the need at the moment." Steve believed that traditional Inuit leadership was about recognizing that, "Everyone in the community has an obligation to be a leader." In essence, Inuit leadership was something that came from within each person in the community, and the sum of these individual forms of leadership created a well-led community.

Becky added to the discussion by explaining that each member of a community has a responsibility to recognize the leadership potential and skills of fellow community members. She explained that the same hold true in a school context, where teacher are responsible for spotting the leadership potential of students. To further explain her point, she provided an example:

> I listen to these Grade 12s talking about, for example . . . why it is important for our seals to be sold and what it means for the community. Then I watch them do the presentations. I see such great leaders not just in education, but in the areas of wildlife, in different areas. You know who is going to be a mother. You can almost see them what their future will be.

Becky continued by saying that not only do educators need to recognize leadership potential in their students, the youth should be able to recognize leadership within each other. On the topic of student leadership, Becky said, "It's very important that the older students see the younger children and that the younger children see the older ones." In turn, promoting the leadership potential within a community is about observing and calling upon the gifts that are housed within every member of the community.

**Elder Leadership: Social and Spiritual**. When referring to traditional Inuit leadership, many participants referred to Elders. Steve identified Elders as leaders who provided direction for families and direction for the community. However, he specified:

> [Elder leadership is] not a mayor, it's not a president, or anything like that. It is more of a collective group of Elders who have that respect of the youth, and it is not about ruling with an iron fist. It's just the way they go about living their daily lives. It's more about how to conduct themselves and what their expectations are for the community.

Participants believed that Elders fostered the social and spiritual wellness of youth. Evelyn spoke about the calming, peaceful presence of Elders. She explained, in her school, Elders helped students who were aggressive and/or fighting or bickering with other students. She explained how the leadership of Elders often brought peace to such a situation:

> Then the children who were involved came. It would be sort of like a restitution circle led by the Elder. I always found those kinds of things beautiful. The Elder would know the families, and you could see the dispute dissolve. The Elder would say, "You know, I think you guys are related. You shouldn't be fighting. You shouldn't ostracize this person."

Becky also referred to how Elder leadership addressed the social and spiritual needs of some students. She said often teachers cannot spend quality time with students who have specialized social needs; however, when these students "spend an hour with the Elder making little carvings or making little mitts, and they talk to the children about social issues," many of the spiritual needs of these students are met. Becky believed that time spent with the Elders is a great resource for students. In Grace's school, "The kids go up to the Elder's room … and they have been beading, sewing, and doing traditional stuff." Grace believed time students spending time with Elder was a way of teaching and retaining Inuit culture. In all these examples, Elder leadership addressed the linguistic, social, cultural, and/or spiritual domains of the student. Kylie believed that such school leadership is in great need. She also said that she was empathetic to the workload of some of the Elders, because "a lot of these Elders are supporting a lot of children."

**Elder Leadership: Dissemination of Knowledge, Language, and Culture**. Another feature of Elder leadership is the oral dissemination of knowledge and the Inuktitut language. Anna recognized the important role that Elders play in her school when she said, "We invite in the Elders, and we do all sorts of activities in Inuktitut." She also said, "[Elders] come and teach us drumming." Jack viewed Elders as knowledge holder: "There were no written things, nothing, no library. Since every Elder was the library, everything was orally transmitted to the generations. So it is like if an Elder dies in Nunavut, that means a library is burned." Neil talked about cultural days at his school, which involved Elders disseminating their knowledge and wisdom. Neil said the Elders help supervise students and only speak to students in Inuktitut. Elders explain how the Inuit survived throughout the seasons, how to make an igloo, and other culture aspects of existence with the land.

The knowledge and wisdom embodied within Elders was not just available to students. Many participants explained that their own teacher, vice-principal, or principal professional development sometimes involved spending time with Elders. For example, Henry said, "We go on day trips as a staff and have an Elder teach us." Owen said that, with the help of Elders, he went out on the land, learned to build traditional igloos, and learned about skinning animals. Lucas believed the leadership offered by Elders is invaluable and said, "I would like an Elder in each school as a resource person, advisor, and instructor to assist teachers. Elders are walking encyclopedias."

**Elder Leadership: Patience and Skill Development**. A final feature of Elder leadership was about being a patient teacher, who promotes the development of skills within students. Becky indicated that Elders stress the virtue of "*Pilimmaksarniq*— it's the development of skills through effort, practice, and action. There's a huge stress in this for Inuit. That's why we are very keen on observation and most of the things we do is through observation." Isabel explained this concept further:

> Around here there is a lot of this attitude when you are younger, you don't do everything right away. You watch, you observe, and, when you are ready, then you do it. So, there is a timespan or progression of "I've seen it. I've seen it. I've seen it." Now I am going to try to do it. Now, I am good at it. So, it depends on where you grew up. It depends on if you are male or female. It depends on a lot of things.

Evelyn described the common features of Inuit learning and skill-building and said:

> It's not the traditional way of learning. You watch, and you watch, and you watch, and then once you know how to do it, then you do it. So that's why I think it's important to be patient and let the learning unfold as it will or as it should and just encourage, that's the core of me I think.

Participants explained that Elder's role model such patience and provide safe opportunities for students to observe, observe, practice, and perfect.

**Effective School Leadership**

With regard to effective school leadership, at its core, participants depicted and effective school leader as someone who promoted collaborative efforts of staff and students. Like tradition Inuit leadership, school leadership was community- and people-focused. Details about these findings follow.

**Teamwork**: When asking Nunavut educators to describe features of strong school leadership within a Nunavut context, the topic of cooperation and teamwork surfaced. Amelia said, "In the institutional sense, I would stay it [effective leadership] is someone who makes an effort with the team to complete a task … Good educational leadership, it's teamwork [and] collaboration." As a school principal, Evelyn valued the importance of collaboration among staff. She explained that early in the year, she would organize professional development sessions aimed at establishing and supporting relationship among staff members. She referred to this professional development as "team building." Becky explained how she tried to promote a team spirit among her staff. She said, "So I try to include the whole staff to help each other. I will just say, 'Who has good material on flowers, because our theme is flowers. Who would like to share it? Thank you so much.'" Lucas promoted teamwork and a sense of community among the staff by bringing food to the staff room, therein promote socializing among staff. On this point he said, "I would bring in country food anytime I could to encourage staff so they are happy at the workplace."

Chloe described effective leadership as a type of shared leadership or teamwork where she, as the principal, invited staff to experience leadership by encouraging them to lead various projects associated with the school. Henry's description of effective

school leadership was similar. He said that an effective school leader empowers his/her staff members by being their advocate and support. Henry said, "If someone wants to run with something, we really support that and say go for it."

**People- and Community-Focused**. The participants' perceptions about effective school leadership aligned with similar comments they relayed about traditional Inuit leadership. For example, as indicated above, Inuit leadership was about recognizing and calling upon the specialized leadership skills of individual people. With regard to school leadership, Isabel said, "Everyone plays a part in the leadership of the school." Isabel also explained that effective school leadership was knowing when to call on which person. On this point, she said:

> It's [effective school leadership] about knowing you staff and knowing the level to which they might be comfortable doing something they have to lead. You had to set it up in a way that is inviting and so that people want to take that leadership role. But it's something you have work at with your staff. It is not something that can develop overnight. It goes back to the whole relationship thing again.

Isabel explained that calling upon the leadership skills of other simultaneously had potential to enrich relationships with these people.

Other participants believed that, as the school leader, effective school leadership was about being a positive role model, through one's acts and attitude, for the entire school community. Evelyn said, "I tried to work alongside them, and I wouldn't ask them to do anything that I wasn't' ready to do myself. Leading by example is important." Lucas said, 'The most effective tool that I have is to model my positive attitude throughout the day to all who come through the school doors. Positive attitude is contagious." For Neil, it was important that he was a friendly person, so that teachers felt comfortable approaching him if something was upsetting them.

The responses of many participants addressed the idea that effective school leadership is about establishing effective relationships within the entire school community. For example, Jack described his style of leadership as "democratic," whereby he invited the staff in the decision-making process. Other teacher participants explained how his/her leadership in the classroom was associated to the concept of community. Owen stated, "We're all in the community together, and when someone has success, we all have it together. When someone is hurting, we all hurt together." Kylie explained, if a teacher wants to be an effective leader in the school, he/she needs to foster a sense of community. To do so, the teacher has "to know the kids—all the kids [in the school] —not just your classroom kids" (Kylie). For Grace, part of being an effective teacher leader was helping to ensure that everyone in the school is working together. She added, "There is not society on the face of the earth that would ever survive if we didn't work together." For Steve, strong teacher leadership was

about building relationships and trust among students and parents. He said, "If you are unable to build a strong relationship with the student and parent … it is going to be very difficult for an educator to get concepts and educate them in a meaningful way."

**Discussion: Inuit Worldview Aligns with Features of Strong Leadership**

Theoretical features of this research are promoted through a discussion about how the Inuit worldview aligns with aspects of effective leadership. An Inuit worldview incorporates the idea that life revolves around the outdoors (*sila*) or the spirit of nature (National Committee on Inuit Education, 2011). Every living thing, including animals, has a spirit; everything is alive, everything is equal, and the land is sacred (Simpson, 2000). A prosperous, fulfilled life involves promoting strong relationships with all things, with all spirits. For the Inuit, these relationships are maintained by observing four core laws: working for the common good, being respectful of all living things, maintaining harmony, and continually preparing for a better future (Nunavut Department of Education, 2007).

Quite recently, Inuit Elders have added details supportive of the four fundamental laws of relationships. Through a 2007 document entitled, "Inuit Qaujimajatuqangit (IQ): Educational Framework for Nunavut Curriculum" (Nunavut Department of Education, 2007), Elders articulated beliefs, values, skills, and knowledge that are components of a traditional and modern Inuit way of life. Elders advised that these IQ principles be incorporated into every school, classroom, and lesson. These eight concepts include: showing respect for others, being welcoming, developing collaborative relationships, promoting environmental stewardship, developing knowledge and skill acquisition, being resourceful, promoting consensus decision-making, and serving others. An overview of these IQ principles is highlighted in Table 2.

Table 2

*Eight Inuit Qaujimajatuqangit (IQ) Principles*

| Principal | Meaning |
|---|---|
| Inuuqatigiitsiarniq | • showing respect and caring for others |
| Tunnganarniq | • being welcoming, open, and inclusive |
| Piliriqatigiigniq | • developing collaborative relationships to work together for a common purpose |
| Avatimik Kamattiarniq | • promoting environmental stewardship |
| Pilimmaksarniq | • knowledge and skill acquisition |
| Qanuqtuurunnarniq | • being resourceful to solve problems |
| Aajiqatigiiniq | • consensus decision-making |
| Pijitsirniq | • serving |

Source: Nunavut Department of Education, 2007

With regard to the findings of this research, both the Inuit laws of relationships and the IQ principles align, for the most part, with how participants described traditional Inuit leadership and effective school leadership. Participants explained that traditional Inuit leadership was about welcoming, inviting, respecting, and using the skills of community members to address the needs of the community. This finding, in itself overlaps with essence of all eight IQ principals, as IQ principles, especially Tunnganarniq (welcoming), Piliriqatigiigniq (collaborative relationships), Pilimmaksarniq (knowledge and skill acquisition) and Pijitsirniq (serving). Traditional Elder leadership embodied social and spiritual relationships with youth. In other words, traditional leadership is about embodying a mutual caring, respectful attitude (Inuuqatigiitsiarniq—respect) between Elders and youth (Piliriqatigiigniq— collaborative relationships). Elder leadership was also about disseminating knowledge, language, and culture and promoting patience and skill development in others (Pilimmaksarniq—skill and knowledge aquisition). As well, all of the aspects that participants perceived as traditional Inuit leadership align with how the Inuit worldview places on relationships, maintaining harmony, and continually preparing for a better future.

With regard to identified traits of effective school leadership, participants explained that teamwork, a focus on promoting and using the skills of people, and a focus on promoting community wellbeing were important. This finding relates to the Inuit/Aboriginal idea that everything is connected. This interconnectedness is, essentially, the Aboriginal concept of holism. Holism is a notion that whole of anything is greater than the sum of its parts. This point infers that the individual pieces of any system, organization, or—in the case of this study—a school community, neither can exist nor be fully understood unless each piece is related to the functioning of the entire structure. This living environment remains healthy via its web of relations, a concept that aligns with the Inuit culture and its laws of relationships. Participants also believed that effective school leadership was about promoting the forte of each individual in the school, whether it be principal, teacher, or students. Participants believed effective leadership was about working as a team, where the leader was a role model for the team. The findings indicates that an effective school leader is a servant leader, which essentially Pijitsirniq. As well, an effective school leader promoted rich relationships among all members of the school community. This idea mirrors, the concept of Piliriqatigiigniq—developing collaborative relationships for a common purpose. In sum, the participants descriptions of traditional Inuit leadership and effective school leadership fully align with an Inuit worldview and the IQ principals.

**Closing Remarks**

Across Canada, the high school completion rate is approximately 52% for First Nations students (Richards, 2008) and 46% for Nunavut students (Nunatsiaq News,

2012), compared to 82% for non-Aboriginal students (Richards, 2008). These low Aboriginal graduation rates show change is required. Achieving equitable levels of educational success will increase the social wellbeing and economic welfare of Aboriginal peoples. Past research supports a solid supposition that a principal's leadership skill and acumen are key mechanisms to improve student performance (Leithwood, Louis, Anderson, & Wahlstrom, 2004); however, there is a stark absence of research about effective school leadership practices imbued with an Aborignal/Inuit worldview. Herein, we addressed that void and described effective leadership practices via an Inuit worldview. In promulgating our results, we hope to inform and influence school leaders about a type of leadership that focuses on relationships and the concept of holism. We believe leaders who embody at least some aspects of this Inuit style of leadership will support the academic success and wellbeing of both Aboriginal and non-Aboriginal students. In turn, this research promotes provincial governments, territorial governments, and the Council of Ministers, Canada's (2010) mandate to narrow the educational gap currently existing between Aboriginal and non-Aboriginal students. It also is a key to enriching the wellness of any school community.
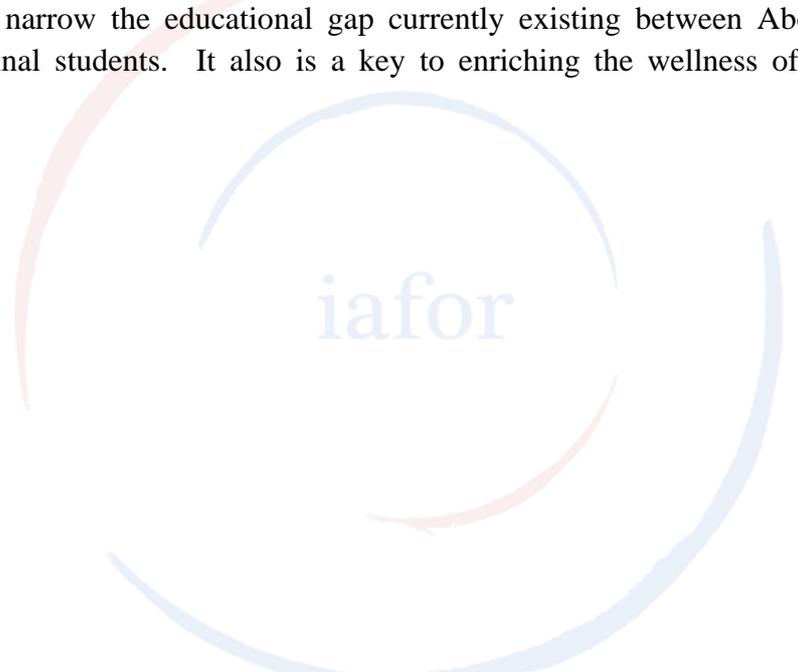
# References

Arnaquq, N. (2015). Uqaujjuusiat: Gifts of words of advice: Schooling, education, and leadership in Baffin Island. In F. Walton & D. O'Leary (Eds.), *Sivumut: Towards the future together: Inuit women educational leaders in Nunavut and Nunavik* (pp. 11–28). Toronto, ON: Women's Press.

Atleo, E. R. (2004). *Tsawalk: A Nuu-chah-nulth worldview*. Vancouver, BC: UBC Press.

Benham, M., & Murakami, E. T. (2013). Engaging in educational leadership: The generosity of spirit. In M. Grogan (Ed.), *The Jossey-Bass reader on educational leadership* (3rd ed., pp. 148–165). San Francisco, CA: John Wiley & Son.

Bennett, J., & Rowley, S. (Eds.). (2004). *Uqalurait: An oral history of Nunavut*. Kingston, ON:McGill-Queen's University Press.

Blanchard, K., Zigarmi, P., Zigarmi, D. (1985). *Leadership and the one minute manager: Increasing effectiveness through situational leadership*. New York, NY: William Morrow.

Conger, J. A. (2010). Leadership development interventions: Ensuring a return on the investment. In N. Nohria & R. Khurana (Eds.). *Handbook of leadership theory and practice: An HBS Centennial Colloquium on Advancing Leadership* (pp. 709–738). Boston, MA: Harvard Business Press.

Council of Ministers of Education, Canada. (2010). *Strengthening Aboriginal success: Moving toward Learn Canada, 2020: Summary Report*. Retrieved from http://www.cmec.ca/Publications/Lists/Publications/Attachments/221/aboriginal_summit_report.pdf

Deloria, V. (1994). *Indian education in America.* Boulder, CA: American Indian Science & Engineering Society.

Felicity, J. (1999). Native Indian leadership. *Canadian Journal of Native Education, 23*(1), 40–57.

Fullan, M. (2014). *The principal: Three keys to maximizing impact*. San Francisco, CA: Jossey-Bass.

Gardner, S. E. B. (2012). The four Rs of leadership in Indigenous language revitalization. In C. Kenny & T. N. Fraser (Eds.), *Living Indigenous leadership: Native narratives on building strong communities* (pp. 125–135). Vancouver, BC: UBC Press.

Griffee, D. T. (2005). Research tips: Interview data collection. *Journal of Developmental Education, 28*(3), 36–37.

Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.

Indian and Northern Affairs Canada. (2005). *Through Mala's eyes: Life in an Inuit community: A learning resource*. Ottawa, ON: Minister of Public Words and Government Services Canada.

Ittusardjuat, M. (2015). Overcoming intergenerational trauma: Identity and reconciliation. In F. Walton & D. O'Leary (Eds.), *Sivumut: Towards the future together: Inuit women educational leaders in Nunavut and Nunavik* (pp. 29–42). Toronto, ON: Women's Press.

Julien, M., Wright, B., & Zinni, D. M. (2010). Stories from the circle: Leadership lessons learned from Aboriginal leaders. *The Leadership Quarterly, 21*(1), 114–126.

Kaner, S. (with Lind, L., Toldi, C., Fisk, S., & Berger, D.). (2014). *Facilitator's guide to participatory decision-making* (3rd ed.). San Francisco, CA: Jossey-Bass.

King, T. (2008). Fostering Aboriginal leadership: Increasing enrollment and completion rates in Canadian post-secondary institutions. *College Quarterly, 11*(1), 1–16.

Kuniliusie, M. (2015) Arctic cotton and stratified identity of an Inuk educational leader. In F. Walton & D. O'Leary (Eds.), *Sivumut: Towards the future together: Inuit women educational leaders in Nunavut and Nunavik* (pp. 57–70). Toronto, ON: Women's Press.

Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *Review of research: Howleadership influences student learning*. New York, NY: Wallace Foundation.

Leon, A. Y. (2012). Elder's teaching on leadership as a gift. In C. Kenny & T. N. Fraser (Eds.), *Living Indigenous leadership: Native narratives on building strong communities* (pp. 48–63). Vancouver, BC: UBC Press.

Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Los Angeles, CA: Sage.

McMillan, A. D., & Yellowhorn, E. (2004). *First peoples in Canada*. Vancouver, BC: Douglas & McIntyre.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles, CA: Sage.

Mitchell, C., & Sackney, L. (2013). *Leadership and living-systems ontology in high-capacity schools.* Paper presented at the Annual Conference for the Canadian Society

for the Study of Education, Victoria, BC. Retrieved from
http://ocs.sfu.ca/fedcan/index.php/csse2013/csse2013/schedConf/presentations

National Committee on Inuit Education. (2011). *First Canadians, Canadians first: National Strategy on Inuit Education 2011*. Ottawa, ON: Inuit Tapiriit Kanatami.

Northouse, P. G. (2012). *Introduction to leadership: Concepts and practice* (2nd ed.). Los Angeles, CA: Sage.

*Nunatsiaq News*. (2012, November 21). Nunavut high school graduate numbers up, but many Grade 12 students don't make it. Retrieved from http://www.nunatsiaqonline.ca/stories/article/65674nunavut_high_school_graduates_up_but_many_grade_12_students_dont_make_/

Nunavut Department of Education, Curriculum and School Services Divisions. (2007). *Educational framework: Inuit Qaujimajatuqangit for Nunavut curriculum*. Iqaluit, Nunavut: Author.

Owlijoot, P. (with Nunavut Arctic College). (2008). *Guidelines for working with Inuit Elders*. Iqaluit, NU: Nunavut Arctic College.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.

Pidgeon, M. (2012). Transformation and Indigenous interconnections: Indigeneity, leadership, and higher education. In C. Kenny & T. N. Fraser (Eds.), *Living Indigenous leadership: Native narratives on building strong communities* (pp. 136–149). Vancouver, BC: UBC Press.

Preston, J. P., & Green, B. (in press). Indigenous and Western worldviews: Embracing divergent epistemologies. *Journal of Educational Thought*.

Putulik, M. (2015). Piniaqsarniq: Practice to achieve. In F. Walton & D. O'Leary (Eds.), *Sivumut: Towards the future together: Inuit women educational leaders in Nunavut and Nunavik* (pp. 71–87). Toronto, ON: Women's Press.

Richards, J. (2008). *Closing the Aboriginal/non-Aboriginal education gaps*. Toronto, ON: C.D. Howe Institute. Retrieved from http://www.cdhowe.org/pdf/Backgrounder_116.pdf

Robinson, V. (2011). *Student-centered leadership*. San Francisco, CA: Jossey-Bass.

Simpson, L. (2000). Anishinaabe ways of knowing. In J. Oakes, R. Riew, S. Koolage, L. Simpson, & N. Schuster (Eds.). *Aboriginal health, identity, and resources* (pp. 165–185). Winnipeg, MB: Native Studies Press.

Stake, R. E. (2005). Qualitative case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443–466). Thousand Oaks, CA: Sage.

Statistics Canada. (2013). *Aboriginal peoples in Canada: First Nations People, Métis and Inuit*. Retrieved from http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.pdf

## Experiencing Desire Outcomes of Adult Education through Participatory Practice Design

Wei-Ying Lim, SIM University, Singapore
Horn-Mun Cheah, SIM University, Singapore

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
The need for direct relevance, be it for academic, professional and/or self-actualization purposes, has added impetus for higher education institutions focusing on adult education to ensure its programs enable lifelong employability in order to achieve economic and social goals. As such, the desired outcomes of a program cannot remain lofty, but be actualized in the teaching and learning (T&L) interactions the learners experience. SIM University in Singapore, with a focus on adult education, has over the years required its programs to provide her learners with *practice intelligence*, *social consciousness* and the life-long learning skills of *self-directed* and *collaborative learning*. Recent curricula efforts have focused on redesigning the T&L interactions with the goal of having learners experience these desired outcomes. In this paper, we first explain the undergirding principles of the desired outcomes as educational provisions in enabling lifelong employability. Then, we describe the redesign principles that were largely informed by the notion of participatory practice (Billet 2010, Lave 1990). In particular, we explicate how this set of principles is enacted pedagogically in a case example of a Marketing course. To conclude, we draw on our experience of this redesign exercise and outline the implications that we may face when this intervention is scaled to the other courses of the degree programs.

Keywords: practice intelligence, social consciousness, life-long learning skills, participatory practice, adult education, lifelong employability

iafor

The International Academic Forum
www.iafor.org

### Introduction

Higher education institutions, particularly those that serve adult learners, have increasingly been concerned with enabling their students with skills for continuity in the workforce, or lifelong employability. This concern is often set against the backdrop of the modern society where the individual's productive economic years are lengthening, so much so that remaining relevant over the extended years becomes critical given the rapid pace at which new knowledge is introduced.

In Singapore, SIM University (UniSIM) is the only private, non-profit, higher education institution that caters to adult learners (www.unisim.edu.sg). At UniSIM, the concern of developing her students with lifelong employability skills has been approached in the form of translating the desired outcomes of UniSIM education into practicable teaching and learning interactions. Such a strategic move is not just to ensure that practices are aligned with policy (that embodies the University's mission and vision), but also to develop and augment a working culture of lifelong dispositions that both staff and students embody.

The goal of this paper is to document the process of translation where the institution's mission and vision are transposed into pedagogical practices for enactment. More importantly, the reification of such a translation process serves as a basis for iteratively refining and improving subsequent teaching and learning interactions. This helps to exemplify the attributes of a reflective practitioner.

We first begin this paper with the explication of the desired outcomes of UniSIM as educational provisions that enable lifelong employability. This is followed by the central thesis of this paper that is the translation of the design principles, appropriated from the notion of participatory practice, into pedagogical practices. We further contextualize this process in a Marketing course. Finally, we conclude this paper by drawing on our experience of this design exercise and outline the implications when this intervention is scaled to the other courses of the degree programs.

### Desired Outcomes of the UniSIM Education

Vision: Empowering society through lifelong education
Mission: To create excellence in lifelong education through a uniquely designed learning experience, equipping learners for a better future.
Desired outcome: The UniSIM graduate is a *socially conscious* professional with *practice intelligence* and *lifelong learning skills*.

UniSIM has an overarching vision to 'empower society through lifelong education'. It occupies a central role in Singapore in providing degree and postgraduate level programmes for working adult learners. This can be seen from its current enrolment of about 14,000 students compared with a total enrolment of about 77,619 [Department of Statistics, Singapore - http://www.singstat.gov.sg/statistics/browse-by-theme/education-and-literacy] for students in the five publicly funded universities. Given UniSIM's history and the context of its establishment, the university aims to prepare graduates who are *socially conscious* professionals with *practice intelligence* and *lifelong learning skills*. To meet these desired outcomes, it becomes important to

not just integrate them within the curriculum, but also to make them explicit in the teaching and learning interactions.

Table 1 below provides the definitions and anticipated responses for the three desired outcomes of *social consciousness*, *practice intelligence* and *life-long learning skills*.

| Desired Outcome: Social Consciousness | |
|---|---|
| Definition | An awareness of the social dimensions of human activities and institutions; as well as our shared responsibilities for the well-being of our communities. |
| Our Programmes | Develop social consciousness through practice in the respective disciplines. |
| Our Graduates | Ethical and professionally responsible, committed to society's collective well-being, and able to make a difference to the community. |
| | |
| **Desired Outcomes: Practice Intelligence** | |
| Definition | The ability to adapt and apply learning to the practice context and the use of the practice environment to shape and guide future learning. |
| Our Programmes | Achieve practice intelligence through applied, real-world and situated learning. |
| Our Graduates | Professionals who can put theory into practice within the globalised work environment; as well as being able to determine future learning. |
| | |
| **Desired Outcomes: Life-Long Learning Skills** | |
| Definition | Life-long skills encapsulated by self-directed and collaborative learning skills. |
| Our Programmes | Provides opportunities for students to develop and practice self-directed and collaborative learning skills within the curriculum and beyond. |
| Our Graduates | Resourceful, adaptable, independent and collaborative knowledge-seekers. |

Table 1. Desired Outcomes of UniSIM education

There are 2 key aspects of *social consciousness* when applied within the context of a UniSIM education. First, it refers to the university's desire to build up a strong awareness of the social aspects of human interactions amongst the students, and between the students and key institutions in society. Second, it aims to build on this raised awareness to actualise the sense of shared responsibilities for the well-being of the communities and society at large. Given a technologically enabled filter bubble (see Beinsteiner, n.d.) and ethical issues in research surrounding internet communities (see Eysenbach and Till, 2001), the ability to connect with a diverse range of communities is becoming an increasing crucial aspect of development for the adult learners.

*Practice intelligence* is internally defined in UniSIM. It articulates the outcomes of an education experience that uses applied pathways as key learning processes. It requires both the ability to effectively bring learning into the work environment, and the ability to shape future learnings based on professional needs and experiences in the work environment. This broadly requires the university programmes to bridge theory and practice, and for the programmes to be informed by practice to broaden the learning context for students. There are various aspects to the former, including direct use of learned knowledge and acquired skills, as well as exhibition of 21st Century dispositions. As for the latter, two sets of learning behavior need to be cultivated, ie.

the ability to identify learning needs and to develop strategies for meeting these needs. Thus, the programme design and delivery will need to ensure that such transitions and application of knowledge and skills occur in the workplace. It is likely to involve more than simple training. Support structures that enable learning to take place, including the natural formation of learning communities, and the provision of opportunities for the students to 'practice' the desire attributes are necessary.

There are numerous ways of framing the skill sets included in 'life-long learning'. Rather than positing a comprehensive, and necessarily long, listing of such skills, it is more useful to focus on two categories of skills which can, in turn, embrace a good range of other key 21st Century skills. This will also allow for a strong common understanding amongst teaching staff and students. To this end, two sets, namely *self-directed* and *collaborative* learning skills, have been identified. *Self-directed* learning relates to three main attributes, i.e. the ability of the learner to (a) take responsibility of his/her learning, i.e. ownership, (b) monitor and manage learning, and (c) map and extend learning. These can be effectively integrated with the curriculum and exhibited through teaching and learning interactions. As for *collaborative* learning, the learner is expected to be knowledgeable about, and to develop the ability to enhance and participate in, effective group processes. On top of this, the learner would also be accountable at the individual and group level to the success of the group.

Note that, in general, soft skills are unlikely to be something that can be explicitly taught in a traditional education environment. They need to be 'practiced' in situated environments that can best develop the skills, which often proves to be a challenging task. For instance, it is entirely feasible to design suitable context in order to provide the opportunities for students to acquire these skills and dispositions through practice, which fits within the practice approach philosophy of the UniSIM education.

## Participatory Practice as Design Principles

The conception of participatory practice (Billet 2010, 2002) builds on two key theoretical pillars. One, participatory practice takes the view of unpacking learning from a *practice* perspective which brings to mind the notion of apprenticeship (Rogoff 1990). This connotes the processes of *learning to be,* drawing on observation, imitation, re-enactment, embedded in the contexts of activities and guided interactions (Brown, Collins & Duguid, 1989). Another different yet related condition is the location aspect of the practice perspective. As practice relates to the situative nature of authentic activities, hence the location for participatory practice, more often than not, is anchored in the workplace.

According to Billet (2010), the process of learning, given the practice perspective, can be summarized as both "personal and situational" (p. 10). The situational aspect of the workplace affords conditions of authenticity and fluidity that are a constitutive function of the experience a learner builds-up. On the other hand, the engagement level of the individual, the competence, and the extent of guidance received are conditions related to the individual that bear consequences to the outcome of learning.

The other key theoretical pillar participatory practice builds on is the social foundation of human development. The workplace is not a neutral context from which economic products and services are generated. The workplace is shaped by organizational hierarchy, group (formal and/or social) affiliation, and occupational-related activities that were borne out of its social historical development (Scribner 1997). Therefore, learning in such an environment is not an objective, out-of-context process but that the "local order" (Engestrom & Middleton, 1996) is an evolving cultural condition the learner has to negotiate in the course of engagement.

On the whole, the dialectics between individual learner's agency and the social context is an important factor that shapes the outcome of learning. Personal meaning making determines the extent of engagement in work practices and as such mediates the construction of knowledge (Valsiner & van der Veer, 2000). The role of discourse, thus, is key to what and how a learner construes one's experience. In other words, having access to and engaging in kinds of discourses shape in complex ways how a learner appropriates the practice.

**Design Principles for Pedagogical Practices**

At the nexus of the desired outcomes of UniSIM and the conception of participatory practice is the common emphasis of *practice* set in the expansive and situated nature of learning. Although represented in different forms, there is a common epistemological belief that lifelong learning requires more than the transmission of content knowledge.

At this point, it is important for us to recognize that while learning at the University is fundamentally not the workplace itself, we argue that educational institutions can be organized in ways to facilitate learning akin to the workplace. Such organization can be by means of simulating higher education contexts as proxies of workplace, or to develop personal heuristics, dispositions, and therein skills that would enable meaning making at the workplace.

Towards this goal, from the literature, we distill the following principles that will guide us in our pedagogical enactment as we redesign our courses. We do not envisage that all principles will apply to all courses given the occupational nature of the courses is wide-ranging. We recommend judicious application depending on the learning outcomes of the course.

1. Connect learners to authentic workplaces
2. Engage learners in occupational dispositions (i.e. values) like practitioners in the field
3. Embed content in the context of workplace use
4. Develop discursive capacity for learners to engage like practitioners
5. Develop cognitive (thinking) skills in learners
6. Develop learning-to-learn skills in learners
7. Use technological tools to promote work-based learning

The first principle refers to apprenticeship-like approaches where learners are placed in workplaces through practicum or capstone projects. As the saying goes, the map is

not the territory. Learners experience the distinctive nature of occupational practices when placed in authentic environments.

The second principle refers to the dispositional development of learners like practitioners in the field. In this regard, we refer to the personhood aspects of development such as the occupational worldviews, values that practitioners hold. For instance, there are values that the legal professions hold which are unique and distinct from that of social workers.

Third, knowledge is only meaningful when applied to contexts of use. In this third principle, we refer to the effort of connecting theories and concepts to how they are used in the field.

Next, the role of discourse is crucial for meaning making to take place. Hence, this principle focuses on the development of the discursive capacity of learners to engage effectively and productively with other practitioners in the field.

The fifth principle refers to the disciplinary thinking related to the occupational practice. For instance design thinking is often associated professions such as the engineers or architects. This principle plays a complementary role to the second principle where one focuses on cognition and thinking while the other emphasizes on disposition and values.

The sixth principle refers to the lifelong learning attribute of learning-to-learn which is a necessary habitus in today's evolving nature of knowledge in the workplace. Learners need to remain open to learning and to continually create new forms of practices in response to evolving contexts.

Finally, the last principle refers to the use of technology to support the preceding six principles. Technological advancement has, in myriad ways, brought about new practices and new ways of being. We can draw on technology as an enabling support in the enactment of work-based learning.

**Case Example to Illustrate the Pedagogical Enactment**

In this section, we present a case example to illustrate the process of how we translate design principles into pedagogical enactment. In this example, we provide the background of the course, the redesign process, the redesign strategy, and finally how they relate to the design principles.

*Case Example: Marketing Management*

**Background.** Marketing management is a second year undergraduate course. It runs for six weeks with an enrolment of about 300 to 350 students per cohort. The two main assessments of the course include a group assignment that requires students to analyze a marketing case study, and an examination at the end of the semester. This course is conducted is a blended mode of which three sessions are online while the other three are held face-to-face. The topics covered in this course is as follows:

| Week 1 | Online | Study Unit 1: Defining Marketing |
| | | Analysing Marketing Environment |
| | | Conducting Market Research |
| Week 2 | F2F (SU1 & 2) | Study Unit 2: Creating Long-term Loyalty Relationships |
| | | Analysing Consumer Markets |
| | | Identifying Market Segments and Targets |
| Week 3 | Online | Study Unit 3: Crafting Brand Positioning |
| | | Marketing of Products |
| | | Marketing of Services |
| Week 4 | F2F (SU3 & 4) | Study Unit 4: Developing Pricing Strategies & Programmes |
| | | Designing and Managing Integrated Marketing Channels |
| Week 5 | Online | Study Unit 5: Designing and Managing Integrated Marketing Communications |
| | | Managing Mass Communications |
| Week 6 | F2F (SU5 & 6) | Study Unit 6: Managing Personal Communications |
| | | Tapping into Global Markets |

Figure 1: Topics covered in the marketing course

**Redesign process.** Our starting point was to identify courses with open-minded instructors who are also practitioners in the field. This is to enable learners to engage in the thinking and occupational discourse like practitioners. Thereafter, front-end analysis was conducted where we analyzed learner profile, nature of content and how the course was conducted. Next we briefed the chosen instructor of the rationale and basis of design principles, and to reinforce the desired outcomes we seek to achieve in the education at UniSIM. Finally, we developed a work plan (see Figure 2 for an example) where the tasks to be performed are listed.

| Item | Actions Required |
|---|---|
| Update of Course design document & Blueprint | ✓ To amend documents to meet new teaching requirements |
| Identify course topics for case studies | ✓ To develop case reasoning guide. Guide to infuse thinking skills<br>✓ To identify key topics necessary for the development of case studies |
| Develop case studies | ✓ To develop a total of 15 cases for face-to-face and online sessions.<br>✓ Case to contain realistic dilemmas and distractions<br>✓ Guiding questions to scaffold towards case resolution<br>✓ To test the case reasoning guide against the cases developed |
| Develop teaching materials | ✓ To develop teaching materials for the 3 face-to-face sessions and 3 online sessions |
| Update instructor's and student's course guide | ✓ To update instructor's and student's course guide according to new teaching requirements |
| Record chunked lessons | ✓ To record chunked videos for 3 online sessions |
| Brief tutors | ✓ To brief tutors on the new format of teaching |

Figure 2: An example of a work plan that guides the redesign process

**Redesign strategy.** The current course delivery, albeit relies heavily on lecture presentation, draws on a variety of small cases to enrich the understanding of the marketing concepts. These cases are current products and services in the market that the learners can relate to.

Building on the strong foundation in the use of cases in this course, the redesign focused on expanding the cases to equip learners with the case learning technique. The expansion of the cases is to increase the complexity in the cases so as to simulate reality where facts are intertwined with dilemmas and even distractions (see Appendix A for an example of a case). At the same time, the redesign focused on developing case reasoning skills in learners (see Appendix B), like marketers in real-life, where cases are deconstructed for deeper understanding so as to derive the ideal marketing solution for particular product or service.

At the same time, to increase the effectiveness of the blended flipped learning approach, we scaffold learners' learning in two ways. One was to develop pre-class questions focusing on specific marketing concepts that students need to know. The intent is to encourage learners to draw on this knowledge when performing case reasoning in-class. The discussions in class are to be done in groups. This is where the content knowledge, case reasoning like practitioners, and the construction of a resolution for the cases occur. Such learning contexts can be likened to work group

discussions in the workplace where dilemmas were deliberated over and marketing solutions to issues were developed.

Second was to develop videos (see Figure 3) that exemplify the case reasoning process for the online sessions. This is to ensure this new approach is consistently applied to the online sessions as with the face-to-face sessions.

The design principles that were applied in this case example:
- Engage learners in the thinking like practitioners in the field – authentic dilemmas and complexities practitioners experience that were incorporated into the cases
- Embed content in the context of workplace use – marketing theories and concepts that were interwoven into the cases
- Develop cognitive (thinking) skills in learners – development of the case reasoning skills as a thinking heuristic
- Use technological tools to promote work-based learning – videos that exemplify the case learning skills
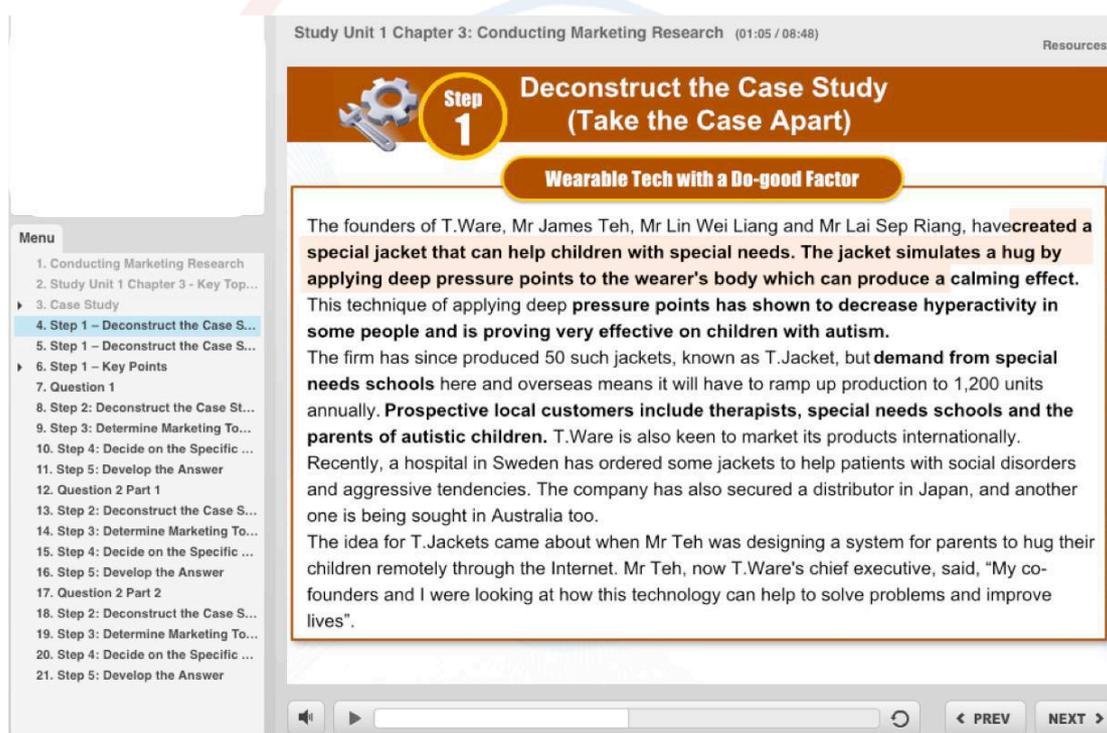


Figure 3: Video that exemplify the case reasoning skills

## Discussion & Conclusion

To recap, the goal of this paper is to present our effort of translating desired outcomes into practicable teaching and learning practices towards lifelong employability for adult learners. Towards this end, we articulated the three desired outcomes in *practice intelligence, social consciousness,* and *life-long learning skills.* We also drew on the

literature, in particularly the notion of participatory practice, to help us shape the seven design principles for translation into pedagogical practices. Then, a case example in the form of a marketing course was presented to exemplify the translation process.

Through this redesign work, we found the exercise to be a fruitful yet challenging one. On the one hand, we found the design principles to be comprehensive and effective to guide us through as we work at the level of the individual courses. They provided the clarity and the concrete premises such as the content, the communicative ability of the learners, etc. that requires redesign attention. Hence, in this regard, the design principles are beacons that we think could be scaled productively across to the other courses in various disciplines.

On the other hand, because we took a ground up approach by analyzing the strengths and the weaknesses of each course, and correspondingly the construction of the redesign solution, it was a highly contextual effort that could not easily be replicated across courses. As such, there is a concern that over time, we may have pedagogical practices that are too diverse that could not be categorically placed into recognizable patterns that could be associated with UniSIM.

To circumvent this anticipated concern, we are selecting courses of maximum variation (similar to the maximum variation sampling method in the case study approach), e.g. counseling and the math degree programmes, to elucidate the range of pedagogical practices possible. That way, there will be sets of recognizable pedagogical practices that could be branded as uniquely UniSIM.

In going forward, we have plans to study the effectiveness of the redesign efforts and to report the results in future conferences and events.

**References**

Beinsteiner, A. (n.d.). *Filter Bubble and Enframing: On the Self-Affirming Dynamics of Technologies.* Retrieved from http://ceur-ws.org/Vol-859/paper3.pdf

Billett, S. (2010). *The practices of learning through occupations* (pp. 59-81). Springer Netherlands.

Billett, S. (2002). Workplace pedagogic practices: Co–participation and learning. *British Journal of Educational Studies*, *50*(4), 457-481.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational researcher*, *18*(1), 32-42.
Cameron, D. (2001). *Working with spoken discourse*. London: SAGE.

Engeström, Y., & Middleton, D. (1996). Introduction: Studying work as mindful practice. *Cognition and communication at work*, 1-14.

Eysenbach, G., & Till, J. E. (2001). Ethical issues in qualitative research on internet communities. *Bmj*, *323*(7321), 1103-1105.

Lave, J. (1997). The culture of acquisition and the practice of understanding. *Situated cognition: Social, semiotic, and psychological perspectives*, 63-82.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford University Press.

Scribner, S., & Tobach, E. (1997). *Mind and social practice: Selected writings of Sylvia Scribner*. Cambridge University Press.

Valsiner, J., & Van der Veer, R. (2000). *The social mind: Construction of the idea*. Cambridge University Press.

Contact email: rebekahlimwy@unisim.edu.sg, hmcheah@unisim.edu.sg

## APPENDIX A: AN EXAMPLE OF A CASE THAT WAS DEVELOPED

**SIA offers premium economy travel as it seeks sweet spot**

Singapore Airlines (SIA) customers flying to Sydney on selected flights will be the first to experience the carrier's new premium economy class from Aug 9 2015. For a fare of around 20 per cent more than what they pay for a full-fare economy class ticket, passengers will be able to enjoy wider seats with more leg room, better meals and amenities, and an improved all-round experience.

SIA's decision to introduce the new tier follows the likes of Air France, British Airways, Cathay Pacific and Lufthansa. As the airline struggles with a challenging environment, and with its rivals narrowing the gap in service excellence, its new premium economy class is intended to help SIA stay competitive. This initiative is also expected to improve yields and profits in challenging times.

Singapore Airlines had until now opted to stay focused on the business and first class segment of the business, which make up around 40 per cent of its revenue. Even when the 2008 global financial crisis came, which resulted in a major slump in demand for premium air travel, SIA was still convinced that the good old days would return. However, they did not. Even after the recovery, not all businesses went back to spending on **premium** air travel. Fewer executives are now flying business as their companies try to stay lean and keep operating costs down. And where firms once flew executives only on full-service carriers, a growing number now turn to budget carriers for short-haul flights.

The rising preference and demand for air travel in Asia has increased significantly in recent years. The boom in air travel was also partly contributed by rapid globalization and rising wealth in many Asian countries, including China. This trend has in turn fuelled the rise of budget airlines which are now doing brisk business with this segment of the market. In consideration of the various conditions, it seemed timely that SIA launched its **premium economy** service. Basically, SIA is looking to lure business travellers and less cost-conscious leisure travellers who do not mind paying premium for more comfort on long-haul flights.

To ensure a seamless experience, priority check-in and baggage handling will be offered to premium customers. The baggage allowance of 35kg is 5kg more than for economy travellers, and KrisFlyer members will receive 10 per cent more miles when they fly premium economy.

The new product will be rolled out to other destinations served by SIA's Airbus 380s and Boeing 777-300ERs, in addition to the future fleet of Airbus 350s. Routes including Beijing, New Delhi, Hong Kong, Frankfurt, London, Mumbai, New York, Shanghai, Tokyo and Zurich will follow in the later part of 2015 and early 2016.

SIA chief executive officer Goh Choon Phong is confident the product will be well-received by travellers who want more features underpinned by "exceptional service" on the ground and in the air. Centre of Asia Pacific Aviation analyst Brendan Sobie said: "The overall reduction in capacity on several medium- and long-haul routes is also sensible, as it should enable improved yields and profits on routes that have come

under increasing pressure, particularly from Gulf carriers. "For SIA, carrying fewer economy passengers can be viewed as a positive trade-off as these are passengers who are generally travelling below cost."

Businessman Rick Wong, 44, a regular traveller, said: "Comfort is definitely important for long- haul flights and if the difference in fares is about 20 to 30 per cent, I would go for it."

*(Original source: SIA offers premium economy travel as it seeks sweet spot, by Karamjit Kaur, The Straits Times, 4 February 2015, Page A3)*
*Other Reference source: Seeking a better way to fly in a changed world, by Karamjit Kaur, The Straits Times, 10 May 2014, Page A3*

### Pre-class Activities

1. Identify and describe the major macro-environmental factors that may create opportunities or threats to a company.

2. Discuss the various types of consumer characteristics that can influence consumer behaviour.

### In-class Activities

1. Analyse the possible macro-environmental factors that may have contributed to

    a. The Rise of budget airlines in Asia
    b. SIA decision to launch the premium economy class

2. Analyse the possible cultural, social and personal factors that may influence consumers to decide to purchase premium economy tickets for personal travel.

### APPENDIX B: CASE REASONING SKILLS

### STEP 1 – DECONSTRUCT THE CASE STUDY (TAKE THE CASE APART)

- Form a basic idea of the case, such as,
    - ✓ Nature of business/industry, product/services offered
    - ✓ Nature of business environment , competition
    - ✓ Company's performance, market share, etc.
    - ✓ Customer profile

- Identify the key:
    - ✓ Elements or issues,

   - ✓ Symptoms of the problems, or
   - ✓ Opportunities and threats faced by company

- Establish potential impacts on the company and/or consumers. The following are some of the possible impact:
   - ✓ Sales and profitability
   - ✓ Strategic directions of the company
   - ✓ Competitiveness
   - ✓ Morale of the company's stakeholders - employees, business partners, etc.
   - ✓ Market share and growth
   - ✓ Customer loyalty and satisfaction
   - ✓ Consumer bahaviour

### STEP 2 – DECONSTRUCT THE CASE STUDY QUESTION (TAKE THE QUESTION APART)

- Identify the vital word(s) and/or phrase(s) in the question

- Write or mark out the key components of the question

- Interpret the requirements of the question based on the action verb used. E.g. Analyse, Discuss, Differentiate, Employ, Explain, etc.

### STEP 3 – DETERMINE MARKETING TOPIC(S) & CONCEPT(S) REQUIRED IN QUESTION

- Identify the key topic(s) of focus in the question

- Write out the key concept(s) relevant to this topic

### STEP 4 – DECIDE ON THE RELEVANT MARKETING CONCEPTS TO USE FOR YOUR ANSWER

- Establish how the concept(s) can be used to answer the question

- Narrow down to the relevant concept(s) or the most appropriate solution(s) that should be used to answer the question

### STEP 5 – DEVELOP THE ANSWER

- Consider the action verb and craft your answer according to the requirements of the action verb. For example, the word, 'Discuss' implies that the writer needs to examine appropriate factors, tools, or strategies to explain or address an issue or problem.

- Craft your answer to link the appropriate concept(s) to explain or address the issue or problem.

- Give justification for your answer by providing relevant supporting reasons or examples from the case.

# Low Incidence of International Publications: A Reflection of the Weaknesses of the Vietnamese Higher Education System

Cuong Hoang, Monash University, Australia

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

Research and publications are essential characteristics of being an official member of the higher education community (Archer, 2008). The capacity to publish research findings in well-known, peer-reviewed journals is a significant indicator of the quality of research (Hien, 2010). The number of published work is the evidence for a researcher's academic contribution and his/her professional development. This applies to an individual researcher and may be true to a nation. The rate of international articles published by authors from a country can indicate the level of academic engagement and scientific development of that country (Ta & Hoang, 2014). The international publication number is also used as an essential criterion to rank the world's leading universities.

This study investigates the challenges that Vietnamese social sciences researchers (VSSRs) have to face when they publish their research work in international peer-reviewed journals. It is part of a larger project investigating the engagement of VSSRs with global academia. This study argues that the publication rate can be an accurate reflection of the weaknesses of a country's higher education system. The findings suggest that the lack of support from higher institutions and academic English are the two most common challenges. The study also reveals a strong correlation between the weaknesses of Vietnam's higher education system and the low rate of international publication. Consequently, the study provides some suggestions for Vietnamese higher institutions, the Vietnamese Government as well as universities and governments from developing countries to support their researchers in publishing their research internationally.

Keywords: international publication, higher education, social sciences, Vietnam

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Having an article accepted for publication in an international journal is a demanding and often depressing task. The process from brain-storming the ideas, writing the first draft until the article published often requires a significant amount of time, energy, and determination. This process also involves considerable pressure. Researchers might experience the feeling of being depressed, disappointed and unsure about what they have written and what reaction the audience may have. For researchers from a developing country, the pressure is even higher due to the language barrier, the differences in research norms and the shortage of literature in the field. To many researchers who are non-native English speakers, publications in international journals are frequently the result of their participation in international research collaborations. However, the effort they have put into their work is worthy of applause. Publications are not only the medium for new research discoveries delivered to the rest of the world, but also the "principle currency" (p. 811) for academics in many developed and developing countries (Man, Weinkauf, Tsang, & Sin, 2004).

Research and publications are essential characteristics of being an official member of the higher education community (Archer, 2008). The capacity to publish research findings in well-known, peer-reviewed journals is a significant indicator of the quality of research (Hien, 2010). Published work is evidence of a researcher's academic contribution and his/her professional development. This is true for an individual researcher and may also be true for a nation. The rate of international articles published by authors from a country can indicate the level of academic engagement and development of that country (Ta & Hoang, 2014). The ability to publish in international peer reviewed journals serves as the measure of researcher's success and leaves the researchers under the tension to "publish or perish" (Ezeala, Nweke, & Ezeala, 2013, p. 376). The international publication number is also used as an essential criterion to rank the world's leading universities by the QS World University Rankings and the Times Higher Education Ranking. This study argues that the publication rate can be an accurate reflection of the weaknesses of a country's higher education system.

According to statistical data (Hien, 2010; T. V. Nguyen, 2009; T. V. Nguyen & Pham, 2011), the number of international research publications from Vietnam is modest as opposed to those of other neighbouring countries. From 2008 to 2012, Vietnam published 6,369 scientific articles in academic journals accredited by the Institute of Scientific Information of United States (ISI) which was roughly equal to 24% of Thailand (26,114 articles) and 22% of Malaysia (28,509) (V. T. Nguyen, 2013). The number of Vietnamese articles whole nation in combine was roughly equal to those of famous universities in Malaysia and Thailand such as Malaya University, Chulalongkorn University or Mahidol University (Hien, 2010). More interestingly, it was revealed that more than 70 percent of qualified research projects in Vietnam were produced in collaboration with foreigners. In some fields such as medical sciences and health sciences, the percentage of cooperation with developed countries increased to 80% or 90% (Hayden & Lam, 2006). Although cooperation with overseas organisations can help to boost the research ability of Vietnamese researchers, strong dependence on overseas cooperation could suggest that the independent research capacity of the nation itself is weak.

On a different note, Hien's study (2010) revealed that the most published fields in Vietnam in 2008 belonged to natural sciences and engineering, including Mathematics, Physics, Chemistry, Engineering, Public, Environmental & Occupational Health and Medicine. Only three articles in social sciences from Vietnam were published in academic journals accredited by the ISI in 2008 (Hien, 2010). Another independent study from the Philippines shows that in the fields of education and psychology from the 1960s to 2000s, Vietnam was at the bottom of the total number of publication and number of productive authors, journal outlets, and total citations per country among the six countries investigated (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) (Vinluan, 2012). This information suggests that publication in social sciences is low and worth investigating.

As an attempt to understand the current situation of publishing activities in Vietnam and the relationship between Vietnam's higher education system (VHES) and the country's research outcome, this small-scale survey is a part of larger study which explores the engagement of Vietnamese social sciences researchers (VSSRs) with the global academia. This report concentrates on the challenges that VSSRs have to face when they publish their study internationally. VSSRs are targeted in this study firstly because of their limited number of international publications. In addition, they have received little attention from the government. Science and technology often receive most of the funding from the government and lies at the heart of the Vietnam education reform and investment (Pham, 2010). Social sciences are left to develop with their own resources.

While the reasons behind the low number of publications and engagement of VSSRs with the academia will be further investigated thoroughly and extensively in another article, this study attempts to answer these following research questions:

1. What are the challenges that VSSRs face when they publish their research results in international peer-reviewed journals and edited books?
2. How do they rank these challenges? What are the most significant challenges for them?
3. How can weaknesses in the VHES be reflected by the rate of international publications by Vietnamese researchers living in Vietnam?

To set the context for the study, I will firstly introduce the VHES and its weaknesses. These weaknesses are likely connected to the challenges that VSSRs have to face when they want to publish their research internationally.

## 2. Weaknesses in Vietnam's higher education system (VHES)

After the 1990s, the Soviet Union model of higher education institutions in Vietnam was replaced by a more westernized model of universities. In response to the globalisation and integration of the country after participating in the World Trade Organization, the Vietnamese Government issued Resolution 14 focusing on "Fundamental and Comprehensive Reform of Higher Education in Vietnam 2006–2020" (namely Higher Education Reform Agenda - HERA) to meet the demand for a professional workforce. HERA was promulgated in an attempt to increase the number of university students, to enlarge the number of qualified higher education staff, to establish research-orientated and vocational higher education institutions, to advance non-public universities and to nurture the advanced research and development culture

(Hayden & Lam, 2010). One of the key aims is to boost the research and development activities at universities from 2% (in 2010) to 25% by 2020. However, to carry out the higher education reform successfully, Vietnam needs to overcome six main weaknesses in its system: shortage of resources, shortage of labour market dynamism, out-dated teaching methods, ineffective governance, unproductive research activities and limited foreign language capacity, particularly English (Pham, 2010). Among these challenges, the shortage of resources, limited foreign language teaching capacity and especially unproductive research activities closely relate to the low number of international publications by researchers from Vietnam.

### *Shortage of resources*

Since Vietnam is still a developing country, the budget spent on higher education is limited. Although the percentage of Gross Domestic Product (GDP) spent on public education increased from 4.2 per cent in 2000 to 7.5 percent in 2007, only around 15 percent of this total expenditure was spent on higher and technical education (the remaining was spent on kindergarten and general education due to the government's desire to make this level of education accessible for all citizens). Vietnamese Government spends a very small amount of the GDP (0.5%) on research and development activities. The budget spent on research activities at tertiary institutions accounted for only around 4% of total annual government investment which was much smaller than that of countries like Thailand, Malaysia and Singapore (Hayden & Lam, 2010; Hien, 2010). Research institutions and universities in Vietnam mainly depend on the state budget (approximately 85%) (G. Harman & Le, 2010). The grants distributed to research projects and the selecting criteria are "neither transparent nor objective"(G. Harman & Le, 2010, p. 94). That discourages many qualified researchers at higher education institutions. This results in poor facilities and shortages of financial incentives for innovative ideas. The small investment of the government into research activities is likely to be a cause for the low number of international publications in Vietnam as researchers at Vietnamese universities have to struggle for finding funding for their research.

### *Unproductive research activities*

Although Vietnam has witnessed an increase in the number of enrolled students and universities opened recently, research activities at Vietnamese higher institutions are restricted and limited improvements in research activities have been recorded (G. Harman, Hayden, & Pham, 2010). In fact, research activity is not concentrated at higher education institutions in Vietnam due to many different causes (Hayden & Lam, 2010). Firstly, as a legacy of the Soviet Union's university model, research institutes are separated from higher education institutions. Hence, research activities are not paid enough attention at VHES and Vietnamese higher education institutions are rarely in charge of large-scale research activities. Vietnamese universities mainly provide an educated workforce instead of innovations. Secondly, the insufficient budget for research from the government and the lack of financial incentives from the commercial sector prevent academic staff from carrying out their research. Thirdly, the heavy workload of university lecturers allows little time for research. Fourthly, the infrastructure limitations and poor working conditions restrict researchers in theoretical research. Lastly, the bureaucratic administration contributes to the lack of motivation to carry out research among academic staff Vietnamese universities

mainly provide an educated workforce instead of innovations. Overall, Vietnamese researchers have to cope with many obstacles when conducting research.

The data from the Ministry of Education and Training (MOET) shows that during 1996 to 2002 universities and colleges under MOET carried out 3,800 research sub-projects and 90 ministerial-level projects (K. Harman & Nguyen, 2010). Qualified tertiary staff often carried out theoretical research based on their PhD training overseas. The low number of PhD students contributes to low number of research projects. For instance, in 2005 only 3.7% of total students were postgraduates and only 12% of these postgraduates were PhD students (G. Harman & Le, 2010). At many universities around the world, PhD students contribute significantly to research productivities. The small number of doctorates and the promotion procedures at Vietnamese universities (which are not sufficiently based on achievement) result in the modest number of publications produced by Vietnamese academic staff(G. Harman & Le, 2010). The World Bank's data (2008) showed that in 2003 all higher education institutions in Vietnam published around 500 articles. The average publication per academic staff was 0.39 for higher education institutions. The number of publications and their citation rate is small. The publications in humanities and social sciences are very rare or "non-existent"(Pham, 2010, p. 56).

In recent years, the Vietnamese Government and international organizations have paid more attention and invested more in research activities in VHES. However, these interventions have not proven effective. The main reasons again lie in the poor management and facilities, the separation of research activities from universities and the low investment from government. The HERA aim to boost research activities at higher education institutions in 2020 is likely to be unreachable.

### *Limited English capacity*

English is a core subject at school and a key foreign language for most programs at university, junior colleges and vocational schools in Vietnam (Nguyen, 2012). Since 2003, English has been integrated into the elementary education curriculum, being taught from the Third Grade with 70 hours per year. The Decision No. 1482 of MOET in 2010 specified English as the desired foreign language and one requirement for graduation at high school examination. It also occupied 98% of foreign language taught at tertiary level in 2012 (N. Nguyen, 2012). However, there is some scepticism as to whether these English programs bring about success. In fact, after more than two decades of introducing English programs, Vietnam is experiencing difficulties in the provision of quality English program. As highlighted by MOET (Nguyen, 2013), after seven years at school and two more years at college (900 learning hours in total) students still cannot communicate in English effectively. This is the results of "teachers' inadequate command of English, poorly designed teaching materials and the size and power structure of the typical classroom" (Kam, 2002, p.19). The ineffectiveness of the English programs in Vietnam also resulted from the lack of self-study and independent learning habits (which have not been properly cultivated), the exam-orientated curriculum (which focused on grammar, vocabulary and translation skills), and "the digital gap existing between rural and urban areas" (Nguyen, 2013, p.4). In addition, the fact that English is seldom used outside the classroom further exacerbates the problem. The limited proficiency of English among graduates might

also discourage the integration of Vietnamese higher education into the world of academia.

Overall, this section has pointed out three possible causes for the limited number of international publications. The whole picture is more complicated than this sketch, as the explanation for low publication might also extend to the competitiveness of publication industry, the use of language and the domination of Western research norms, and the concentration of academic centres in developed countries. However, we cannot deny that the weaknesses of VHES are main reasons leading to the low publication numbers of Vietnamese researchers.

## 3. The study's methodology and findings

### Research participants & methodology

As mentioned above, this report is part of a larger research project entitled the engagement of VSSRs with the global academia. This report used data from an online questionnaire using the Qualtrics program. The part of the questionnaire focusing on publications by participants was reported in this study. Seventy nine responses by Vietnamese researchers from various fields in social sciences were received in this questionnaire. Sixty-three percent of participants (50) are female. Although the questionnaire was published in various channels (including Vietnamese academia forums, emails, and research groups), and utilised the snowboarding technique, the survey did not have an equal distribution across researchers from different fields. The most numerous group of participants were Teachers of English to Speakers of Other Languages (TESOL) researchers followed by those working in education, literature and anthropology, history and public relations. The overwhelming number of researchers in TESOL and Education might be explained by the existing contacts that the researcher of this study had since his background was education. This, to a certain extent, may result in some bias in the results and requires caution when interpreting the data.

Table 1, 2, and 3 show the biographical data and academic background of participants.

**Table 1: Distribution of Participants' Age**

| Age | Responses | Percentage |
|---|---|---|
| < 25 | (4) | 5% |
| 25-35 | (47) | 59% |
| 35-45 | (24) | 31% |
| > 45 | (4) | 5% |
| Total | 79 | 100% |

**Table 2 & 3 Participants' education background**

| Degree | | Major | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TESOL | International Relations | History | Literature and Anthropology | Education | Psychology | Others |
| Bachelor | 53 (26 missing) | 20 | 2 | 2 | 6 | 2 | 2 | 19 |
| Master | 66 (13 missing) | 24 | 3 | 4 | 6 | 5 | 1 | 26 |
| Doctorate | 19 | 1 | 0 | 0 | 5 | 8 | 0 | 5 |

| Degree | | Countries in which qualification was obtained | | | | | |
|---|---|---|---|---|---|---|---|
| | | Vietnam | The USA | Australia | New Zealand | European countries | Other countries |
| Bachelor | 53 (26 missing) | 43 | 0 | 0 | 0 | 1 | 1 |
| Master | 66 (13 missing) | 29 | 6 | 13 | 6 | 7 | 5 |
| Doctorate | 19 | 4 | 4 | 9 | 0 | 1 | 1 |

It can be seen from Table 1 that most participants, are early-career researchers, aged from 25 to 35. Interestingly, Table 2 and 3 show that nearly all participants earned their Bachelor degree in Vietnam (N = 43) and among 66 participants who have Master degrees, 37 participants (56%) earned their degree in a Western country such as Australia, the United States of America and New Zealand. Nineteen participants had finished or were doing their doctorate degree in a variety of fields, most popularly Education, Literature and Anthropology.

Graph 1 shows the number of participants' years of teaching and of experience in conducting research. Participants' teaching experience varies from zero to 24 years while the number of years of researching experience varies from one to 40 years.



Graph 1 Number of participants' teaching years and research experience
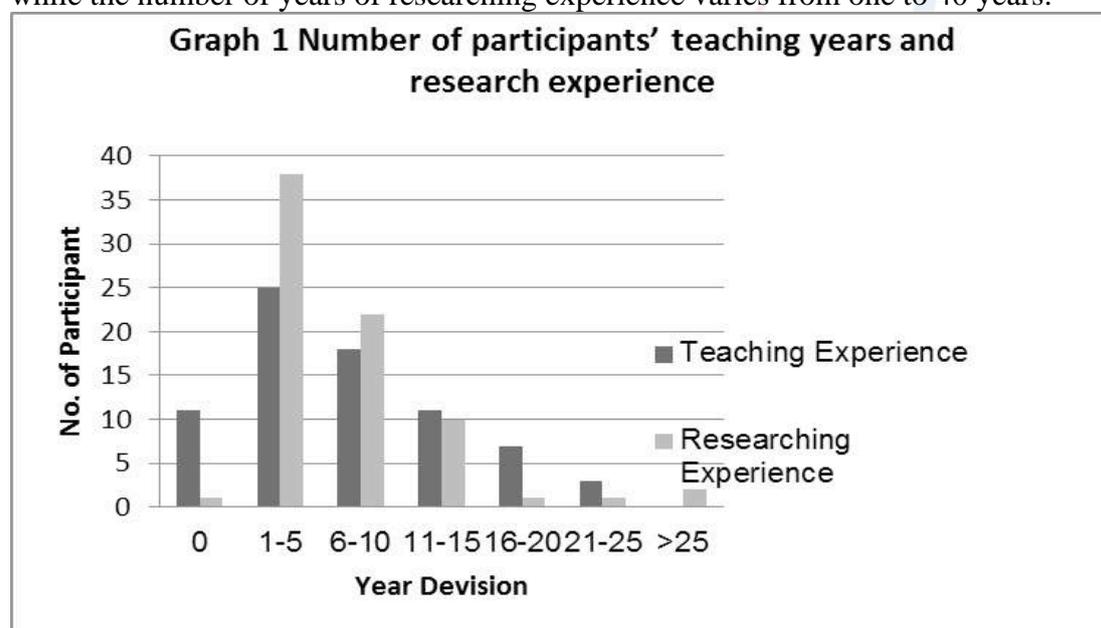
It can be seen from Graph 1 that most participants are in their early stages of their research and lecturing careers. This means that their research productivity is, as yet, limited. Given the comparatively short time that they have been employed as academics, they could be considered as active in their research career. Only two

participants have more than 25 years of research experience. In reference to language skills, all participants are able to use English while some can also use Chinese (n = 4), Russian (n= 3), Japanese (n=2), German (n= 1) and French (n=1).

Overall, the participant profile reveals that participants come from a variety of research backgrounds, most of them are early career researchers and the majority is well-qualified.

### *Participants' Research Production*

The first question asked participants to estimate the number of research outcomes they have published to date. Table 3 provides a summary of responses for this question.

**Table 4. Number of research outcomes that participants have produced**

| Number of academic articles/book chapters that you have | Number of articles/book chapters | | | | Total Responses | Mean of four groups |
|---|---|---|---|---|---|---|
| | 0 | 1-3 | 4-5 | >5 | | |
| published internationally in peer-reviewed journals | 52 | 19 | 3 | 2 | 76 | 1.41 |
| published internationally in edited books | 53 | 21 | 0 | 2 | 76 | 1.36 |
| published domestically in peer-reviewed journals | 22 | 33 | 13 | 8 | 76 | 2.09 |
| published domestically in edited books | 43 | 23 | 4 | 4 | 74 | 1.58 |
| submitted for publication in international journal being rejected | 58 | 15 | 0 | 1 | 74 | 1.24 |
| submitted for publication in domestic journal being rejected | 58 | 16 | 1 | 0 | 75 | 1.24 |

Not surprisingly, a lot of participants in this study have published neither in international nor domestic journals. The results show that fewer respondents have the experience publishing in international peer-reviewed journals and edited books than in domestic publications. The higher the mean value is, the more productive the researchers are. Means for international publications were 1.41 (in international peer-reviewed journals) and 1.36 (international edited books) while those numbers of domestic publications are 2.09 and 1.58 respectively. Only two participants who were the later career researchers have had more than five articles published in international peer-reviewed journals.

Table 4 shows that the VSSRs who responded to the questionnaire have quite limited number of publication. Many researchers responded that they did not have this experience. With a desire to give the participants the opportunity to tell about their experiences, the next question asked the participants to list five challenges that they had to overcome when publishing internationally. This is followed by the questions asking participants to rank some given challenges.

### *The challenges that VSSRs have to face when publishing their research in international academic journals or edited books*

English competence (and English writing skills specifically) was the most commonly-listed challenge in publishing internationally. This is in line with other studies by Man et al. (2004),Uzuner (2008) and Wallace (2009) on the problems that non-native researchers need to face when they publish in peer-reviewed journals. Some participants also reported that the limited knowledge of research norms and academic writing standard prevents their study from being accepted. Secondly, many participants said that they did not get support from their employers when publishing overseas, especially in term of funding and time. Some participants said that there was no difference if they published overseas or domestically – their employers did not appreciate it. Other reasons were the lack of information on suitable journals and the

high expectations of international peer-reviewed journals. Also, participants did not often have feedback from their colleagues and supervisors in Vietnam. Vietnamese participants expressed their lack of confidence in the quality of their study due to their "theoretical inadequacy" and knowledge on research methodology. Some participants were not confident about the originality and the novelty of their study – they felt that they were not able to contribute something to the theoretical framework or critical arguments on the issue.

### *Participants' rating of challenges*
Graph 6 indicates the participants' rating (10-score scale) of challenges for VSSRs in publishing their research in international peer-reviewed journals and edited books. Ten was equal to a significant challenge while zero was equal to not being a challenge for them. Results are presented as average value and standard deviation.



Graph 2. Rating of challenges for publishing internationally (10-score rate)
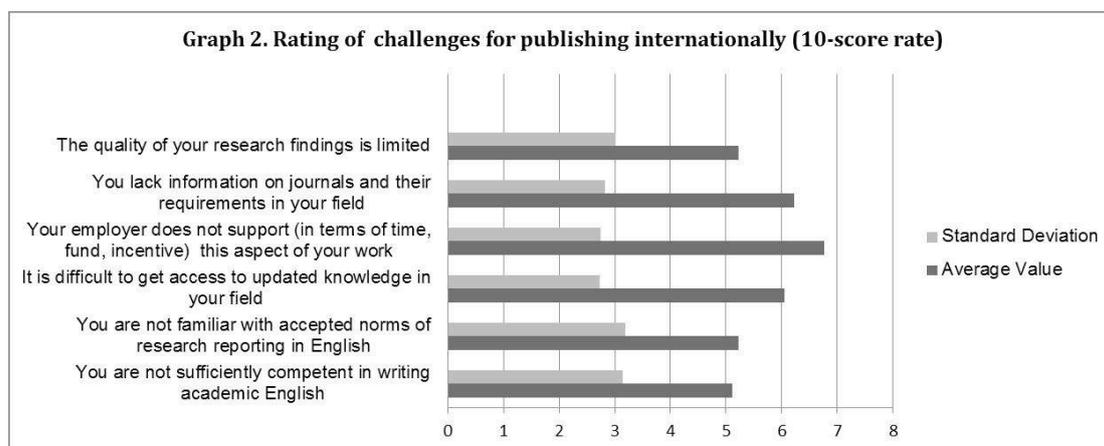
Although English was the most commonly listed challenges in the previous open-ended question, English was not rated as the most significant challenge. Participants ranked the lack of employer's support as the most significant challenge, followed by the lack of information on journals and their requirements as well as limited access to knowledge in their field. English writing competence and research quality, however, were the two least significant challenges in the rating. Accepted norms of writing research reports for peer-reviewed journal ranked higher than English writing competence itself. This is in line with studies by Li and Flowerdew (2009) and Flowerdew (2008) which point out that stylistic differences are one of the main reasons of rejections.

### 4. Discussions and Implications

For researchers from a developing country, English is their first barrier when they interact with the global academia. English is not only necessary for reading key articles in their disciplines and presenting their research in peer-reviewed English journals and at international conference but also for their collaboration with their international peers. The pressure of mastering English for researchers from non-English speaking countries is significant. The finding of this study has reconfirmed this fact. Many participants in this study reported that the limited English competence (especially academic writing skills) prevents their study from being accepted by international journals. However, English was ranked as less challenging than other factors may be due to the outnumbering of TESOL participants. Also, it might be because of the limited numbers of options provided in the rating question.

Furthermore, most of the participants in this study have studied overseas so they should have been familiar with academic English.

The globalization of academia has increased the demand for English. However, English has never been strength of Vietnamese researchers. As mentioned above, the quality of teaching and learning English in Vietnam is limited (H. T. M. Nguyen, 2011; N. Nguyen, 2012; T. T. T. Nguyen, 2012). As a result, few Vietnamese researchers trained in Vietnam are sufficiently proficient and confident in writing up their research report in English. The low competence of English among VSSRs also reflects the limited quality of English teaching and learning in VHES. In addition, limited proficiency in English prevents researchers from accessing and reading English specialist literature. Nguyen & Pham (2011) point out that English is one of the main reasons for the low contribution of Vietnamese science in global scientific outcomes. It might be true to say that English is the first obstruction for VSSRs to publish internationally. The English language barrier becomes more serious for those whose English is not their major and those who have not studied or worked in an English speaking country. Hence, investing in the quality of teaching academic English for their academic staff should be the priority of higher education institutions if they want to see more international publication from their staff. Moreover, this study suggests that making academic staff familiar with the English style of reporting research and providing them with a database of updated research in their field is an important job of higher education institutions. However, the findings also suggest that mastering academic English might be the prerequisite but not the sufficient condition for being an active researcher at the international level.

In developing countries, scholars with high fluency in English and active participation in international networks are often rewarded with funds for research activities and promoted to be the leaders of research communities (Altbach, 2013). For instance, if a domestic publication is highly related to the national context, it is still considered as less prestigious than one published in an international peer-reviewed journal. One article published domestically is surely unable to bring the scholars with as many opportunities in their career as one published internationally. However, in the context of VHES, this might not always be true. Some participants in this study reported that there is no privilege for them when they have already spent a lot of time for international publication. Their employer provides neither support nor encouragement for their international publication. This reflects the old-fashioned style of administration in the higher education system of Vietnam.

The limited resources for research activities in Vietnam are also reflected clearly in this study. The participants ranked the lack of funding and supporting from the government and institutions for their research activities as the most significant challenge. This perfectly reflects the first mentioned weakness of VHES. The findings partly reveal that the bureaucracy in higher education management create a research-unfriendly environment for VSSRs. It entails many difficulties for the researchers carrying out their research. In some cases, participants reported that they are demotivated due to the lack of incentives and appreciations from their employers. The research findings suggest that VSSRs may have limited interaction with the global academia. Participants reported that they could not access to the international literature in their field as well as the current trend of international research.

Although the study is limited due to a small sample size and the use of a single research instrument, it raises some useful suggestions for higher institutions in Vietnam as well as higher institutions from developing countries. Firstly, to raise the research outcome and improve research activities in Vietnam, Vietnamese higher education institutions as well as Vietnamese Government need to invest more in research activities. Also, they should set a standard for research findings following international standards and to reward researchers whose studies are published in international and domestic academic journals. Similar to Hayden and Lam's suggestions, this study also raises the concern on higher education's concentration more on "the commercialization of research and training opportunities" (2006, p. 12) and to be open to international cooperation in higher education. Actions are needed to improve the research skills of novice researchers at university. The sharing and collaboration among researchers is important. In order to do that, higher education institutions in Vietnam should create an environment that support the communities of VSSRs and encourage collaboration in research activities. Lastly, providing their academic staff with academic English courses and a computerized database for researchers in their institutions could be a practical option for government and higher institutions to consider.
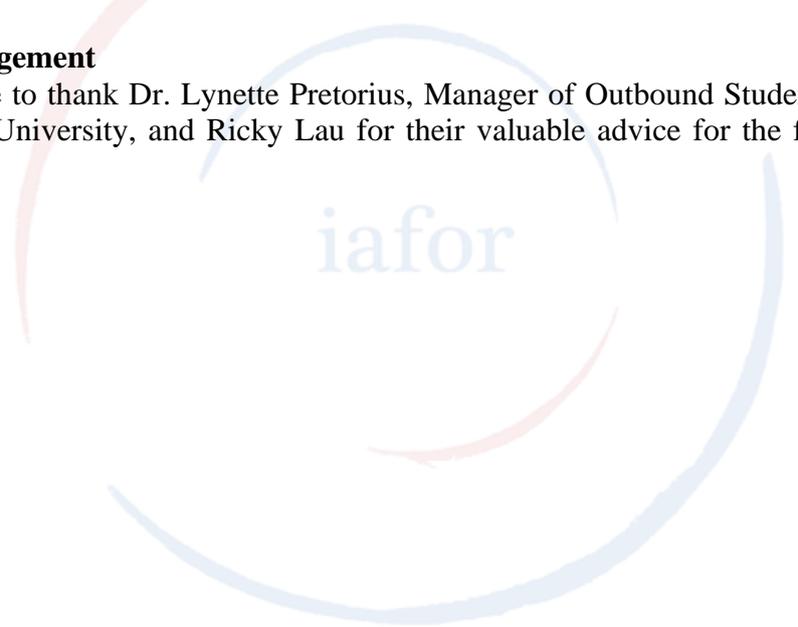
## Acknowledgement

## References

Altbach, P. G. (2013). *The international imperative in higher education*. Boston: Sense Publishers.

Archer, L. (2008). Younger academics' constructions of 'authenticity','success' and professional identity. *Studies in Higher Education, 33*(4), 385-403.

Ezeala, C. C., Nweke, I., & Ezeala, M. (2013). Common errors in manuscripts submitted to medical science journals. *Annals of Medical and Health Sciences Research, 3*(3), 376-379.

Flowerdew, J. (2008). Scholarly writers who use English as an Additional Language: What can Goffman's "Stigma" tell us? *Journal of English for Academic Purposes, 7*(2), 77-86.

Harman, G., Hayden, M., & Pham, T. N. (2010). *Reforming Higher Education in Vietnam: Challenges and Priorities*. Dordrecht: Springer.

Harman, G., & Le, T. B. N. (2010). The Research Role of Vietnam's Universities. In G. Harman, M. Hayden & T. N. Pham (Eds.), *Reforming Higher Education in Vietnam: Challenges and Priorities* (pp. 87-102). Dordrecht: Springer.

Harman, K., & Nguyen, T. B. N. (2010). Reforming teaching and learning in Vietnam's higher education system. In G. Harman, M. Hayden & T. N. Pham (Eds.), *Reforming Higher Education in Vietnam: Challenges and Priorities* (pp. 65-86). Dordrecht: Springer.

Hayden, M., & Lam, Q. T. (2006). A 2020 vision for Vietnam. *International Higher Education, 44*(Summer), 11-13.

Hayden, M., & Lam, Q. T. (2010). Vietnam's higher education system. In G. Harman, M. Hayden & T. N. Pham (Eds.), *Reforming Higher Education in Vietnam: Challenges and Priorities* (pp. 15-31). Dordrecht: Springer.

Hien, P. D. (2010). A comparative study of research capabilities of East Asian countries and implications for Vietnam. *Higher Education, 60*(6), 615-625.

Li, Y., & Flowerdew, J. (2009). International engagement versus local commitment: Hong Kong academics in the humanities and social sciences writing for publication. *Journal of English for Academic Purposes, 8*(4), 279-293.

Man, J. P., Weinkauf, J. G., Tsang, M., & Sin, J. H. D. D. (2004). Why do some countries publish more than others? An international comparison of research funding, English proficiency and publication output in highly ranked general medical journals. *European journal of epidemiology, 19*(8), 811-817.

Nguyen, H. T. M. (2011). Primary English language education policy in Vietnam: Insights from implementation. *Current issues in language planning, 12*(2), 225-249.

Nguyen, N. (2012). How English Has Displaced Russian and Other Foreign Languages in Vietnam Since "Doi Moi". *International Journal of Humanities and Social Science, 2*(23), 259-266.

Nguyen, T. T. T. (2012). English language policies for vietnamese primary schools and issues of implementation in rural settings. *The Journal of Asian TEFL*(Special Issue), 115-134.

Nguyen, T. V. (2009). Khoa học VN đang ở đâu trong năm 2009 ? [What is Vietnamese science's position in 2009?]. In T. V. Nguyen (Ed.), *http://tuanvannguyen.blogspot.com.au* (Vol. June 18 2014).

Nguyen, T. V., & Pham, L. T. (2011). Scientific output and its relationship to knowledge economy: An analysis of ASEAN countries. *Scientometrics, 89*(1), 107-117.

Nguyen, V. T. (2013). *TỪ NGHIÊN CỨU ĐẾN CÔNG BỐ KỸ NĂNG MỀM CHO NHÀ KHOA HỌC*. THÀNH PHỐ HỒ CHÍ MINH, Vietnam: NHÀ XUẤT BẢN TỔNG HỢP THÀNH PHỐ HỒ CHÍ MINH.

Pham, T. N. (2010). The Higher Education Reform Agenda: A Vision for 2020. In G. Harman, M. Hayden & T. N. Pham (Eds.), *Reforming higher education in Vietnam: Reform, challenges and priorities* (pp. 51-64). Dordrecht: Springer.

Ta, T. B., & Hoang, H. C. (2014). *Citation problems and plagiarism: A hindrance to Vietnamese scholars' integration into scholarly world.* Paper presented at the 5th Engaging with Vietnam: An interdisciplinary dialogue, Thai Nguyen, Vietnam.

The World Bank. (2008). *Vietnam: Higher education and skills for growth*. Washington, DC: The World Bank.

Uzuner, S. (2008). Multilingual scholars' participation in core/global academic communities: A literature review. *Journal of English for Academic Purposes, 7*(4), 250-263.

Vinluan, L. R. (2012). Research productivity in education and psychology in the Philippines and comparison with ASEAN countries. *Scientometrics, 91*(1), 277-294.

Wallace, S. (2009). *Nine Errors that Cause Chinese Research Papers to be Rejected*. Retrieved from http://www.phys.nctu.edu.tw/en/activities091029.htm

**Contact email:** cuong.hoang@monash.edu

# Integrated Curriculum & Pedagogy

Najah Al-Ramahi, University of Ajman of Science & Technology, UAE

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

An integrated curriculum offers a way of designing and structuring a school curriculum organised in terms of topics and themes, rather than a more traditional subject-based approach. It has been attempted in many systems, periodically attracting educationists and curriculum planners around the world and becoming a trend in curriculum and educational knowledge restructuring. Its protagonists, including some educational researchers and theorists, intend it to focus on its claimed advantages and capacity to enhance quality education. Change in the form of knowledge structure leads to change in pedagogic modality in the direction of one which emphasises ways of knowing, employing new teaching and learning methods. Yet, despite the widespread appeal of curriculum integration there is no agreement as to what can be integrated or how it can be achieved. An examination of the literature shows that there is lack of consensus on two main issues. First, as with "curriculum" there is no one agreed definition or meaning and secondly, there are no specific methods for its establishment in school practice. This paper aims to review the literature on the integrated curriculum in two main sections. The first focuses upon definitions, aims and features of "integrated curriculum", and the third is devoted to review of Bernstein's work and particularly his theory of curriculum and pedagogic practices.

iafor

The International Academic Forum
www.iafor.org

**Introduction**
The meaning and definition of the term 'curriculum' continue to be contested and, in turn, gives rise to different prescriptions and practices. These have shifted over time, with a tendency to place more or less emphasis on content and pedagogy. They have been shaped by the contributions of psychologist, philosophies and sociologists of education and, more recently, by politicians. The contest may be viewed as one for the definition and control of knowledge as a mean of regulating the distribution of power in society. It has not just been over the control of the formal curriculum but also the informal or 'hidden' curriculum, which shapes individuals' wider attitudes and beliefs (Kelly, 1989). As Goodson (1988) argued, the 'struggle' over the curriculum is a matter of social and political priority as well as intellectual discourse. The main aim, therefore, is in the ways in which knowledge is selected, distributed and evaluated in the context of the social system in which it takes place (Bernstein, 1971, 1977, 1990, 1996, 2000).

Reading literature, integrated curriculum is discussed across all curriculum subjects, e.g. Bewer (2002); and Venville, and others (2002). It has been attempted in many countries and attracted many educationists and curriculum planners all around the world, some educational researchers and theorists, tried to focus on its advantages and capacity to achieve better education quality. As Costley (2015) puts it, 'integrated curriculum has many different meanings. Everyone has his or her own definition of an integrated curriculum' (p. 2).

**Integrated Curriculum Definitions**

According to Bernstein (1971), integrated curriculum 'refers minimally to the *subordination* of previously insulated subjects *or* courses to some *relational* idea, which blurs the boundaries between the subjects' (original emphasis). He emphasised that integration means to link insulated subjects around main topics, themes or ideas:

'In order to accomplish any form of integration, there must be some relational idea, a supra-content concept, which focuses upon general principles at a high level of abstraction' (p. 60).

Bernstein (1971) argued that such change in the form of knowledge structure leads to change in pedagogic modality in the direction of one which emphasises ways of knowing, employing new teaching and learning methods which focus on how knowledge can be created and taking pedagogical process away from focus the mastery of insulated subjects.

In his analysis of integration, Bernstein (1971) distinguished between teacher-based integration and teachers-based integration, suggesting that the former is easier to introduce than the latter as practices and meanings will tend to be vary in terms of the number of teachers involved in its implementation. Integration may be confined to one subject as, for example, in science, or run across subjects.

Drake and Burns (2004) had a more general view about integrated curriculum by saying: 'in its simplest conception, it is about making connections' (p. 7).

Gehrke (1998) defined integrated curriculum as educational knowledge restructuring which aims to meet students' needs and satisfy their wants, his 'supra-content concept', in Bernstein's term. He added,

'It (integrated curriculum) is a collective term for those forms of curriculum in which student learning activities are built, less with concern for delineating disciplinary boundaries around kinds of learning, and more with the notion of helping students recognize or create their own learning' (p. 248).

This definition emphasises the idea that integrated curriculum organises educational knowledge so that learning activities are prepared to meet students' needs and to encourage them to active involvement in the process of their learning using techniques, such as research projects, learning by doing and problem solving. Here students try to think and to act as historians or mathematicians, for example, rather than to memorise written facts in different subjects and to be given relatively more freedom and autonomy in the learning process than is permitted in more subject discipline centred constructions. In other words, Gehrke (1998) saw integration not as an end in itself but as the means to achieve another important goal: changing pedagogy so as to stress various ways of knowing rather than emphasising the status of received knowledge, echoing Bernstein's initial description of the modality.

Warwick (1972) used the term integrated studies rather than integrated curriculum, defined as 'two or more teachers united to inaugurate the study of some common issue, making use of the skills and techniques of a variety of subjects and disciplines in order to present and evaluate the discoveries made by the children during a given period of study' (p. 42).

Warwick (1972) related the idea of integrated curriculum to team teaching but this is a contingent relationship.

Kysilka (1998) reviewed some of the different definitions provided in the literature, including that of Jacobs's (1989), which focused on type and degree of change that happens to the disciplines and whether they remain separate entities, taught in regular time-frames, or their boundaries break down, requiring new time-tables. Fogarty (1991) was more concerned with the 'how', or pedagogy, rather than the organisational structure of the curriculum. Drake (1993) used the terms multidisciplinary, interdisciplinary and transdisciplinary to refer to different types of integrated curriculum (as cited by Kysilka, 1998, p. 202-203). Multidisciplinary refers to the same topics or themes addressed by different subjects, interdisciplinary refers to specific skills, processes or ideas that are common to all disciplines and transdisciplinary refers to curriculum planning which focuses on a 'life-centred approach', where knowledge is taught as it exists in the real world. Kysilka (1998) argued that the current use of such a variety of curriculum terminology indicates a continuum of thinking with respect to the role which subject matter can play in its organisation, as well as the roles which 'processes' and teachers and learners can play in its development and conduct.

It might be that the case is even more complex as the literature provides more and more underlying theories (frameworks of planning) for such integrated curriculum. 'The attention to integration is growing exponentially and with such rapid growth

comes confusion, uncertainty and concern over exactly what is meant by integration and how schools ought to go about implementing such ideas' (Kysilka, 1998, p. 198).

Differences in definition also arise from different models for planning and the different practical implications and sequences inherent in the implementation of each particular model. This leads us to acknowledge that different models of planning for integrated curriculum also lack a basis in consensus, creating large amounts of potential confusion for both teachers and curriculum planners and making their accomplishment rather difficult. Although an 'integrated curriculum' may achieve a child-centred approach for curriculum knowledge restructuring which may be regarded, as will be considered later, inter alia, as advantageous, this does not remove difficulties with its meaning which will depend on: whether part or the whole of the school curriculum is to be integrated; whether only some subjects are integrated subjects and for which cycle (stage); to what extent the curriculum to be integrated; and in what ways this will be planned and approached at practice. According to Kysilka (1998):

'At the moment it seems that integration means whatever someone decides it means, as long as there is a 'connection' between previously separated content areas and/or skill areas. Before any teachers or administrators can successfully plan for integrated curriculum, a much clearer concept of what is meant by integration needs to be understood' (p. 198).

**The aims of curriculum integration**

Warwick (1972) claimed that integration is a more rational and human approach for curricular planning than classification on the basis of a division of knowledge taken from past generations. He contended that,

'Subject integration arises from a desire to pursue broader topics of immediate interest laterally over a widely defined area rather than following a series of seemingly unconnected items in multifarious random directions. It strives to develop 'whole' personalities by restoring some of the 'wholeness' to knowledge' (p. 10).

Moreover, '(E)nquiry, research, and discovery are the qualities at a premium in the modern world. These are the methods of approach almost universally adopted by Integrated Studies' (*Ibid.*). Thus, the main aim and most significant value of integration is to prepare and to qualify youngsters to cope with the modern world and its requirements which rely on searching and learning by discovery. 'This is achieved by re-grouping the standard subjects, or certain aspects within them, in a fashion more related to the world in which the pupil lives' (*Ibid.*), aiming to relate school knowledge to pupils' own experiences and lives and, in so doing, enhancing their enjoyment of learning as it relates to their everyday's reality, and maybe adapted to their life's problems and demands.

Skilbeck (1976) questioned the reasons for and intended aims of integration, asking: integrated for what? Is the reason pedagogical in a more limited sense of composing and creating efficient strategies of learning? Is the aim to enhance collaborative work between different teachers in order to learn from each other, to exchange their expertise and to reflect on each other? Is it the aim to make pupils think about the

similarities, connections and overlap between different disciplines? The answer may vary from one project to another and sometimes attempt to incorporate all of these, or even more, like motivating pupils, creating positive attitudes towards schooling and creating a link between school knowledge and outside knowledge (home or community knowledge) based on the proposition that schooling should qualify and prepare youngsters for their future life and render them more able to cope with real life difficulties.

Reading the literature and research undertaken to investigate integrated curriculum proposals or projects and their practice in schools leads one to conclude that most of them express as their most frequent aim concentration on pupils' needs and requirements or a child-centred approach in the curriculum (Riquarts & Hansen, 1998; Campbell, 1999; Hansen & Olson, 1996). For example, Riquarts and Hansen (1998) investigated science integration that sought to take into account the interests preconceptions, abilities and special needs of students, as well as an opportunity for a shift to more pupil centred teaching and learning which took pupils' demands more seriously. Hansen and Olson (1996) investigated teachers' conceptions of discipline and pedagogy and dealt with the changes in teacher thinking necessary to cope with integrated curriculum. They considered that a main aim of the Science, Technology and Society scheme in which they studied teachers' views, was to help students to cope with real life problems by selecting contents which related to them. Focus on child centred approaches in curriculum design are explored further in the following section.

## Features of Integrated Curriculum

It has already been noted above how sometimes extravagant claims made in the international literature for integrated curriculum have led to it being described as the solution to many educational issues because of its capacity to enhance quality education by employing 'child-centred' or 'progressive' approaches to curriculum design, relying on activities which are directly related to students' interests and needs. The notion of child-centeredness was expressed by Whitfield (1971) who considered that changing emphases within curriculum were influenced largely by the social sciences, in particular, psychological research about learning. More precisely, this has influenced methods of teaching rather than the content of what is taught.

Child-centred approaches place emphasis on children and their needs in the educational process rather than traditional classifications based on subject matter or conceptions of societal imperatives. Skilbeck (1976) claimed:

'The progressive education movement of the inter-war years drew attention to pupil choice, the claims of children's expressed interests as a criterion for selecting curriculum content, and the educational value of a texture of interpersonal relationships in groups and small-scale communities' (p. 123).

He considered the practical implications of integrated curriculum to be that relations between teachers and pupils become less authoritarian or hierarchical and more collaborative, co-operative and communicative. Focus shifted from how much information pupils' acquired and memorised to processes of thinking and searching for facts. At a lower level, between pupils themselves, relations tended to become

more collaborative, enhancing discussion and interpersonal relations between pupils who mostly worked in small-scale groups.

Kysilka (1998) also pointed out important possible features of an integrated curriculum which constituted advantages for education. Most of these insisted on the importance of students' participation in the learning process:
'Genuine learning takes place as students are engaged in meaningful, purposeful activity' (p. 198). Activity here indicates that learning should include practical activities which take the form of 'learning by doing', where the learner learns through those undertaken. The success of this method depended on the extent to which the curriculum is integrated. Hierarchy decreased between teachers and students as they worked co-operatively to ensure successful learning.

There is a pervasive tendency among authors and writers to suggest that integrated curriculum will create a type of learning and restructure knowledge in ways that are more related to real life problems, enabling learners to gain skills which are connected to daily life. This idea assumes that schooling ought to qualify youngsters for their future as 'good' adults, enabling them to deal with different problems they might encounter in their lives. Nagel (1996) emphasised the importance of employing such real-world problem solving in creating a meaningful context for learning. 'Students are engaged in learning situations that reflect interactive learning in the real world' (p. 198).

**Integrated curriculum and pedagogy**

Integrated curriculum change can best be described as manifold, where changing the structure of educational knowledge from subject to topic based is associated with changing teaching and learning methods to become more child-centred, where meeting pupils' different educational, personal and pastoral needs are considered to be high priority. This would shift teaching methods to those which emphasise the acquisition process, where pupils are more active and required to be self-regulators in their learning, which may require material resources, worksheets, new types of teacher questions which excite broad inquiry and searching and working collaboratory with other pupils. Teachers will be constrained to give more time to specific skills in order to meet pupils' different needs and to work with groups according to ability. In pedagogical terms, the use of time and space, the organisational structure of the classroom and the nature of pupil work relations and grouping all need to be considered.

Alexander (1992) pointed out that the curriculum consisted of the 'what' of education and teaching consisted of the 'how' and that the 'what' and 'how' are inseparable 'as that the teacher's classroom strategies are what transform curriculum from a mere bundle of inert ideas to experiences through which children learn (p. 59). In this sense, therefore, the 'how' and 'what' of education are one' (*Ibid.*). It is in these terms that we should understand the importance of professional development for teachers and their participation in matters of planning and creating a supportive learning and teaching environment if classroom practice is to be enhanced, whether in respect of integrated curriculum planning and implementation or any other. So we can recognise that there is an overlap between 'what' and 'how', changes happened in

one would enforce change the other.  Bernstein's sociological analysis of this matter is expanded upon later and discussed in the following section.

As changing 'what' tend to enforce change in 'how', so changing 'how', or teaching methods, is likely to enforce change in classroom organisation and the timetable. Alexander (1992) discussed 'flexible teaching strategies' and the ways in which they might be successfully established in practice.  He investigated different types of classroom organisation and the ways in which time is used and impacts upon practice within them.  He considered how different types of classroom organisation, in terms of grouping pupils, gave teachers the flexibility to move freely in their classrooms, giving attention and supervision both to individual pupils and groups, including the class as a whole, providing an advantage which can be difficult to find in the traditionally organised classroom with its desks in rows.  He called for further investigation to question the effectiveness of grouping, for 'the strategy of grouping has become an end in itself rather than a device adopted for particular educational purposes' (*Ibid*., p. 67) as well as of classroom contexts, where both curriculum specific areas and grouping children were two teaching strategies used to maximise the opportunity of teacher-child interaction, as well as to encourage co-operation between pupils and flexibility in curriculum delivery.

All of these ways of picturing changing types of pedagogy also see it as associated with changing the structure of educational knowledge and suggest that teachers' roles would also be changed.  Bernstein (1977) described the change in teachers' role as being from solution giver to problem-poser or creator. Just as content and pedagogy cannot be separated, neither can teacher nor pupil roles.  Bernstein (1977) suggested that pupils were given greater choices which created a wide range of autonomy in de-contextualised learning processes:

'The pupil's role is less clearly defined. Of equal significance, his role conception evolves out of a series of diverse contexts and relationships.  The enacting of the role of pupil reveals less his similarity to others, but rather his difference from others' (p. 72).

**Bernstein's theory of curriculum and pedagogy**

Bernstein developed his ideas over time to provide a sociological analysis which related processes of educational change to wider social factors.  His earlier work (Bernstein 1971, 1973, 1977) raised crucial questions about schooling, curriculum and pedagogy analysed by using the terminology of classification and framing, to explain the various types and structures of curriculum and pedagogical practices.  He attempted from the start to relate the analysis of micro processes of schooling to the macro level of analysis, the distribution of power and principles of social control.  In the later work (Bernstein 1990, 1996), his analysis became more complex and abstract in an attempt to provide and develop a model which could be generalised and used in different social contexts.  In this work he developed a theoretical model of what he called the pedagogic device, which he claimed was able to handle analysis at both micro and macro levels and to connect the macro level of knowledge and policy production to the micro level of school practice.  This was considered important in order to understand education processes in the light of wider social, economic and political factors, to understand the production of specific types of pedagogic practices and associated changes in consciousness in the light of the structure of a particular

society and its distribution of power and its dominant cultural categories and forms of symbolic control.

In his ground-breaking paper, *On the Classification and Framing of Educational Knowledge, in 1971,* Bernstein introduced two types of educational codes, integrated and collection. Educational knowledge code refers to the underlying principles which shape curriculum, pedagogy and evaluation.  He used the term classification as underlying principles that define the structure of different types of curricula and framing to the underlying principles which identify different types of pedagogies. Bernstein (1971) argued that there is no definite criterion to determine the relative status of specific type of curriculum structure. He pointed out that the form that this code takes depends upon the social principles which regulate classification and framing, 'there is nothing intrinsic to the relationships between contents… the *forms* of their transmission, that is, their classification and framing, are social facts' (p. 49). He also showed the impact of distribution of power and social control over the selection, organisation, transmission and evaluation of educational knowledge in classroom contexts.

The strength of boundary between contents (or classification) determines the form which curriculum takes, producing different types of collection and different types and degrees of integration.  He discussed the consequences of establishing integrated codes in terms of weak classification and framing.  The most important of these were that:

1. An integrated code may set up requirements for a different form of socialization between staff members, teacher and pupils and maybe between pupils themselves, appropriate to the changes in the structure of knowledge.  This new type of teacher and pupil socialisation emerges as a result of changing the power relationship from vertical, a more hierarchical, to horizontal form, or symmetrical, or less authoritarian relationship, those lower down a hierarchy, teachers and pupils, being given more status, autonomy and choice, enabling them to exert some power to influence the 'what' and 'how' of educational knowledge.  As a result of changing the power structure, new types of teacher and pupil interactions result, which also produce new educational identity.  The 'new type of organisational structure' changes power relationship not just between teacher and pupils but also between staff members and among pupils themselves;

2. Integrated codes require a different concept of skills for both teacher and taught. '…whole varieties of skills reduces the significance of context-tied operations and increases the significance of general principles from which a range of diverse operations may be derived' (Bernstein, 1971, p. 67).  These new skills required from teachers are related directly to the importance of using teaching methods which give pupils more control over their learning and result in new types of teacher/ pupil interaction; and

3.  '(T)he less rigid social structure of the integrated code makes it a potential code for egalitarian education' (*Ibid*.), promising to allow all pupils to fulfil their personal and educational requirement.  This type of education may best to be described as '*Learning (or education) for all',* designed to meet pupils' different educational and

learning needs, while regarding all as equal and sharing common characteristics. This notion is similar to what Bernstein (1990) argued later about invisible pedagogy:

'Invisible pedagogies are less concerned to produce explicit stratifying differences between acquirers because they are apparently less interested in matching the acquirer's text against an external common standard. Their focus is not upon a 'gradable' performance of the acquirer but upon procedures internal to the acquirer …as a consequence of which a text is created and experienced. These *procedures of acquisition* are considered to be shared by all acquirer, although their realization in texts will create differences between acquirers… But these differences do not signal differences in potential, as all acquirers are judged to share common procedures' (p. 71).

Later, in 1996, Bernstein stated that a main feature of the social logic of a competence model of pedagogy, previously referred to as invisible pedagogy, was, 'an announcement of a universal democracy of acquisition. All are inherently competent and all possess common procedures. There are no deficits' (p. 56).

Bernstein (1971) suggested that change to an integrated code might indicate a crisis in society's basic classifications and frames, so that it might represent an attempt to declassify and alter power structures and principles of social control; 'in so doing to unfreeze the structuring of knowledge and to change the boundaries of consciousness' (p. 67). From this point of view, integrated codes are 'symptoms of a moral crisis rather than the terminal state of an educational system' (*Ibid.*).

In his article, *Social Class and Pedagogic Practice,* Bernstein (1990) distinguished between two generic types of pedagogic practice, according to three main principles, or rules, which regulate and act as their inner logic. These are rules of hierarchy, sequencing and pacing, and criterial rules. Differences in these three rules can produce and constitute completely different forms of pedagogic practice in terms of their degree of explicitness. Visible pedagogy was where hierarchy, sequencing and pacing and criterial rules are explicit, invisible pedagogy where they are implicit. In both forms of pedagogic practice, the rules of hierarchy are considered to be prior and dominant, regulating and establishing what regarded as appropriate conduct, order, character, and manner to produce a legitimate relationship between transmitters and acquirers. He calls these 'regulative rules' and the other two 'instructional', or *discursive* rules.

'the inner logic of pedagogic practice as a cultural relay is provided by a set of three rules, and the nature of these rules acts selectively on the content of any pedagogic practice. If these rules constitute what can be called the 'how' of any practice, then any particular 'how' created by any one set of rules acts selectively on the 'what' of the practice, the form of its content' (p. 63).

He went to say '(W)hen I refer to the inner logic of a pedagogic practice I am referring to a set of rules which are prior to the content to be relayed' (p. 64). For example, if the curriculum is in a form of highly classified subjects, we expect explicit hierarchical, sequencing, pacing, and criterial rules to be explicit. These rules are prior to content, determining the shape of curriculum, or the 'what' of educational knowledge. Analysing for type of curriculum involved search for these three rules

which constitute the type of pedagogic practice. As Davies (1995) put it 'the study of curriculum has refocused within a broad conception of pedagogy' (p.189).

In a more updated paper, *edagogizing Knowledge: Studies in Recontextualizing,* in 1996, Bernstein provided an even more developed analysis refined through considerable empirical study. He contrasted two generic modalities of pedagogic practice: competence, or invisible and performance, or visible pedagogy. Contrast is made between these modalities of pedagogic practice in terms of eight categories which act as an inner logic or principles or main themes through which he organised his discussion. These categories are time, space and discourse; orientation to evaluation; pedagogic control; pedagogic text; pedagogic autonomy; and pedagogic economy. In this paper we may note that 'time', 'space', 'autonomy' and 'economy' are all highlighted as aspects through which we can see differences between modalities of pedagogic practice alongside 'content', that Bernstein (1996) had made the process of educational transmission, or 'how' the fundamental element, prior to 'content', or the 'what' of educational knowledge. Discourse with respect of educational content refers to its form, whether in terms of specialised subjects or themes, or projects which require the acquirer to be actively participative in the process of its acquisition.

It is worth mentioning that the brief discussion in this paper on *edagogizing Knowledge: Studies in Recontextualizing* has only been an overview of an extensive issue that requires more in depth discussion. This will therefore be followed up in a separate paper to discuss it more clearly.

## References

Alexander, R. (1992). *Policy and Practice in Primary Education*. London: Routledge.

Alexander, R. (1997). *Policy and Practice in Primary Education: Local Initiative, National Agenda.* Second Edition. London : Routledge.

Bernstein, B. (1971). On the classification and framing of educational knowledge. In: M. Young (Ed.), *Knowledge and Control. New Directions for the Sociology of Education*. London: Collier-Macmillan.

Bernstein, B. (1973). *Class and Pedagogies: Visible and Invisible.* Paris: OECD, CERI Paris.

Bernstein, B. (1977). *Towards a Theory of Educational Transmissions; Class, Codes and Control.* Vol. 3. (Second Edition). London: Routledge and Kegan Paul.

Bernstein, B. (1990). *The Structuring of Pedagogic Discourse: Class, Codes and Control*, Vol. 4. London: Routledge.

Bernstein, B. (1996). *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique.* London: Taylor & Francis.

Bernstein, B. (1999). Vertical and horizontal discourse: an essay. *British Journal of Sociology of Education.* Vol. 20, No. 2, pp. 157-173.

Bernstein, B. (2000). *Class, Codes and Control: Vol. V, Pedagogy, Symbolic Control and Identity* (Revised Edition). Oxford: Rowman & littlefield.

Brewer, T. (2002). Integrated Curriculum: What Benefit? Arts Education Policy Review. Volume 103, Issue 4, 2002.

Campbell, A. (1999). An Integrated Curriculum for English, Media and Drama at KS 4. *English in Education.* Vol. 33, No. 1, pp. 13-23.

Costley. K (2015) Research Supporting Integrated Curriculum: Evidence for using this Method of Instruction in Public School Classrooms . Arkansas Tech University. USA.

Davies, B. (1995). Acquiring the means of acquisition: is pedagogic practice a crucial variable? *International Studies in Sociology of Education*. Vol. 5, No. 2, pp. 189-202.

Drake, S. & Burns, R. (2004) *Meeting Standards Through Integrated Curriculum.* Association of Supervision and Curriculum Development (ASCD), Alexandria, VA. USA

Fogarty, R. (1991). Ten ways to integrate curriculum. *Educational Leadership*. Vol. 49, No. 2, pp. 61-65.

Gehrke, N. (1998). A look at curriculum integration from the bridge. *The Curriculum Journal.* Vol. 9, No. 2, Summer 1998, pp. 247-260.

Goodson, I. (1988). *The Making of Curriculum: Collected Essays.* London: Falmer.

Hansen, K.-H. and Olson, J. (1996). How teachers construe curriculum integration: the Science, Technology, Society (STS) movement as Bildung. *Journal of Curriculum Studies.* Vol. 28, No. 6, pp. 669-682.

Kelly, A. (1989). *The Curriculum: Theory and Practice*. 3rd Edition. London: Paul Chapman.

Kysilka, M. (1998). Understanding integrated curriculum. *The Curriculum Journal.* Vol. 9, No. 2, Summer 1998, pp. 197-209.

Riquarts, K., and Hansen, K. (1998). Collaboration among teachers, researchers and in-service trainers to develop an integrated science curriculum. *Curriculum Studies.* Vol. 30, No. 6, pp. 661-676.

Robertson, C., Cowell, B., and Oslon, J. (1998). A case study of the integration and destreaming: teachers and students in an Ontario secondary school respond. *Journal of Curriculum Studies.* Vol. 30, No. 6, pp. 691-717.

Skilbeck, M. (1976). Forms of curriculum integration. In: Williams, M. (ed.) *Geography and the Integrated Curriculum.* London: Heinmann Educational Books. pp. 123-128.

Venville, G., and others (2002) Curriculum Integration: Eroding the High Ground of Science as a School Subject. Studies in Science Education. Volume 37, Issue 1, 2002.

Warwick, D. (Ed.) (1972). *Integrated Studies in the Secondary School.* London: University of London Press.

Whitfield, R. (1971). Curriculum in crisis. In: R. Whitfield (Ed.), *Disciplines of the Curriculum.* Maidenhead: McGraw-Hill.

## *Early Childhood Care Education in Nigeria: Problems and Prospects*

Esther Chinedu Wordu, Department of Early Childhood Care and Education, Federal College of Education, (Technical), Omoku, Rivers State, Nigeria
Monica Wosowei, Department of Early Childhood Care and Education, Federal College of Education, (Technical), Omoku, Rivers State, Nigeria
Ezekiel Onwubuche Achinihi, Department of Early Childhood Care and Education, Federal College of Education, (Technical), Omoku, Rivers State, Nigeria

**Abstract**
Early childhood education is the bedrock of basic education, it is the education of children between the age of 0-5 years, hence the government involvement in ensuring that every Nigerian child acquire this level of education for all Nigerian children irrespective of their ages. This paper examines the early childhood education in Nigeria; the problems and prospects, it appraises the objectives of this level of education. It also points out that government's role in early childhood are basically supervisory. Thus the major players in the provision f early childhood education are the private individuals. The contributions made by some interest groups and institutions in early childhood where pointed out. Many problems have been indentified including the high fees charged and lack of official policy regulating the payment of teachers. It is recommended that government should ensure compliance with regulations by the operators of the pre-primary schools.

iafor

The International Academic Forum
www.iafor.org

**Introduction**
Education is one of those things that no society can plan for and entrust upon another. This is because education is an important instrument in the development of any nation. It is the process by which an individual is assisted to acquire the cherished norms, attitudes, values, skills and knowledge that will enable him or her to live a useful life both for himself or herself and the community to which he or she belongs. Adeyemo (1992) view education as an art of teaching and training the young. This implies that education is both 'task' and 'achievement', the former embraces the various ways of initiating people into what is worthwhile. Looking at the various definitions and views of education, one can agree that every society or race has a form of training its young ones since children are expected to be future leaders. The culture of the society is passed to the young ones through education. Supporting this view, Osanyin (2002) said that no nation can afford to neglect the education of children because the children are the future assets of their various societies. Thus, such an education starts from the early years of life with the society supporting, stimulating and finding the development process of the child. Nigeria educationist have realized that the future of the Nigerian society depends on laying a sound foundation for the children in the early years of life (Osanyin, 2002). Accordingly, the national policy on education (FGN 2004) has laid down guidelines on all levels of education including early childhood education.

**Definitions of Early Childhood Education**
Early childhood education has been variously defined by educationists under such names as nursery school, primary school and pre-primary school education. Maduewesi (1999) saw early childhood education as:

> … a semi-formal education arrangement usually outside the home, whereby young children from about the age of three(3) are exposed, through play like activities in a group setting, to mental, social and physical learning suited to their developmental stage, until the mandatory age of government approved formal school.

The National Policy of Education (2004) in section 2 paragraph 9 refers to it as pre-primary education. It defines early childhood education as "the education given in an educational institution in children aged 3 to 5+ prior to their entering the primary school. Obinaju (2004) defines childhood education as the education and training given to the children from the moment of birth to the period of adolescence. Ti starts from the time when the child is totally dependent on some other people for survival and the satisfaction of needs to a time when, he can survive on his or her own.

**Development of early childhood education**
The beginning of early childhood education starts from the homes or families and even up till today in some places, parents and relatives are still solely responsible for teaching and bringing up of their young children according to the tenets of their localities. According to Ushie (2004), among early advocates of nursery education was Plato who integrated a community school for very young children in his Ideal Republic. Comenius is generally credited with the establishment of the first nursery school. In English, the MacMillan sisters (Margaret and Rachel) started the education of young children in cooperation with hospitals, where they combine pedagogy with psychology and hospital experience in nursery education under medical supervision.

This seems to have given the initial care by the nurses to the children, the popular name "Nursery school". That, the First Public Nursery School in the United States of America was opened in 1919. Most of the early nursery schools were affiliated with universities and established as laboratory schools for the preparation of childhood education leaders and for the systematic study of young children. Another contributor to our knowledge of early childhood is Jean Piaget, the Swiss psychology who was interested in the study of the process of human intellectual development. He concluded from his numerous researches that:

a)     Intelligence emerges from a child's sensory experience with concrete objects which he can act upon.

b)     Language development is essential to increase power of thinking.

c)     Repeated exposure to a thing or an idea aids comprehension.


**Types of Early Childhood Education**

According to Ekeatte (2000), pre-school education institutions are classified into two major classes which are:

a)     The Nursery: As a result of the interest generated in pre-education in Nigeria in particular, variety of names have emerged as listed below:

❖     Nursery classes
❖     Day nursery schools
❖     Day nursery/primary school
❖     Residential nursery/primary school
❖     College/university daycare/nursery centre
❖     Daycare centres
❖     Child minders
❖     Play groups


b)     The Kindergarten: This is the highest class of nursery provision. These schools are often attached to primary schools and are included in their overall statistical report. These following have been suggested as the functions of kindergarten.

To assist the children develop:

a)     Friendliness and helpfulness in relationship with other children.

b)     Great power to solve problems based on individual activities and group relationships.

c)     Respect for the rights, properties and contributions of other children

d)     Responsiveness to intellectual challenges.

e)     Achievement of good sensory-motor co-ordination

f)     Understanding of concepts necessary for continued pursuit of learning.

g)     Responsiveness to beauty in all forms

h)     Realization of individuality and creative propensities.


**Early Child Education in Nigeria**

According to Ekaette (2000) the history of pre-school education in Nigeria can be traced to the colonial days when it was preserved for the children of the colonial masters. Although, the fees for this type of education was high, with increase I industrialization and employment facilities in Nigeria especially few years after the independence, some Nigerians participated in sending their children to the pre-school institutions where these children will be taken care of before the parents are back from work and where they would learn in preparation of entering primary schools, later on.

This is because it is believed by psychologists like Jean Piaget, Frederick Froebel and Jean Rousseau (year) that conceptual learning starts at an early stage and it sets interest, curiosity habit patterns etc. Obinaju (2004)stated that with advent of colonialism, education was equally introduced to use by missionaries. They train people in different spheres of life but in the 1070s the concept of nursery education spread into the urban centres, day care centres were opened. The major purpose of the centres were very similar to those of the white men to given care to babies of working mothers. Maduewesi (1999) stated that, in 1970s those years following the Nigerian Civil War were especially active in the growth of nursery schools all over the country in response to the increasing demand for such facilities. That many survivors of the Civil War especially in the former war zones in savouring their survival were ready to do for their children the best that was possible. That, since general belief was that nursery school gives a head start for primary school education, there was a general scramble for nursery school places. By that time, there was also a competitive spirit abroad demonstrated by the uneducated rich parents in their resolve to catch up through their children, with the educated class. Finally, also changing value system, after math of the Civil War in Nigeria, led to many more women going out to work for paid employment, leaving their young children at home. It thus became increasingly desirable to have places or centres looking after pre-school children. This gave further fillip to the growth and increase of pre-school services in Nigeria.

**Objectives of Early Childhood Education**
The document National Policy (2004) enumerates the objectives of this level of education (pre-primary) to be:
a)      Effecting a smooth transition from the home to the school.
b)      Preparing the child for the primary level of education.
c)      Providing adequate care and supervision for the children while their parents are at work (farm, market).
d)      Inculcating social norms.
e)      Inculcating in the child the spirit of inquiry and creativity through the exploration of nature and local government, playing with toys, artistic and musical activities.
f)      Teaching co-operation and team work.
g)      Teaching the rudiments of numbers, letters, colours, shapes, forms etc through play.
h)      Teaching good habits, especially good health habits.

Historically, nursery schooling, which is the same as pre-primary education in the National policy, has always had as its major purpose, the social, emotional and to some extent, the mental development of the child. It is valid to regard the nursery school as an upward extension of the home rather than a downward extension of the primary school. This suggests that the primary concern of the home, namely, social and emotional adjustment, should be the major pursuit in the nursery school.

**Need for Early Childhood Education**
There is always a reason for any action taken. The demand emerged to support the provision of affordable quality programme of early child care that are community based, linked with health care, nutrition and other community services as part of

education for all approach to meeting the needs of the young child FGN/UNICEF training guide.

1.  Scientific evidence: Studies have shown that from conception to six years of age, children undergo quick mental, social and physical development. By the age of six, the brains have developed to almost their adult size.
2.  The convention of the rights of the child stipulates that children have right to live and develop to their full capacity.
3.  Morally and Social values which postulates hat through children, societies pass on values and cultures from generation to generation.
4.  Intervention that supports young children's physical and mental development leads to increased enrollment and improve progress and performance in school.
5.  Studies have shown that Early Childhood Centre (ECC) facilities offer equal opportunities to children from both disadvantaged and privileged home.
6.  A programme in early childhood development should be used as an entry point for other development activities which benefit the entire community.

**Important issues on Early Childhood Education**

There are some important issues that will guide the smooth running of early childhood education in our institutions. Such issues are:

a)  It is important to recognize and acknowledge he role of parents on early child care programme from planning to the evaluation, financing and its operation. Parent which are harmful and should be discontinued.
b)  Parents need to understand that children do not just grow in size. They develop, evolve mature, by leading evermore complex concepts of the people and objects, and the environment. The process of child development is holistic and requires appropriate stimulation. Also parents must know and respect the rights of the child. These include the right to care, provision of food and shelter, education, and protection. Children should not be exposed to danger and abuse by their parent, who in the process of sending them out as hawkers, unknowingly expose them to danger and abuse (Obinaju, 2004).

**Institutions Involved in Early Childhood Education**

Home: Ushie (2004) stated that early part of a child's life, the home, is pre-eminently the educational social centre. The home should be a designed and appropriately furnished place for loving and learning. The child should also find the home a haven of hope, love and security provided by the parents.

The School: It is the most conducive environment for the child to learn, it plays the role of culture transmission.

The total ways of life, the social norms and values, science, religion, art and philosophy of the given society are imparted to the children in the school. A child in the early stage of this education needs to identify with the culture of his people hence the need for schools to be more responsive in this direction. The teacher of the pre-school child is a surrogate parent at all times and therefore needs to provide love, care and protection to the child. It is the teacher that determines the likeness for school in children and the early impression created determines subsequent stages. It is advisable that any person involved with teaching children at this stage should undergo teacher's training course, be versed in principle and practices that are necessary to mange

children at this stage, understand most particularly the psychological development and needs of the children.

Community: The community includes both home, the school and others. In traditional Africa, the child belongs not just to a particular parents but to all within the community. The home transmits vital attitudes, trains the child in basic living habits and serves throughout childhood as a translator of cultural moves, norms and values which the child is exposed to outside as well as inside the home.

**The Problems of Early Childhood Education in Nigeria**

The Early Childhood Education level has been formalized as part of the system of education in Nigeria. Many public primary school established it recently (Adeyemi and Atumba, 2006, Ekens, 2006). Yet the major player in the provision of pre-primary school are the private individual. One of the problems is that socialization is carried on in English and not in the mother tongue or the language of the community. The games, the toys the songs, nursery rhymes mostly have on direct relationship with what the growing children are likely going to encounter in their immediate environment. Supporting this point, Elems (2006) revealed that the prevalent method of handling the children is by the cane, engaging them mostly often in memorization, recitation and regurgitation for instance names of states and capitals" in the federation. There is also the problem of untrained, unqualified and insufficient personnel. Since most of the proprietors operate the schools as business centre maximum gain seem to be their goal. Thus they engage few Nigeria certificate in Education (NCE) holders. Mostly those employed to teach are secondary school dropout/learners who have no knowledge of child physiology and thus cannot be good surrogate parents (Shom and Ushie 2006). Another problem is the school location, educationally institution of learning should be located some distance from the road. The obvious reason is to check traffic and noise pollution; equally, schools should not be cited close to industries market, heavy metal works, bakeries etc for fear of dust as well as noise pollution. Ilogu (1992) observed that currently, it has been difficult to maintain standard across board because of the proliferation of pre-school institution. The location of pre-schools in church premises, residential quarters and make shift buildings, are great hindrances to attainment of education goals. In proceeding of international conference on Research and Development, Volume 3, Number 34, 2010.

Addition, some of the school are located to busy roads and highways thus creating traffic congestion which may lead to accidents where proper care is not provided. Another major problem in curriculum of early childhood education. The learning experiences which the child needs to acquire should be systematically and logically arranged. Denga (1993) stated that educational provisional starts with a well articulated curriculum for the education of the child, the parents and caregivers. Currently, it is observed that pre-primary institutions do not operate uniform curriculum. Each school tries to develop its curriculum borrowing ideas from one another. The problem of the fees charged by the private owners of nursery school are usually beyond the reach of the average Nigeria since there is no government policy on this. Nursery school are mostly found in the urban areas and local government headquarters where it is hoped that many parent especially the educated and rich would enroll their children. There is official policy on regulating the payment of teachers' salaries and school calendar. Lack of proper supervision by the government

and lack of Nigerian-bas research results on Early Child Education that could serve as reference points.

## Prospects of Early Childhood Education

There is abundance evidence to show that children who attended pre-primary institution have benefited tremendously on the acquisition of the requisite knowledge, skill, attitudes and competence that enhance their performance at the primary level. The trauma that is usually experienced by children on their first day at the primary school can be seen to have been reduced drastically. This can be attributed to the effective transitory roles of the nursery school. There is abundant evidence to show that children who attended pre-primary institution have benefited tremendously in the acquisition of the requisite knowledge, skills attitudes and competences that enhance their performance at the primary level. The emergency of the pre-primary institutions has allowed both skilled and unskilled workers to engage in activities, with ease that have resulted in the overall development of the society. Texas Family (2007) submitted that nursery school children acquire and display socially acceptable behavior such as: greetings, showing of respect or others dressing properly and obeying rules. Teachers in nursery institutions have used their knowledge of child psychology not only to establish stimulating environment but also of such environment. Adeniyi (2006) supported this view saying that the nursery schools in Nigeria have, to some extent, helped children learn to; observe, ask intelligent questions and talk about people, things and events happening around them.

## The role of the Nigeria Government in Early Childhood Education

Shorn and Ushie (2006) assert that the role government plays at this level of education is basically supervision. This, they pointed out, is reflected in the National Policy on Education (2004) section 2 subsection 11 an 12 to achieve the objectives of this segment of education, government will;

a) Encourage private efforts in the provision of preprimary education.

b) Make provisions in teacher's training institutions for student teachers who want to specialize in pre-primary education.

c) Ensure that the medium of instruction will be principle the mother-tongue or the language of the immediate community, and to this end will:

    (i) Develop the orthography for many more Nigeria language and

    (ii) Produce textbooks in Nigeria language. Ensure that the main play, and that curriculum of Teacher Training Colleges is appropriately oriented to achieve this;

Regulate and control the operation of pre-primary education as well as ensure that staffs of pre-primary institutions are adequately trained and that essential equipment is provided. Also ministry of education are to make regular inspections to ensure the maintenance of high standards.

## Conclusion

A prominent Nigeria teacher observed that just as the foundation of a major building starts with excavation, leveling and scaling, so is pre-primary education essential for realistic primary education career, Lassa (1996). He concludes that the critical issues in ECCDE are child stimulation both physically and mentally, basic hygiene and sanitation, feeding habits and immunization that will equip the children to find pleasure in a formal school setting.

## Early Childhood Education in Nigeria Problem and Prospects

The need for all to be interested in and participate actively cannot therefore be over emphasized. Therefore, knowing the government's good intention, it should not sabotaged at any stage of operations.

## Recommendations

The important of Early Childhood Education cannot be over emphasized. National policy of education (2004) recognized it. For this level of education to be more relevant the following are recommended:

1) The government should ensure compliance with regulations by all operators.
2) Primary Education Studies (PES) departments in colleges of education should be up-graded to schools and PIES course be expanded to cover relevant themes in early childhood education, growth and development.
3) Specialist in the field should broaden their horizons, and enrich their teaching, research and service functions by considering on-going experiences and experiments in other African countries.
4) Government should ensure adequate supervisory bodies to control that standard of operation of the Early Childhood Education (ECEC) centres.
5) Government should inspect for approval, the existence of any private ECC facility before the commencement of children enrolment, else such centre should be sealed.
6) Government should ensure that monies allocated for ECCE programmes are not diverted to other sectors but are for the very purpose made for.
7) Childhood development should be used as an entry point for other development activities, which will benefit the entire community.

## References

Adeyimi, K. and Atumba, B. (2006). The attitude of parent and teachers to the introduction of pre-primary education into the public primary system (unpublished) research, report, ECE Unit, University of Ibadan, Ibadan.

Adeniyi, M.O. (2006). Objectives of pre-primary education in Nigeria. In Bulu (ed) Nigerian Educational Objectives; An appraisal, Pankshin.

Adeyemi, P.Q (1992). Principle of Education practice of education. Ado-Ekiti, Omolaya Standard press bookshop Go: (Nig) Ltd.

Denga, (1993) Education at a glance. From cradle to tomb calabar: Rapid Education Publishers Limited.

Ekaette, A.A. (2000) Definition and Scope of Education. In Q.I. Obinaju, The Nigeria Child: His education in a sociological and Psychological Environment. Lagos: Ivy Press Limited.

Elems, E. (2006) Child's Developmental. Lagos Addison Publishing Press Plc FGN (FGN) (2004). National Policy on Education NERDC. Lagos.

FGN/UNICEF, (1996) Early Child care project in Nigeria Lagos: NERDC.

Hogu, G.C. (1995) Contemporary Issues in Early Childhood Education JOCROMP (1): 103-110.

Lassa. P.N. (1999). Teacher Education for the 21st Century: Kaduna, National Commission for Colleges of Education.

Maduewesi, E. 3 (1999) Early Childhood Education: Theory and Practice. Ibadan: Macmillian.

Okeke C.C. (1989). Philosophy of Education: Concepts analysis and application Owerri.

Osanyin, A. (2002) Survey of Cost of pre-primary school education in selected Lagos schools. Journal of Education and Development 4(1-2).

Phoenix, P.H. (1966) Philosophy of Education. New York holt. Finehart and Wrinstone Inc.

Shom, C.J. and Ushie, B.C. (2006) Objectives of pre-primary education in Nigeria. In Bulus (ed) Nigeria education objectives. An appraisal. Pankshin, FCE. Pp. 17-31.

Texas Family Literacy Resource Centre (2007) Early Childhood Education Retrieved November 24th 2009 from hit/www/tci-education.

Ushie, B.C. (2004) Philosophy of pre-primary and Primary Education Studies. Plateaus State: Academic Trust. Found.

E-mail: ezekielachinihi@yahoo.com
**E-mail: estherckwordu@yahoo.com**

## Patriotism and the Teaching/Learning of History in Nigeria's Basic Education Schools: An Assessment of NCCE Minimum Standards

Iyela Ajayi, Federal College of Education, Okene, Kogi State, Nigeria
Enesi Prince Habib, Federal College of Education, Okene, Kogi State, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
Patriotism and civic responsibilities of the average Nigerian has been a major subject of discourse in contemporary study of citizenship and apathy to the Nigerian nationhood. Nigerians lack of patriotism has been largely blamed on the functionality of government which has been described as selfish and self-centered. This study however, not oblivious of the above factor looked at another dimension which may have hampered the spirit of patriotism in Nigerians. Most nations whose citizens to a large extent are said to be patriotic have in addition to good governance, the consciousness of patriotism from childhood as this is explicitly contained in the syllabi of elementary schools up to the Colleges. This work therefore critically assessed the knowledge and information being given to students of Nigeria's Colleges of Education in terms of the syllabus which could endear them to be patriotic and have the nationalistic pride. By so doing, this research looked at the general perception of the Nigerian citizens towards their country, the philosophy of Colleges of Education in Nigeria and assesses the syllabus of History as contained in the National Commission of Colleges of Education Minimum Standards which is the official guiding document for the training of students of Nigeria's Colleges of Education to determine if they are sufficient to raise the consciousness of patriotism in the Nigerian student.

Keywords: Patriotism, Teaching, History, Minimum Standards, Education, Nigeria, Colleges,

iafor

The International Academic Forum
www.iafor.org

**Introduction**

The word 'patriotism' has often been used interchangeably with 'nationalism' and hardly can one distinguish patriotism from nationalism. In any case, both discuss the affection and emotion of a citizen towards his country. Patriotism does not just occour, it is a gradual process that is developed over time. This could be spurred by what you hear, what you see, the ideology imbibed over time, the attitude of the government towards you and the rest. However, a citizen tends to develop this spirit of patriotism by the ideas he is being fed with from childhood before he even starts comprehending the idiosyncrasies of life. It is not just a coincidence that adherents of religious faiths tries to instill the tenets of their religions on their children from childhood. By so doing, the growing child unconsciously develops the love for that religion. The major agents with which to instill this spirit of patriotism on citizens are through the curriculum of schools which will expose them to the greatness of the people and land. The mass media is also an important agent of such education. The government's value and regards for the citizens also influences a citizen's patriotic feelings.

In Nigeria however, patriotism is alien to the national consciousness due largely to government's neglect for the citizenry. Government's value and regards for the people in terms of security, provision of welfare and boosting of national pride goes a long way in influencing the spirit of patriotism on the citizens. Nigerians see the political leadership as selfish, corrupt and inept. Though, the governmental activities in boosting patriotism or otherwise is not the subject of this paper but how a school curriculum shapes the feeling of patriotism using the discipline of history.

All over the world, the subject of 'history' has been an agent of revolutionary ideals. It has a methodology of boosting and raising the consciousness of a citizen towards his country thereby influencing his level of patriotism. However, it is rather unfortunate that this powerful agent of imbibing the spirit of patriotism on citizens is not taught in the basic schools in Nigeria. Thus, children whose ages ranges from year four to year thirteen may likely not know the greatness of their past. Most secondary schools in Nigeria has also has replaced this all important discipline with 'government' and 'civic studies'. It is then a possibility to go through the length of academics in Nigeria without being exposed to the history of Nigeria. This paper thus critique the curriculum of history in the Nigerian Colleges of Education as contained in the National Commission of Colleges of Education Minimum Standard to see if the content can spur patriotic feelings on the citizens.

**Methodology**
This research applies both the thematic and analytical method of historical reconstruction. It uses the oral history where personal interviews and informal chats were conducted. The research also made use of secondary sources such as journals, published and unpublished books, periodicals and other relevant literature.

**Patriotism**
The word 'Patriotism' is an ambiguous word which is very difficult to define because of the relativity of the term. This is because, in the broad sense, anything you do out of

'love' for a country is patriotism even if such action is evil. Patriotism is defined as a sense of national loyalty, a love of national symbols, and specific beliefs about a country's superiority.[1] Scholars despite their various views and their perception of patriotism came to a consensus that, patriotism is a deeply felt affective attachment to a nation.[2] According to Robert Jensen, patriotism includes love of a nation's land, people, culture, leadership, national polies and institutions.[3]

Many scholars have dealt with the problem of a valid theoretical and empirical distinction between *nationalism* and *patriotism* and with its consequences for research. Adorno et al. in their work, *The Authoritarian Personality* distinguished between *genuine patriotism* which stands for 'love of country' and *pseudo-patriotism* which measures *'[...] blind attachment to certain national cultural values, uncritical conformity with the prevailing group ways, and the rejection of other nations as out-groups'*.[4] According to Habermas' normative concept of constitutional patriotism and Staub's constructive patriotism, patriotism is based more on universal humanistic values than on identification with history or culture. According to them, democracy, republican values, and human rights are also inherent to the concept of patriotism. One can deduce from their works that their conceptualization of patriotism is based mainly on shared values and on a rational set of norms.[5]

## Nigerians and their level of patriotism

The average Nigerian does not know or comprehend what it is like to be patriotic. This is evident in the way national issues are discussed and how national monuments are treated. The popular statement made by John F. Kennedy, the former president of the United States of America that "*think not of what your country can do for you but what you can do for your country*" is practically alien to the Nigerian populace. This is because, Nigerians over the years have had this bottled feelings of anger towards the leadership of their country which accounts most for the non-challant attitude of Nigerians towards Nigeria. According to Usman Abubakar, a farmer in North-Central Nigeria, affection for Nigeria cannot be in his heart because love is reciprocal and as such, he cannot love a country that does not care about him, his family or his business.[6]

Dr. Micheal Udoma believes Nigerians are not patriotic because the country has never spurred the feelings of patriotism in Nigerians. He further explains that Nigeria does not stand up for Nigerians when they are in need or faces danger, whereas, countries like the United States of America can go to war over her citizen and can also go to any length to rescue their citizens in distress. According to him, it is just natural for citizens of such country to be patriotic towards her country unlike Nigeria whose leadership practically does not know if her citizens exists.[7] In a paper presented at a conference, Mr. Anaza Abaukaka summarized the frustration of Nigerians thus ".......they wake up tired not knowing what the day holds, without jobs, they wander aimlessly, those with jobs are not well remunerated with lots of requests from jobless relatives, no water, no electricity supply, bad roads, unequipped hospitals, in short, majority of Nigerians live in hopelessness. And in contrast, the elected few whose responsibility is to govern the nation to the benefit of all lives in stupendous affluence and brazen display of wealth."[8]

Whereas, the citizens of the United States, Britain and even Ghana in West Africa relish with pride, the history and culture of their nations with utmost show of love and respect for constitutional authorities, Nigerians exhibits the care-free attitude to their country's development. Just like the leaders whose lack of patriotism for the country led them to corruptly enrich themselves with reckless impunity and other unpatriotic behaviour, the followers are also guilty of being selfish and not having the interest of the country at heart.[9] It is indeed a general consensus that Nigerians, both the ruling class and the followers are not patriotic and that accounts to the almost failed state status Nigeria is battling with. This development can largely be ascribed to bad leadership and governance over time and its failure to instill the concept of patriotism on the growing citizens from childhood in the form of education curriculum that will endear the citizens to their country which will be discussed later in this paper.

**History and Mandate of the Colleges of Education in Nigeria.**

Nigerian Colleges of Education are the 'train the 'trainers' colleges established to train and equip teachers for their esteemed functions. There are twenty one federal owned Colleges of Education in Nigeria, while thirty one Colleges of Education are owned by various states of the federation. The graduates of these institutions are assigned to teach in the nation's basic schools, helping to nurture and shape the kids who are 'the future leaders of tomorrow'. The mandate of the Colleges of Education includes:

1. to provide full time courses in teaching instruction and training in technical, vocational, sciences and arts;

2. to conduct courses in education for qualified teachers;

3. to arrange conferences, seminars, and workshops relating to the field of learning; and

4. to perform other such functions as in the opinion of the College Council may serve to promote the objectives of the college.[10]

The Nigerian Colleges of Education awards a National Certificate of Education (NCE) after students successfully completes a three year course of study in any chosen discipline.

**National Commission of Colleges of Education Minimum Standards on History; An Assessment**

The National Commission of Colleges of Education was established by decree 13 of 17th January 1989 (Amended Act 12 of 1993) now an Act of the parliament, as a completion of tripod of excellence in the supervision of higher education in the Country.[11] The establishment of the commission was a resultant effect of the utmost importance accorded to quality teacher education by the federal government of Nigeria. Since inception, the Commission has continuously pursued goals of quality assurance in teacher education. The pride of the Commission is based on the National Policy on Education which states

that "no education can rise above the quality of its teachers…."[12] For over two decades, the Commission had ensured that teacher education contributed immeasurably into national development. In pursuit of its objectives, the Commission had standardized and continuously reviewed the curriculum of the Colleges of Education. This constant review has strengthened the capacity of the Nigerian Certificate of education.

However, out of the seven objectives outlined in the teaching and learning of history in Nigeria's Colleges of Education, only two of the objectives are likely to shape a student's perception on the desired love and feelings of patriotism.[13] These objectives are;

i. to encourage in the students the growth of an awareness of his responsibilities and opportunities as a Nigerian citizen; and

ii. to enable students to develop an appreciation and understanding of the historical developments in Nigeria and the contribution of her past heroes and heroines.

These objectives however have not been properly harnessed to achieve its desired goals as seen in the course contents. Students in the first year of study take eight courses which are *Historiography, Major world civilizations, West Africa up till 1800, Nigeria up till 1800, Egypt and the Nile Valley, North Africa up to 1800, East and Central Africa up to 1800* and *Economic History of Nigeria from the earliest times to 1800*.[14] In *Historiography*, students are taught the nature, justification and sources of history. They are also exposed to various perceptions and views of history and its relationship with other disciplines. The content of *Major World Civilizations* include the study of the Egyptians, Greeks, the Romans, the Chinese and the Latin American civilizations and their contributions to historical development. *West Africa up to 1800* exposes students to the empires of the forest and savannah kingdoms and the trans-Saharan / trans-Atlantic trade. *Nigeria up to 1800* looks at the evolution of early culture in societies and states to the emergence of the centralized states. It briefly looked at the contributions of NOK, Benin, Igbo-Ukwu and Ife civilizations.

In the course *Egypt and the Nile valley*, students are exposed to Egypt and its series of invasions and the influence of meroetic civilization on Western Sudan. *North Africa up to 1800* looks at a brief survey of the land and people of North Africa, the Berbers, the Carthagenian empire, the Romans, Arabs and Turkish rule and European imperialism. *East and Central Africa up to 1800* looks at the general survey of the land and people of East Africa. *Economic History of Nigeria from Earliest times to 1800* generally looked at major units and institutions of production and distribution. It looks at salt making, iron works, carving, leather works etc. It also exposes students to trade linkages and inter group relations.

Having looked at the course contents of history as being learnt by history students of Nigeria's Colleges of education in their first year, it is observed that out of the eight courses taken, only two discusses Nigerian History. It is expected that a nation who strives to impart nationalistic feelings to her citizens should dwell more on Nigerian History. For example, in the course, *Major World Civilizations*, one see no reason why the Nok Terra-Cotta, the Igbo-Ukwu bronze, the Ife and Benin civilizations do not feature prominently in that segment when these civilizations are part of the major world civilizations. The course should stress the contributions of the NOK, Igbo-Uwu, Ife and Benin civilization to world civilizations. One will also see that despite that it features in a

different course, *Nigeria up to 1800*, it was mentioned in a passing. Without prejudice to having a broad knowledge of the world history, Nigerian History should take a pride of place in the teaching and learning of history in Nigeria especially at this level of education to inculcate in the students the spirit of patriotism.

The history students in the second year takes eight courses also which include *Methodology*, *Research Methods*, *Themes in World History, 1750 – 1919*, *European Conquest and African Resistance*, *Southern Africa up to 1800*, *Nigeria in the 19th century*, *Economic History of Nigeria since 1800*, and *Introduction to Archeology*.[15] *Themes in World History* exposes students to the Atlantic slave trade, the industrial revolution, French revolution, the Napoleonic Europe up to 1816, Russia, America's war of independence, the first world war and other themes. The course *European Conquest and African Resistance* examines the background to imperialism and Africa's resistance and the factors that led to Africa's failure to resist occupation. The course, *South Africa up till 1800* looks at the Hottentots, the Bushmen and the Bantu. It also exposes students to the Portuguese invasion and colonialism. The course *Nigeria in the 19th Century* exposes students to the Sokoto jihad and the establishment of the Caliphate. It further looked at the 19th century Yoruba land, Benin, the South-Eastern states and missionary activities in that area.

Meanwhile, the course *Economic History of Nigeria since 1800* exposes students to the trend in economic development by 1800, patterns of Nigeria economic development during the colonial era and after independence. In the course, *Introduction to Archeology*, the students are exposed to definitions and scope of archeology, significance of archeology and techniques in archeological techniques. It also discusses the origin of man.

Critically assessing the courses taken by students of history in Nigeria's Colleges of Education in their second year, only three out of nine courses, focused on Nigerian history. Studying the Economic History of Nigeria since 1800 without heralding the contributions of the cocoa plantations to beverage production in the world, cotton in the manufacturing of textile materials and the groundnut cultivation and other cash crops that led to industrial revolution in Europe is a brazen betrayal of an opportunity to harness the economic prowess of the nation as this knowledge will have instilled on students the great potentials in their land. It will also give Nigerian students hope that if the land had enjoyed such economic boom in Agriculture, the present generation could do more.

The year three students spends half of the year in student attachment to schools known as Teaching Practice and uses the remaining half to learn five history courses which include, *Nigeria in the 20th century*, *The Third World*, *Africa in the 20th Century*, *Southern Africa since 1800*, and *World History-1919 to the Present*.[16] The students are exposed to colonialism, independence, military rule, civil war, unity, neo-colonialism in the course *Nigeria in the 20th century*. In the course, *The Third World*, students are taught the concept of 'third world', developing and developed countries and their relationship with European and North-American countries. In *Africa in the 20th Century*, students are exposed to decolonization process in Africa, Nation building, military rule, external relations etc. In the course, *South Africa since 1800*, students are further taught the

Mfecane and its impact on European occupation and policies, the great trek, Southern African Nationalism, Apartheid, the liberation movements etc.

In the courses offered in the third year, out of five courses, only one focused on Nigerian History. While Nationalism of South Africans is studied, Nigeria's nationalism was overlooked. How can one love what he knows not? Patriotism heavily relies on the food of history to nurture and that's why most developed nations shaped the curricula of history to instill the citizens with innate love and respect for their nation.

Having seen the course description for year one to year three students of history in Colleges of Education in Nigeria, one begins to wonder if objectives (i) and (iv) as encapsulated in the National Commission of Colleges of Education Minimum Standards on History have been met. These items are of importance to the theme of this paper 'patriotism'. For the avoidance of doubts, the objectives are

i.   *to encourage in the students the growth of an awareness of his responsibilities and opportunities as a Nigerian citizen and*

ii.  *to enable students to develop an appreciation and understanding of the historical developments in Nigeria and the contribution of her past heroes and heroines.*

Nigerian curriculum on history as reviewed above does not ginger such spirit or fire of patriotism in the Nigerian students; it is heavily laden with histories and activities of other nations. Nigerian history curricula should harness the greatness of the country in the comity of nations; project the contributions of national figures prior to the coming of Europeans who wielded enough power and respect, national figures during the colonial and post-colonial era; Nigerian professionals doing great at home and in the diaspora in their various professions like Professor Emegwali, Chimamanda Adichie, Wole Soyinka, Chinua Achebe and their contributions towards the progress of their various fields should feature prominently in the present day curriculum. Nigerian heritage sites should also be projected; students of history and indeed students generally will naturally imbibe the spirit of patriotism having recanted the greatness of his country. The teaching of history can make or mar the destiny of nations and the greatest problem of Nigerians is the ignorance of her history as stated by Chief Olusegun Obasanjo, a former president of Nigeria.

In previous curriculum of history, African students took pride in relishing the greatness of the Mali, Songhai, kanem-Borno and Oyo empires because they were taught these heroic strides of their leaders and lands. Mansa Musa was said to have devalued the worth of gold when he travelled to Saudi Arabia on pilgrimage apparently signifying the level of wealth of the Mali Empire. In contrast, the present day students do not even know their heroes and their activities, thus the passion to strive for the love of country is not there.

**Conclusion**
Patriotism is an innate feeling of love and emotional attachment to one's nation which can be achieved through conscious and deliberate knowledge of the greatness of a person's land and people amongst other means. It is however observed that the main agent of spreading this all important abstract phenomenon is education. The paper having

assessed the contents of the curriculum for the Nigerian Colleges of Education discovered the inadequacies of the contents to spur the fire of patriotism in Nigerians. The failure to offer 'History' as a discipline in Nigeria's basic schools and the lukewarm attitude it is being handled as a discipline in Nigeria' senior secondary schools has denied Nigerians one of the best medium to spread and imbibe the spirit of patriotism. Nevertheless, the nation could as part of periodic review of the curriculum include topics and themes in the teaching of Nigerian History and indeed general studies in Nigerian schools from Basic Education to Universities. If history and history topics are accorded same preference as that entrepreneurship, computer and civic education which have been made compulsory subjects in Nigerian schools, the urge and feeling of patriotism will spring up in the hearts of Nigerians thereby making her a greater nation.

## Endnotes

1. Leonie Huddy & Nadia Khatib, 'American Patriotism, National Identity, and Political Involvement' in *American Journal of Political Science,* Vol. 51, No. 17, January 2007, p.63
2. P. J. Conover & S. Feldman, 'Measuring Patriotism and Nationalism, Memo to NES Board of Overseers', 1987 in http://www.icpsr.umich.edu
3. R. Jensen, Citizens of the Empire: The Struggle to Claim Our Humanity, San Francisco: City Light Books, 2004, p. 3-4
4. T. W. Adorno, R. N. Stanford, D. J. Levinson & E. Frenkel-Brunswik, *The Authoritarian Personality,* New York: Harper & Row, 1950, p. 107
5. Rossalina Ratcheva, 'Nationalism Versus Patriotism or the floating border? National identification and ethnic exclusion in post-communist Bulgaria' in *Journal of Comparative Research in Anthropology and Sociology*, vol.1, 2010, http://compaso.ro
6. Interview with Usman Abubakar, 42 years, farmer, Okene L.G.A, March 11, 2015
7. Interview with Dr. Michael Udoma, 51 years, Civil Servant, Lokoja, February 23, 2015
8. Anaza Abaukaka, Nigeria and Nigerians: A social contract, A paper presented at a symposium organized by the National Association of Social Studies Students, Federal College of Education, Okene, 2012.
9. Anaza Abaukaka, Nigeria and Nigerians: A social contract…, 2012.
10. www.ncce.edu.ng, official website of the National Commission of Colleges of Education
11. www.ncce.edu.ng, official website of the National Commission of Colleges of Education
12. National Policy on Education, Abuja: National Press, 2007
13. NCCE Minimum Standards, 2012 edition
14. NCCE Minimum Standards, 2012 edition
15. NCCE Minimum Standards, 2012 edition
16. NCCE Minimum Standards, 2012 edition

## Oral Interviews

Interview with Usman Abubakar, 42 years, farmer, Okene L.G.A, March 11, 2015
Interview with Dr. Michael Udoma, 51 years, Civil Servant, Lokoja, February 23, 2015
Interview with Mrs. Angela Ogedemgbe, 48 years, Trader, Lokoja, February 24, 2015
Interview with Yahaya Umar, 32 years, Unemployed youth, Lokoja, February 23, 2015
Interview with Peter Achimugu, 26 years, Unemployed youth, Lokoja, February 23, 2015
Interview with Maria Salami, 22 years, Student, Okene, March 12, 2015

**References**

Abaukaka Anaza, Nigeria and Nigerians: A social contract, A paper presented at a symposium organized by the National Association of Social Studies Students, Federal College of Education, Okene, 2012

Adorno T. W, Stanford R. N, Levinson D. J. & Frenkel-Brunswik E. (1950) *The Authoritarian Personality,* New York: Harper & Row

Conover P. J. & Feldman S. (1987) 'Measuring Patriotism and Nationalism, Memo to NES Board of Overseers', in http://www.icpsr.umich.edu

Huddy Leonie & Khatib Nadia. (2007) 'American Patriotism, National Identity, and Political Involvement' in *American Journal of Political Science,* Vol. 51, No. 17, January 2007

Jensen R. (2004) Citizens of the Empire: The Struggle to Claim Our Humanity, San Francisco: City Light Books

National Policy on Education, Abuja: National Press, 2007

NCCE Minimum Standards, 2012 edition

Ratcheva Rossalina. (2010) 'Nationalism Versus Patriotism or the floating border? National identification and ethnic exclusion in post-communist Bulgaria' in *Journal of Comparative Research in Anthropology and Sociology*, vol.1, http://compaso.ro

www.ncce.edu.ng, official website of the National Commission of Colleges of Education

### *What Precludes Community of Practice from Functioning?*

Fama Abusrewel, University of Huddersfield, UK

**Abstract**

This paper presents a qualitative case study about the early experiences of newly graduated teachers (NGTs) of English in post-conflict Libya. The research question is what are the NGTs' perceptions of their experiences during their first year of teaching in post-conflict Libya? The methods employed were: semi-structured interviews, observations and documents. The teachers were interviewed three times, and observed twice. The study also included other administrative staff of relevance to teacher training and development.

Communities of Practice (CoPs) (Wenger, 1998) as a social theory of learning, is the conceptual framework upon which the research is based. It helped the researcher to understand the data deeply and reveal the factors that contributed to the formation of the teachers' perspectives. This theory sees practice as central to the community, and through it people participate, establish relationships, learn and build identities. Operationalisation the elements of the theory enabled to trace the extent to which CoPs was experienced by the NGTs in the post-conflict Libyan context. The findings revealed that there were some significant factors overlapped in formulating the teachers' experiences. One of the greatest factors was that antagonism emerged as a result of that bloody conflict which exacerbates other social and cultural perspectives. The trilogy; the political and social and personal values worked together and precluded CoPs from existence. The NGTs found themselves unable to cope with the demands and challenges of everyday work experience. The argument of this paper is that CoPs does not exist because of these points discussed below.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

The study analyzes the experiences, perceptions and views of a group of newly graduated teachers of English (EFL) in post-conflict Tripoli, Libya. The focus was to gain a deep insight into those teachers' experiences, perceptions and the contextual factors that shaped them. This would reveal the reasons standing behind their construction of in that context. The institutions involved in the study were all in one of the largest areas in Tripoli. They were four schools representing basic and secondary education. Basic education extends from class one to class nine involving students aged from 6-15 years of mixed gender in three schools. The second one was a secondary school for girls only and their ages range from 15-19 years. All students in all the schools selected study English as a compulsory subject for 3 hours per week. The 10 NGTs were all Libyan females of ages ranged from 24-30 and only one was married while the others were still single. They graduated from different institutions such as faculty of Arts (4 teachers), faculty of Education (1 teacher), a college for teacher training (1), and a higher institute for teacher training (5 teachers). Only the last two institutions qualify teachers to teach English in the basic and secondary education in Libyan schools. They all studied in the state-run schools and taught in them respectively. They neither had practice teaching as part of teacher education study nor received any training before commencing teaching as they stated in the interviews repeatedly.

**The conflict when the uprising erupted**

Libya is a country in North Africa and has boarders with six African countries; namely Tunisia and Algeria in the west, Chad and Niger from the South and Egypt and Sudan from the east. It also has a coast of about 2000 kilometres. It was a stable country till February the 17th 2011 when the uprising erupted in Benghazi, the second biggest city in the eastern part of Libya developing later on to spread to other cities and towns. Libyan people suffered from decades of grievance, lack of freedom and repression of the dictatorship and his regime. All these together contributed to the eruption of what becomes known as "Arab Spring". With the help of the NATO, Libyan revolutionaries toppled the Libyan dictatorship after 42 years of suffering and Libya has entered a new era.

Although the military actions finished, they have opened the scope for endless political ideological and tribal ongoing conflict that puts the country in a dilemma. The armed conflict in Libya completely transformed every aspect of the daily life, including education where the possibility of learning and development has become very limited. It has halted the progress and set back the gains built up over generations, disrupted economic growth and advances in nutrition, health, housing, education and employment. The conflict has had serious impact on the provision and service delivery of education.

**Communities of Practice**

The choice of communities of Practice (CoPs) (Wenger, 1998) as a theory upon which the theoretical framework of this research was based its relevance of how the NGTs in the Libyan context might learn and develop their identity as EFL qualified teachers. Before going further, what is CoPs then? Lave & Wenger define CoPs as "a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping communities of practice" (1991, p. 98). Newcomers to a workplace practise the community activities and gradually become socialized with its routines, norms and regulations. They develop understandings of the language and

what is appropriate and inappropriate in terms of behaviours within that community. Lave & Wenger posit that;

> social communities are in part systems of relations among persons. The person is defined by as well as defines these relations. Learning thus implies becoming a different person with respect to the possibilities enabled by these systems of relations. To ignore this aspect of learning is to overlook the fact that learning involves the construction of identities. ...identity, knowing and social membership entail one another (1991, p. 53).

Practice is central to the community wherein members build relationships and develop identities. In CoPs "the focus on creating identity through membership of (a) community is thought to distinguish it as a social learning model" (Moule, 2006, p. 371). Likewise, Kirkup asserts that "individuals and collectivities are seen to create or perform their identities through learning" (2002, p. 182) in their communities which "are seen as having strong reciprocity and members are actively engaged in the negotiation of meaning" (ibid, p.187). Furthermore, Wenger (1998) goes on to suggest that communities are not necessarily homogeneous, but are composed of diverse individuals. However, through working together they make "engagement in practice possible and productive" (1998, p. 75). Disagreement and conflict can constitute a core characteristic of a shared practice and may support the existence of the community. Individuals will create their own identities that function within the community through mutual engagement, a sharing of practice. In the context of this study, a working definition of CoPs is a group of people-staff members (teachers) bound together by profession and interests in teaching English in mainstream education in both basic and secondary schools in Libya and who continually interact and negotiate issues of interest and relevance to all schools on a regular basis.

Wenger (1998) outlines three major components of CoPs: mutual engagement, joint enterprise and shared repertoire which are the source of community coherence. These elements are of great importance and relevance to the current study and are therefore operationalized for analysis of the data. Thus, it is important to give a clear explanation of what each element means in relation to this research.

**Mutual Engagement**
Mutual engagement is the basis for establishing coherent relationships in the CoPs. Members engage in activities whose meaning is negotiated on a regular basis (Wenger, 1998). This requires members to be involved in regular interaction in which they negotiate the meaning of practice within their community. This interaction might be manifested through formal or informal meetings which create engagement and actions to maintain the community. For teachers in the context of this study, issues such as discussion of the curriculum, exchange of books or lesson plan notebooks, exam preparation and marking may be keystones for negotiation and practice in the community. Other issues of social interest may stimulate extra interaction and act to maintain the community. Gradually this extends to include discussion about current social events.

The teachers might share mutual engagement as they engage in establishing relationships with their colleagues (teachers of English) and other teachers in schools. Such interactions might include sharing or exchanging course books, negotiating issues related to exams, having extra classes to make up missing time during the semester, participating in preparing midterm and final exams and carrying out marking of final exams together. These conditions might provide opportunities for continuous interaction that enhances the creation of relationships between the members that can work to the benefit of the community.

**Enabling engagement**
Being a member and involved in the community's activities is necessary for enabling engagement. Within the physical environment of the community (school in the context of this study), this might include being present at meetings and other formal activities related to school norms as arranging an open day or a trip, issues connected with the curriculum, or even being involved in workplace gossip during break time. Such engagement defines belonging; knowing and understanding issues related to the community and yields full participation. Maintaining the coherence of the community requires work that might be less noticeable and done by one particular member, for instance, sharing breakfast, drinks, reading, exchanging magazines, newspaper together during breaks. This might be a voluntary act on the part of members as a means to enhance mutual relationships. The NGTs may approach experienced teachers to ask for help. In turn the more experienced teachers can help to create the appropriate atmosphere to start negotiating relevant issues with those teachers. The possible outcome might increase engagement and development of understanding on both sides. However, the opposite might be the case when either side is reluctant to participate or prefers to remain apart as shall be seen.

According to Wenger's argument (1998) homogeneity is not a necessity for the continuity of the community; "what makes engagement in practice possible and productive is as much a matter of diversity as it is a matter of homogeneity" (1998, p. 75). Yet members' relationships enable them to influence each other's interaction within the community. They work together, meet regularly, and exchange information and opinions. However, participants still build their own identities that contribute to the mutual engagement and a shared practice. "Each participant in a community of practice finds a unique place and gains a unique identity, which is both further integrated and further defined in the course of engagement in practice" (ibid, p.75-76). Mutual engagement involves both our own competence as well as the competence of other members in the community. "... this competence is experienced and manifested by members through their own engagement in practice" (Wenger, 1998, p.136). Participants are required to know how to give and receive help from others rather than to know everything by themselves. Contributions to the community are complementary with all participants playing their part.

Mutual engagement does not create homogeneity, but rather yields relations in the community. Moreover, disagreement, challenges and competitions can represent forms of participation that contributes to the development of the community (Wenger, 1998). However, disagreement, not in the sense interpreted by Lave & Wenger (1991) and Wenger (1998), might be coated with social and political values and views that entirely contradict with the norms of the community. Although this area is not sufficiently addressed by Lave & Wenger (1991) and Wenger (1998), it is of

particular relevance to understanding the situation of newly appointed teachers in post-conflict Libyan schools.

**Joint enterprise**

Joint enterprise refers to "a process, not a static agreement. It produces relations of accountability that are not fixed constraints or norms" (Wenger, 1998, p. 82). It is not only sharing goals but also a negotiated enterprise that involves mutual accountability (ibid). Lack of homogeneity can be viewed as a productive part of the enterprise. Members bring their own ideas, views and skills that can sometimes enhance the enterprise. The enterprise is joint because it is communally negotiated; members negotiate all the conditions of CoPs which shape their practice.

Negotiating of a joint enterprise creates relations of mutual accountability. These relations of accountability include various issues and their counterparts. This mutual accountability makes members "feel concerned or unconcerned by what they are doing and what is happening to them and around them, and under which they attempt, neglect, or refuse to make sense of events and to seek new meanings" (Wenger, 1998, p. 81). They have developed the sense of belonging to one particular community.

In the context of this study, this would require the NGTs to negotiate ways of working towards a communally agreed enterprise. This does not mean that all the teachers must have the same view, but must negotiate their enterprise. Negotiating a joint enterprise manifests in relations of mutual accountability within the CoPs (Wenger, 1998, p. 81). Mutual accountability is the means by which "individuals, members feel concerned or unconcerned by what they are doing and what is happening to them and around them" (ibid).

In the context of this study, and as a result of the military actions and the political situation of the country, a sense of accountability among the NGT might be insufficient. Those teachers could be divided into two groups; one might prefer to isolate themselves because they are not interested in teaching and have accepted it as a temporary occupation. They might not look forward to becoming effective members of a professional community they joined unwillingly. The political and social consequences of that bloody conflict might still have their impacts on teachers' experiences and lives. In addition, other factors such age and experience might be behind such isolation.

**Learning and Communities of Practice**

Lave and Wenger envisage learning as socially situated activity, focusing on "the structure of social practice rather than privileging the structure of pedagogy as the source of learning" (1991, p. 113, p.360). Hammersley believes that Lave and Wenger "emphasize that learning generally involves social participation in communities, and even more importantly that it amounts to the learner coming to behave in ways that are recognized as competent within a particular community" (2005, p. 6). Lave & Wenger describe learning as an "aspect of social practice, learning involves the whole person; it implies not only a relation to specific activities, but also a relation to social communities" (1991, p. 53). Significant Learning is significant as it "changes our ability to engage in practice, the understanding of why we engage in it, and the resources we have at our disposal to do so. … Our experience and our membership inform each other, pull each other, and transform each other"

(Wenger,1998, p. 95-96). It is postulated that members create what is to be learned while learning. This "suggests that the workplace itself offers opportunities for learning that cannot be easily provided in other venues" (Felstead, 2005). Hence, learning is social and is embedded in practice, not outside it or prior to it. Thus in post-conflict Libya, the NGTs can learn and build their identities and develop themselves as qualified teachers through situated learning within their professional communities.

The most significant finding of the current research was the antagonism that triggers other social and cultural restrictions which all work together and prohibited professional CoPs from functioning. The results were surprising as the conflict destroys everything and exacerbates other factors that work together to preclude the formation of professional CoPs. Therefore, the NGTs in the Libyan context experienced antagonism with all its manifestations.

**Antagonism**
The term antagonism is used to differentiate from the term conflict which has been applied to the recent Libyan context. Sometimes antagonism sneaks into the communities; members bring it and the rift un-deliberately. It starts eroding the structure of the professional community. It is heightened by political, military, social or cultural sources. For instance, in the context of this study, the political and the social situation has drastically changed after the bloody conflict that hit the society leading to massive schism. The loyalty has become to the militia, the ideology, the party, and the tribe. All these affect the relationships of the entire society. With regard to the existence of a professional CoPs, what was happening in schools mirrored what was going in the society. For instance, some teachers within the sample had conflicting political views as a result of the conflict. It seems difficult to have mutual engagement if there is none, like the situation of some teachers in the context. The traumatic political and social conflicts brought to the communities did not finish with the end of the military actions which ended after the killing of the tyrant Gaddafi, the defeat of his troops and the fleeing of his loyalists. Moreover, the impacts of the deadly military actions flourish more when people tend to express their intention to join a diversity of political parties or associations or express their attitudes towards the opposite sides. These potential members of the community would not effectively interact and participate in the community activities. They may be excluded or marginalized or they may leave the community entirely (Colley et al., 2007) when they could not tolerate the situation. They may also be behind preventing the newcomers to join the community. In situations like these, developing identity and belonging are questioned. The existence of such antagonism within a CoPs is not easy to overcome. People have become protective of themselves and they protect those who they know; a matter of having tribal, political and social loyalty. In this case one asks whether there a professional CoPs can exist. If there are any, do such members participant in community activities? Do they learn, develop identity, have mutual engagement, joint enterprise and share accountability? The data revealed that the antagonism precluded the formation of a CoPs completely and this may continue for decades because of the social and cultural perspectives associated with antagonism. The conflict and its direct effects on the whole life of the Libyan people created a horrific schism which is politically, ideologically and socially rooted. The scene outside the school was transmitted to schools spontaneously and tension could be felt everywhere.

Arguably Lave and Wenger (1991) and Wenger (1998), did not put into consideration that antagonism can exist and preclude the development of a professional community. This is simply because Wenger's theorization was based on western values which are divergent from the Libyan and Middle Eastern ones where the trilogy of the political, social and personal values merges to enrich antagonism. Wenger only made the conflict simple and limited it to certain areas that would not affect the development of a professional community.

Some of the issues exacerbated by the conflict are the increasing antagonism, reserve the researcher experienced during data collection stage. They demonstrated the direct impact of the conflict on all aspects of life. The following vignettes narrate some of the researcher's experiences that elaborate how the conflict has changed people's behaviours.

**Vignette 1: Reserve**

One of the puzzling issues was that people were on their guard. People were guarded in everything they said or did and suspicion can be noticed everywhere. Many became guarded when hot issues, particularly, political or of relevance to certain militias, were under debate.

There were instances when the researcher sat waiting in the staff rooms in the schools included in this study where she saw teachers sitting without saying a word. They would often stand in the corridor or the front yard. Once the researcher asked two of them why they did not sit in the staffroom and relax. They stated that they wanted to avoid clashes with other teachers when certain political hot subjects were discussed. In one school, some teachers stated that such political debates had forced the former headteacher to leave the school because she was attacked by some teachers. They considered her as a foe as she was a supporter of the old regime. They did not value what she had done for the school while she was a headteacher although "she was a good person" as one expert teacher stated.

Teachers' reserve included also the way they dealt with inspectors and administration. Teachers guarded themselves to the extent that they did not complain to the head of English language inspection during visits to discuss their problems. Ahmed; the head of Tripoli inspection office stated that:

> *Ahmed: I went to a school today and I talked with teachers and asked them if they have any notes about inspectors and their behaviours with you. We try to help and even school administrations are cautious. I told them I was not coming to evaluate them or investigate them. I told them if there is a gap we try to amend it and the treatment should be good. Some are still cautious (focus group).*

Teachers had reserve because they could not find a connective community to support them. Some of the NGTs were unaware of their rights to complain and many were appointed on temporary contracts. Some of them might have experienced hard situations when they voiced their views. Thus, they avoided complaining to protect themselves. The head of the inspection interpreted it as "courtesy" because he was in a better situation than those teachers. They also thought of what might happen in the future if those they complained about found out. Although they might be from different CoPs, mutual engagement and the integration were missed and reserve was the one used safe guard.

The researcher remembered going to the Educational Development Centre many times to meet the manager by any means because there were no guarantees to have an appointment. His assistant was clever in finding excuses, and she had to be patient. With her tenacity, she met the manager who welcomed her, but without shaking hands as (he might be religiously conservative) and expressed his interest in the research after hearing the brief account presented. People interrupted the meeting many times, which the assistant could have avoided; however, she carried out the interview without fear. Every comer looked at her suspiciously, which frightened her most of the time. She knew he was so busy. Therefore, she asked him a few questions and for evidence represented in documents of the plans for teacher training. The reserve included the employees in the department of training where they welcomed her, but insisted on having a legal letter signed by the manager himself in order to issue a copy of the centre plans for training.

Going to the inspection office was encouraging in terms of the people the researcher met there; they were inspectors, and heads of inspection offices on the level of the whole country. They looked at her suspiciously and had reserve too, although some of them knew her as a former colleague. It was difficult to get some documents referring to the activities conducted by the inspection office. She had to ask and repeat the questions many times many times. Everyone seemed to think she might use what they said or what she might get as evidence against them. As a conclusion, reserve exists earlier to the conflict yet it is exacerbated by the conflict in Libya, the situation and culture. This trilogy works together and inhabits the formation of CoPs. The consequences of the conflict might last decades to be eradicated and no one could predict what is coming next.

**Age Barrier**

Age was another factor that hindered mutual engagement of some NGTs in the sample of this study. In the context of this research and from social and cultural perspectives, young people have to respect their elders in terms of interacting with them and even more in the way of asking for help. The culture here plays a significant role in establishing relationships among members of the same community. Under the umbrella of respect, younger members may not sit or chat or have meals with older members even on social occasions. Such restriction on relationships does not promote the development of mutual engagement. To the contrary, it results in a lack of it to the extent that teachers would not sit in the staff room. The NGTs had to show respect for older and experienced teachers as some of these colleagues were their former teachers too. For instance, Amall, Eve and Nawal confirmed that the age barrier limited communication between NGTs and their colleagues. For other teachers like (Rab),

age difference was an excuse for keeping formal relations with colleagues in general. This hindered acquiring the "knowledge and skills related to work requirements"(Felstead et al.,2005, p.360), formation of relationships and consequently affected the mutual engagement of those teachers and created opportunities for misunderstanding. Age According to Wenger (1998) can be a barrier to achievement of CoPs and those teachers will not be able to overcome the "demands and challenges of everyday work experience and social interactions with colleagues" (Felstead et al., 2005, p.360).

These teachers might have experienced hard times during the conflict which had its impact on them to the extent that they became unwilling to integrate. They might perceive integration as an intrusion into other's privacy. Evidence from the observation suggests that some NGTs had limited contacts even with NGTs, which might relate to their personality; possibly they were less sociable or they might have experienced a lack of responses from their colleagues. This lack of communication might also relate to the schism between supporters of the new and the old regimes. Moreover, it was noticeable that both Amall and Rab (teachers in the same school) used to come on time, go to class and then leave the school. The researcher also had to wait or search for them when there were appointments. The observation data suggest that they limited their mutual engagement upon their own decisions. This would make it difficult for them to achieve an advantage of the community cited by Lave & Wenger and Wenger (1991 ; 1998) namely, people successfully learn without the help of formal education (Hughes, 2007).

This view of the age barrier may have pushed teachers like Eve and Sam to resort to self-socialization (De Lima, 2003) and to isolate themselves from other members of the community. They might not be interested in integration or escaping from other social burdens. Their possible marginalization is suggested in the statements below:

> *Eve: I felt that I was a stranger because they are older than me and they know each other well (1).*
>
> *Sam: Because I know no one there, I felt that the place is strange and I know no one so I went home (1).*

Observing Eve and Sam showed that they were seriously dissatisfied with their situation as teachers and wanted to leave the professions.

> *Eve: My ambition is more than this; I do not want to spend my life in teaching only. I think I want to do something. Honestly, it does not (go with) me (fit) as a profession (2).*

Likewise, Sam stated repeatedly, "teaching isn't my interest at all". Both Eve and Sam's attitudes towards teaching might be affected by their previous ideas about teachers and the social status of a teacher as a person who works hard, but is paid little. They perceived themselves as ambitious and teaching is as a hindrance.

Moreover, if these NGTs did not find the appropriate conditions for mutual engagement, the Possibility of integration became limited and self-isolation became a preferred strategy.

Moreover, Eve became hesitant and avoided asking others' help. She did not find an encouraging atmosphere that would stimulate her interaction and reduce her hesitation. She stated:

> *Eve: Sometimes I want to ask and then I say who says that the students understand from this teacher (2).*

She might not have that much experience on how to engage with colleagues. Hesitation might be related to her personality, difference in age or experience or the anxiety of asking. She might have doubt about her colleagues' qualification and capabilities. On the other hand, the expert and experienced colleagues might assume she did not need their help at all. There was no community that encouraged her to integrate, to learn and contribute to her development.

**Nepotism**

The Libyan society originally consists of tribes distributed all over the country now. However, some tribes still settle in their original regions and their members still keep in touch with them and pay their moral respect in different manners. The strong relationships between members make neutrality unachievable in most cases. Thus, sharing of knowledge as emphasized by Lave and Wenger (1991), Wenger (1998), and Brown and Duguid (2002) and (1991) is affected by the status of the individual in a community if existed. It is reasonable to speculate that the conflict triggers nepotism and other social barriers to hinder the community from functioning as theorised by Wenger (1998).Therefore, members do not find chances to collaborate to solve common problems, share best practices and support each other. This can be noticed in seeking opportunities looking for jobs or help in general. It seems that the conflict activates all these issues to the extent that one will not be able to recognize whether the person talking is highly educated or just a normal one from the lay out.

**Conclusion**

It was noticeable that all the mentioned above were exacerbated by the conflicts in all its manifestations; the political, the social and the cultural .They worked together as complete abstraction that precluded CoPs from functioning. For the NGTs in the Libyan context and in other similar ones, the potential means for gaining professional development in the workplace would be through formal training under the educational organizations.

## References

Brown, J. S., & Duguid, Paul. (2002). *The social life of information*. Boston: Harvard Business School Press.

Brown, J. S., & Duguid, Paul. (1991). Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation. *Organization Science, 2*(1), pp.40-57. doi: 10.1287/orsc.2.1.40

Colley, H., James, D.,& Diment, K. (2007). Unbecoming teachers: towards a more dynamic notion of professional participation. *Journal of Education Policy, 22*(2), pp.173-193.

De Lima, J. Á. (2003). Trained for isolation: The impact of departmental cultures on student teachers' views and practices of collaboration. *Journal of Education for Teaching, 29*(3), pp.197-217.

Felstead , A., Fuller ,Alison., Lorna Unwin ,Lorna., Ashton ,David., Butler., Peter.,& Lee.Tracey. (2005). Surveying the scene: learning metaphors, survey design and the workplace context. *Journal of Education and Work, 18:4, 359-383, 18*(4), 359-583.

Hammersley, M. (2005). What Can the Literature on Communities of Practice Tell Us about Educational Research? Reflections on Some Recent Proposals. *International Journal of Research and Method in Education, 28*(1), pp.5-21.

Hughes, J. (2007). Communities of practice in their place. In J. Hughes, Nick Jewson & Lora Unwin (Ed.), *Communities of Practice Critical perspectives* (pp. 156-170). London: Routledge.

Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Wenger, E. (1998). *Communities of Practice Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.

Contact email:  fatimasuccees@yahoo.ca

# Dialogue, Problematization, Political Commitment and Community Participation as the Main Elements of Integrated Pedagogical Actions of Rural Family Houses

Ronaldo Marcos de Lima Araújo, Federal University of Pará, Brazil

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
This paper approaches an experience of integrated teaching in the Gurupá Family House, a technical school, integrated to the high school level of education, sponsored by an organization of rural workers in the hinterland of the Brazilian Amazon. Ensued from studies grounded on Gramscian's concept of Unitary School as a reference, we sought to identify the strategies of knowledge integration adopted at the focused school, which led it into a status of prominence, regarded as a positive educational experience, despite the poor infrastructure available. A case study yielded us to identify that the teaching strategies based on dialogue, critical reasoning of knowledge and work situations, teachers' and students' political commitment to the school's pedagogical project and the community's effective daily participation in the school life constitute the main elements of the integrated pedagogical action of the studied school unit.

**Keywords:** High schoo, Rural Family House of Gurupá, Amazon, Integrated teaching

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Integrated teaching should be perceived as an ethical and political project of broad range for human development, which also involves coping with the poor quality of the teaching offered by the majority of Brazilian public schools. It is a project committed to social transformations, considering the fragmentation of knowledge as one of the main features underlying this poor-quality education, as well as to the challenge of facing it.

This article proposes the re-articulation of the relations involving theory and practice, expertise and performance, scientific and local knowledge, education and professional development, thus fostering a wider and more rigorous perception of reality and its natural and social phenomena. With that intent, it presents a curriculum structured around science, work and culture.

This proposal, inspired on Gramscian's idea of Unitary School (without intermingling), represents the search for "the most thorough education possible" for young workers, regarding the current conditions of a dependent capitalist country. Praxis-oriented, the integrated teaching presupposes a transformational, thus non-conformist attitude towards reality[1].

Proposed by a group of Brazilian intellectuals, among which we pose special emphasis on Gaudêncio Frigotto, Maria Ciavatta Franco and Marise Ramos, who launched the book "Ensino Médio Integrado (Frigotto, Ciavatta and Ramos, 2005), the integrated teaching was intended to reorganize the secondary education. The Ministry of Education, through its Coordination of Secondary Education, considered the integrated teaching as an official reference (Brasil, 2006, 2007a and 2007b), however, not all the members of the Ministry shared the compromise in equal terms of commitment. On account of that fact, integrated teaching was either 'more' or 'less' regarded throughout Lula's and Dilma's governments (from 2003 to 2014).

Meanwhile, integrated teaching has constituted itself a flag used to convince many professionals of the education field who sought an alternative for the lack of projects aimed at defying the poor quality of the Brazilian education. Some state public systems considered the integrated teaching as a key idea for their professional development units and /or for their regular secondary level during some governmental administration periods. Among these systems we refer to the Secretariat of Education of Pará, Mato Grosso, Espírito Santo and Paraná. Likewise, other rural and city schools of secondary level and technical education have also supported the idea, facing the challenge of promoting the "integrated teaching".

In a research developed in the state of Pará (Araujo, 2012) several schools were identified as having adopted the integrated teaching as their formal project, however, the majority did not effectively promote the intended meaningful changes either in the school organization or in the pedagogical practices. Nonetheless, some positive experiences have been registered in regards to the integrated secondary education – associated or not to the professional development.
This article will focus exclusively on the experience developed by the Rural Family House of Gurupá (RFH), located in the city of Gurupá, region of Marajó, in the state

---

[1] Refer to Araújo, Rodrigues and Silva (2014).

of Pará, 485 km away from the capital, Belém[2]. The RFH of Gurupá is a secondary school operating under the principles of the Pedagogy of Alternance and whose students are young people coming from distinct rural communities of the nearby areas, mainly riverside, *quilombola*, and settled families. The RFH of Gurupá offers primary and secondary education classes, including technical secondary programs under the integrated system, our main focal point. We have interviewed students and "collaborators" who share teaching, secretary and other administrative tasks at the school.

Another aspect underlying this study is the fact that it analyzes a school, conceived and maintained, by a labor organization, clearly embracing a counter hegemonic stance.

**The Rural Family House of Gurupá**

During the visit to the school, diverse sorts of shortages and needs were revealed, namely teachers, administrative staff and regular electricity service (the school's power generator operates in reduced hours due to the financial cuts on resources done by the municipal administration). In terms of infrastructure, the school lacked laboratories, including computer lab with access to the World Wide Web and varied didactic resources. Despite the difficulties, aspects such as teamwork spirit, political commitment to the school qualification and to the improvement of the community quality of life were clearly attested.

The purpose of the RFH of Gurupá (not named *school*), according to different interviewed subjects, consists in the "development of the community". The general purpose, on that account, is not pedagogic. "Teaching is not what matters most" explains a monitor, "the most important point is the development of the rural workers' well being: *quilombolas*, settled families and riverside people". The school is definitely destined to that intent.

In a chat with the school educators, termed monitors (including the graduated professors) it was clear the school had been created and operationalized to fulfill the demands and educational needs of the local population. It is the community itself to determine the focal themes that will aggregate related contents and developmental activities, always converging to the central purpose – development of the local communities.

During conversations, the school youngsters revealed political maturity and the great majority revealed argumentation and exposition skills. It was also clear that just a few of them make frequent use of the Internet and although part of their time is dedicated to the productive tasks in the school and within the family properties, they did not differ in general preferences and tastes from any other youngster: music, soccer, dance and fun.

---

[2] Among the visited schools, *Escola Crescendo na Prática*, from the Settlement of Palmares II stood out, associated to LRWM – Landless Rural Workers' Movement (in Brazil, largely identified by the acronym MST). We emphasize, however, two remarkable features which tend to limit its performance: a) strong institutionalization, and as a consequence, b) potential loss of radicalness of its original proposal.

**The educational proposed program of the Rural Family House of Gurupá**
The conception of the Rural Family House of Gurupá, in line with so many other existing RFHs in Brazil and in the world, arises from the need to qualify the young people from the rural areas so that they remain in rural areas and, by mastering skills and knowledge, become capable to contribute economically to improve the life of their community[3] (GIMONET, 2007).

The Pedagogy of Alternance is regarded as a pedagogical reference of this institution[4]. Listed below, are the characteristics identified by Nosella (2007) as those expressing the specificities of this curricular arrangement:

        a) Alternance
        b) Internship
        c) School's articulation with the social reality of the context where it is inserted
        d) Didactic organization accomplished by a Study Plan that represents its "methodological specificity".

The articulation involving the axes 'knowledge', 'doing' and 'thinking' should allow students greater control of both theoretical and practical contents fostering enhanced possibilities to build and autonomously produce new knowledge.

The political content of the "pedagogical project" of the RFH of Gurupá is the main distinguishing feature of this school. It takes the pedagogical practice as a tool to promote human critical thinking over trivial matters and the development of concrete solution means for their specific problems.

**Students** recognize **human development** as the great goal of that school. For students, the emergence of new technical and political leaderships for the community is the school's main objective, which means the school is expected to provide the demanded experts, develop collaborative skills and assure the religious education of the students. Although technical, political and spiritual developments are distinct aspects of the educational program proposed at the RFH of Gurupá, they are carried out in an integrated manner.

---

[3] The RFHs in Brazil, when created, sustained in their purposes, a strong social function instead of a merely educational one. They aimed at defying the lack of alternative techniques for the environment preservation, the rampant deforestation process, the inappropriate use of fire, the inadequate preparation of the soil, the intensive use of agro-chemicals, the poor conservation practices in cultivated areas, the monoculture, the rural exodus, the evasion of rural schools and the lack of elementary schools in the rural areas. (GIMONET, 2007, p.31).

[4] According to Nosella (2007), the Pedagogy of Alternance is characterized as vocational and not professionalizing, at the service of the teenagers of the rural environment, guided by the fundamental purpose of social changes, making use of a Study Plan within an educational environment with small groups, ensuring the participation of their farmer parents.

Making this clearer, **monitors** (teachers) of the RFH reaffirm the School's commitment to the articulated goals involving **work**, **religion**, **and well being of families** and to the improvement and **overcoming of precarious conditions of family life in the community**. They also take the responsibility to broaden the horizons of the youth population, having the rural reality as reference.

A monitor explains the objectives of the RFH:

> The difference between the public school and the Rural Family House, the issue of valuing the rural areas and not studying math because it is necessary for us to, but because it is a need that will be felt by the peasant while administrating, so it is about acquiring new knowledge. (Interviewed 1).

The worries towards the promotion of progress and well being among the country families is stressed, thus going beyond the essentially educational purposes which seem to characterize the other schools.

It is possible to infer from the students' discourses that **good quality education is that which values the local culture, family property, community and family,** enabling them to enjoy a dignified country life.

Under the influence of *Pastoral da Juventude* [5] the school works towards the tripod – action, education and spirituality – believed to be the credentials for "students' humanity"[6].

**Pedagogy pursuing integration**

From the pedagogical standpoint, "integration" between theory and practice is pursued, having **the country and riverside lives as elements of integration** and **the participation of the families and community in the school dynamics** as a guarantee of the school's articulation with the realities of the youth and the community. This is its fundamental pedagogic specificity.

Family participation, therefore, is not merely a management strategy, but also a pedagogic one, as stated by a monitor:

> The matter of the monitor's interaction with the family also makes the difference, the matter of following up the young people, the family knows that the kid is here and when he leaves he takes the notebook of Alternance telling how his week was, this makes a great difference, the matter of human development, for the families that participate directly, that have kids studying here, people who are members, this will end up making a difference between the RFH and the others (Interviewed Monitor 1).

The families are also encouraged to take part in classroom activities. From the **Planning stage,** the action is shared and built upon lively participation of the community. The Rural Family House of Gurupá plans its actions collaboratively, in that parents, students, monitors, coordinators and smallholder farmers of the region determine, during reunions and general sessions, which contents are more relevant to be included within the core thematic axes, in an integrated way, during the periods of alternance.

---

[5] *Pastoral da Juventude*: Youth Ministry

[6] The influence of the Church by means of BCCs – Basic Christian Communities – in that the region is analyzed by LOPES (2013).

Among the teaching procedures used by the monitors, in the search for integration of knowledge, we have identified a very wide range of strategies. They include lectures, seminars, study plans, personalized tutoring service, the reality notebook, the didactic notebook, field visits and study tours, external overtime-interpositions, return-to-school support activities, experiences, follow-up visits to families and communities, supervised professional practice, professional aspiration project, alternance monitoring notebook, debates and visits to small farms of the Marajó river communities.

Although several teaching procedures are employed, especially seminars and research activities, **collaborative work, problem posing and dialogue seem to constitute the basis of the different formative strategies** observed. While collaborative actions are encouraged, youngsters are demanded to prove responsibility and commitment to the school, to their own formative process and, mainly, to the community.

The work of the monitors in the classroom is guided by the idea of questioning the bases of knowledge and experiences. Even in practical classes held during the visits to the associated families' properties and supervised by the monitors, their interventions are minimal and, when they actually occur, the aim is to problematize. The rural producers committed to the school program and who take over the practical lessons on *techniques* and *knowledge learned throughout life*, are also oriented " not to provide the students with prompt responses ", but to stimulate the their reasoning skills.

For the monitors, **problem posing** and **research** are basic teaching and learning strategies grounded on the proposal of situations that start up reflection and dialogue, as explained by a monitor:

> In the lectured classes, we use videos, seminars, the reading of notes, so it is quite dynamic, the interesting thing about the Rural Family House it does that a lot, allowing the students to speak a lot and search for knowledge, always when we take our courses, our meetings to socialize, we use the old tactic of the student who makes a direct question, expecting to get a straight answer, we always explain and explain not to offer direct questions, guide the student to seek the answer to the question he asked. He tries, he learns to seek knowledge, that is what we understand to be the most important, the most important knowledge that I can offer to my students and make him learn to develop his knowledge he already has and go search, so that's what we try, it is not easy, it is not simple, we often need the monitors, we need more theoretical basis to complement our practice and it is right there that your participation is welcome (interviewed Monitor 5).

This is how a monitor explains about the interdisciplinary action, which shall allow communication among monitors and the subject matters:

> I'm a monitor, I and another colleague, even though I have specific degree in Education and the other monitor in Portuguese, or be an Agronomist, we believe the development is all this at the same time in a very practical and concrete way, when you are debating a topic

like *açaí*, of course you are looking for all the knowledge you have of the various subjects that you study separately, so the Portuguese language is involved, Mathematics, Biology, Chemistry, Physics, Arts, Culture when you explain about the production of a *paneiro*, all this is coming at the same time without saying: now it's Arts, now it's Portuguese language, now it's Mathematics, because we resist to this, a lot, because we understand that education is like that (Interviewed Monitor 5 ) .

When specific themes need to be more deeply explored and understood, this is done during nighttime in the overtime-organized sessions.

**Assessment** at the RFH is a continuous process and includes the different formative dimensions: content apprehension, working practices and the youth's social life at school and within the community, analyzed from the individual and collective perspectives. Instruments of assessment, including self-assessment include the reality notebook, the alternance notebook and the pedagogic file. Assessment is also accomplished in the rural properties where monitors register the demands and the families *evaluate if the student is learning, if he is putting into action what he does here* (Interviewed Student 1).

A student explains the assessment process as follows:

They assess us twenty four hours a day, for the entire structure of the House, we get Excellent, Good and Regular, then along the week the monitor controls all the activities developed in the House, then in the coming week the average is exhibited in the bulletin board. (Interviewed student 1).

**C**ontent organization is oriented in accordance to each of the three mentioned axis and then, developed into study plans that are expected to fulfill the community demands and be "translated" into the school planning, as explained by a monitor:

An interesting thing I told you, they interview students in the community, then when they get to the houses of the families, associated families that have a student here, there is joint effort in the community, there is a communal celebration, they question, the monitor is introduced as a representative of the Rural Family House who is doing a research, they end up... also some people who are not militants, as has been the case, start to take the cause, and ask about politics, economy, social problems, finally, there with the families, everything is questioned, so the teacher must be adapting to this. (Interviewed Monitor 4).

The follow up of the evolvement of the study plans is the school's and the family's responsibility, as explained by a student:

The dynamics of their class, he will use mathematics relating to the subject in which we are, but he uses all the rules of mathematics, the same thing is the Portuguese, he teaches Portuguese, but we're studying on a topic, for example, we work with texts a lot, reports, then the Portuguese it is already involving (interviewed student 5).

The knowledge brought by the students into the RFH, resulting from their direct social interaction in the community and from their relationship with the productive work, is highly appreciated.

The establishment of some internal RFH norms takes place during meetings and general sessions. They include: the constant monitoring of students throughout the internship period, their domestic responsibilities in terms of cleaning rooms, engagement in management activities, planting in and out the properties of the RFH, definition of relationship patterns among monitors / students, students / students. This internship period, according to the views of coordinators and monitors, should be understood as a part of a thorough formative and individual growth process shared by all and built upon daily constructed interrelations.

A student in the following narrative explains the organization of the school time and the community time

> During these fifteen days we spend at home we do not just sit and rest, we do a survey with the families in our property, our community, we do this research and socialize the results together with the monitor when we get back here, so we put our knowledge, the knowledge of our family, of our community, the student socializes, the monitor does the same too, so there are conflicts of ideas, knowledge, I agree with that, but my classmate does not agree, then he disagrees with me, then we start to debate, so it's a very cool thing, as she says, you can not tell who is a monitor and who is a student (student interviewed 2) .

The **monitors** (teachers) hired by the local government of Gurupá and assigned to the RFH are required to meet the basic prerequisites – acknowledgment and conformity to the school's pedagogic project. These monitors have proved effectively engaged to the RFH project, whose main broad objective is to promote **human development.**

The pedagogical practices at the RFH seek ways to overcome the separation of the intellectual and manual competencies of the laborer and also to find a clear strategy of integration by means of dialogue and problem posing.

**An attempt to synthetize the pedagogical experience at the RFH of Gurupá**

In this text, we approach the integrated teaching conceived as an ethical-political project of reality awareness in its thorough dimension, putting actions forward and on behalf of social transformation.

We start from the premise that the didactic solutions are not enough for the effectiveness of the integrated teaching, be they founded on the Pedagogy of Alternance, Pedagogy of Projects, Problem Posing or other strategies which try to articulate theory and practice.

The work developed at the RFH of Gurupá is an experience that is worth recognition for its uniqueness, in the state of Pará, one that offers secondary and technical levels of education in the rural area and has been undertaken by a labor organization with a clear counter hegemonic perspective. Another remarkable fact is that it is one of the sole educational experiences in Pará, which intentionally accomplishes the integration

between local and universal knowledge moving from the common school curriculum and the specific technical training[7].

Managers, educators and students have had difficulties both in sustaining regular secondary education offers and in keeping attending the classes. The situation was aggravated with the election of the current state government staff (2011-2014), which cancelled a crucial agreement grating the transference of financial resources and available personnel.

This research allowed us to identify three specificities of the pedagogical practices underway in the focused school and which might be its differential aspects:

1.  Political project and democracy as its target;
2.  dialogue and problem posing as pedagogical strategies; and;
3.  participation of the community as an assurance of quality.

The emancipatory political project advocated by the RFH of Gurupá is revealed by the way pedagogy is subordinated to politics, priority is given to social interests, commitment to the families' well-being is embraced, more importance is given to collective interests in detriment of individual interests and the way workers' knowledge and culture are highly regarded.

Elements such as: families, community, culture, politics, economy, knowledge and professionalization are inseparable in the studied educational unit. These multiple aspects should be considered in the elaboration of the study plans and in the definition of the teaching strategies.

The proposal of an integrated secondary education at this RFH has the primary intent of emancipating the rural worker in terms of his political and social position and the condition imposed to him by the capitalist society, in whose context the country life and knowledge are undervalued.

Dialogue and problem posing strategies emerge as signs of the pedagogical practices proposed by the RFH. They are visible in the dialogues with the community, in the school interactions and in the teaching and learning strategies. Students, coordinators and associated workers are agents with different roles, but with a symmetrical relationship. Problem posing is revealed in the different teaching strategies, in the dialogues between monitors and students and also in the emphasis given to research, faced as a pedagogical principle.

Community participation in the school life is also another characteristic of this experience. It is understood as a guarantee that the school will keep on putting forward its social mission of promoting the community well being.

The study carried out to this point has shown positive and also problematic issues that need to be understood in depth. The idea of fostering conditions for the rural people to remain in the country areas is still solid in the narratives collected from different interviewed subjects. The declarations, which expose their low expectation towards college education, treatment given to scientific data and the use of community time

---

[7] Some photos taken during the visit to the RFH of Gurupá may be seen at:

http://emdialogoamazonia.blogspot.com.br/2012/08/o-que-e-ser-jovem-em-gurupa-pa.html#more.

need to be better understood, taking into account that counter hegemonic teaching projects should be built as "empowering time"[8], just as labeled by Nosella (2007).

The idea of integrated education, here perceived as a possible and necessary project, despite of some relatively successful experiences such as this of the RFH of Gurupá, is still a pedagogical and political challenge. It presupposes the mobilization of educators committed to the articulation of their educational actions with an equalitarian society.

The effective integration of educational practices in Brazilian schools is still in the first steps of a long road, but the progress already achieved is undeniable. The fact that this project was brought into discussion and was undertaken by agents originated from different teaching units is a clear example. For that reason, it is extremely positive to attest that many schools and some public teaching systems have fully embraced the integrated teaching political and pedagogical project.

Other positive examples are the experiences and attempts of integration made in some schools and educational systems. These experiences must be analyzed, their progress and difficulties systematized so that they might subsidize actions to face the problem of knowledge fragmentation. None should be perceived as completely "right" or "wrong", otherwise our possibilities of learning more about the process of building integration would be hindered. More appropriate pedagogically (and dialectically) is to try to recognize what such experiences mean, try to realize that many professionals under different teaching situations have tried to materialize the idea of integrated teaching and that these practices are the most relevant sources of pedagogical knowledge available to guide effective strategies of integration.

---

[8] Translator's solution for the original "tempo de libertação" in Nosella (2007)

**References**

ALMEIDA, F. S. (2012). *Estratégias de ensino em Educação Profissional*. Relatório de Iniciação Científica. Belém: Universidade Federal do Pará,.

ARAUJO, R. M. L.; RODRIGUES, D. S. (2011). *Filosofia da Práxis e Ensino Integrado*: para além da questão curricular. Trabalho & Educação (UFMG), v. 20, p. 11-21, 2011.

ARAUJO, R. M. L. (2000). *Desenvolvimento de Competências Profissionais*: as incoerências de um discurso. Tese de doutorado apresentada ao Programa de Pós-Graduação em Educação da UFMG. Belo Horizonte.

ARAUJO, R. M. L. (2012). *Experiências de ensino integrado no estado do Pará* – Relatório de Pesquisa. Available at www.gepte.com.br. Belém.

ARAUJO, R. M. L. (2014). *Práticas Pedagógicas Alternativas de Formação dos Trabalhadores Referenciadas em Projetos Contra-hegemônicos* – Relatório de Pesquisa. Disponível em www.gepte.com.br. Belém.

ARAUJO, R. M. L.; RODRIGUES, D. S.; SILVA, G. P. (2014). *Ensino integrado como projeto político de transformação social*. In: Revista Trabalho & Educação. Belo Horizonte: FAe-UFMG. V. 23, n. 1, pp. 161-186. Jan-abr.

BRASIL. Ministério da Educação. (2006). *Programa de integração da educação profissional técnica de nível médio na modalidade de jovens e adultos*-PROEJA. Documento Base, Brasília: MEC.

BRASIL. Ministério da Educação.(2007). *Educação Profissional Técnica de Nível Médio Integrada ao Ensino Médio*. Documento Base. Brasília. Available at < http://portal.mec.gov.br/setec/arquivos/pdf/documento_base.pdf > Acessed in 12.20th.2007a.

BRASIL. Ministério da Educação (2007). *Decreto 6302 de 12 de dezembro de 2007*. Institui o Programa Brasil Profissionalizado. Brasília, 2007b.

COSTA, A. M. R. (2012). *Integração do Ensino Médio e Técnico*: Percepções de alunos do Instituto Federal de Educação, Ciência e Tecnologia do Pará – IFPA/Campus Castanhal. Dissertação de Mestrado defendida no Programa de Pós-Graduação em Educação da UFPA. Belém.

FRIGOTTO, Gaudêncio; CIAVATTA, Maria; RAMOS, Marise. FRIGOTTO, Gaudêncio; CIAVATTA, Maria; RAMOS, Marise. Ensino Médio Integrado: concepções e contradições. São Paulo: Cortez, 2005.

GIMONET, J. (2007). *Praticar e compreender a Pedagogia da Alternância dos CEFFAS*. Petrópolis, RJ: Vozes.

LOPES, R. W. C. (2013). *CEBs Ribeirinhas*: análise do processo de organização das Comunidades Eclesiais de Base em Gurupá-PA. Dissertação defendida no Programa de Pós-Graduação em Ciências da Religião da UEPA. Belém.

MAGALHÃES, B. A. C. S. (2009). Educação do campo, poder local e políticas públicas: a Casa Familiar Rural de Gurupá-Pa, uma construção permanente. Dissertação de mestrado defendida no PPGED-Universidade Federal do Pará. Belém: Universidade Federal do Pará.

MARX, K.; ENGELS, F. (2001). *Manifesto do Partido Comunista*. Available at: http://www.histedbr.fae.unicamp.br/acer_fontes/acer_marx/tme_07.pdf. Acessed in 08.06th.2014.

NOSELLA. P. (2007). *Origens da Pedagogia da Alternância*. Brasília.
RAMOS, M. N. (2001). *A Pedagogia das Competências: Autonomia ou Adaptação?* São Paulo: Cortez.

SANTOS, É. M. N. (2008). *A Construção de Espaços Públicos na Política Educacional em Gurupá*. Tese defendida no Programa de Doutorado em Desenvolvimento Sustentável do Trópico Úmido da UFPA. Belém.

SANTOS, M. T. (2011). *A pedagogia da alternância na integração de saberes no PROEJA Quilombola no Instituto Federal do Pará* (IFPA)- Campus Castanhal. Dissertação defendida no Mestrado Acadêmico em Educação da Universidade Federal do Pará. Belém.

*Effect of Inclusive Education Awareness Programme on Preservice Teachers*

Sudha Samir Pingle, University of Mumbai, India
Indu Garg, University of Mumbai, India

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
In India, the concept of inclusive education schools is gaining importance to provide equal opportunities for education for all. Aim of schools in India is to include students with special needs in the regular classrooms. However, biggest challenge they face is lack of awareness among teachers about inclusive education. Educationists across India have felt the need to make teachers aware about inclusive education. This research paper discusses about the effect of inclusive education awareness programme, developed to create awareness among preservice teachers. Methodology used was quasi-experimental design-pretest and posttest non-equivalent group along with factorial design to study the interactive effect of moderator variables on treatment. Questionnaire on awareness about inclusive education was prepared. It comprises of 48 items, and its reliability index is 0.85 by Split–Half method and 0.88 by Cronbach Alpha. Purposive sampling technique was used and sample consisted of 77 preservice teachers in the experimental group and 53 in the control group from two colleges offering D.T.Ed (Diploma in Teacher Education) Course. Treatment, inclusive education awareness programme was implemented using different interactive teaching methods for 52 hours across five weeks. Data was analysed using descriptive and inferential statistics t-test, ANNOVA (Two-way), Wolf's test. Findings revealed that preservice teachers from experimental group have gained awareness about inclusive education to a moderate extent. No significant interactive effect of social intelligence, emotional intelligence, socio-economic status and treatment was found. This confirms that treatment given to experimental group was effective.

**Keywords**: Inclusive Education Awareness Programme, Quasi-Experimental Design, Factorial Design, Preservice Teachers

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Inclusion as is known today has its origins in special education. The development of the field of special education has involved a series of stages, during which education systems have explored different ways of responding to children with disabilities, and to students who experience difficulties in learning. In some cases, special education has been provided as a supplement to general education, in other cases it has been entirely separate field. In recent years, the appropriateness of separate systems of education has been challenged, both from a human rights perspective and from the point of view of effectiveness in dealing with children with special needs.

In the past 20 years, the issue of inclusion has had a huge impact on development in thinking and practice in the education of children with Special Educational Needs (SEN) both in India and overseas. Legislation of most countries encourages regular schools to adopt a more inclusive approach to education. Today, in India there is a growing importance to provide equal opportunities for education for all. One of the important aims of schools in India has become to include students with special needs in the regular classrooms.

The Government of India has enacted the legislation Persons with Disabilities (Equal Opportunities and Full Participation) Act, 1995 (PWD Act) to achieve the goal of providing access to free education in an appropriate environment to all learners with disabilities till the learner attains the age of eighteen years. The Act endeavors to promote the integration of learners with disabilities in mainstream schools by providing inclusive education.

Inclusive education opposes the practice of separation and it is based on the notion of equity. Emphasis is given to the needs and rights of children, including their right to education. It accepts all children as they are, providing them with adequate resources and support according to their needs. When talking about integration, it refers to the integration of an individual into a school in which learner was not previously accepted. Inclusive education does not simply refer to the placement of children with disabilities into normal schools, but it is also concerned with the conditions under which all children can be educated effectively (Barton, 1997). Sebba and Ainscow (1996) define inclusive education as the process with which schools try to respond to all pupils as individuals, reviewing the organization and provisions in the curriculum.

**The Education System in India**

The Indian education system is structured as follows:

- **Pre-School**: Education at this level is not compulsory. The Montessori system is especially popular at the pre-school level
- **Kindergarten**: This is divided into lower kindergarten (for three- to four-year-olds) and upper kindergarten (for four- to five-year-olds)
- **Primary School**: First to fifth standard/class/grade (for six- to ten-year-olds)
- **Middle School**: Fifth to eighth standard/class/grade (for 11- to 14-year-olds)
- **Secondary School**: Ninth and tenth standard/class/grade (for 14- to 16-year-olds)
- **Higher Secondary or Pre-University**: 11th and 12th standard/class/grade (for 16- to 17-year-olds) This is when students choose an academic area on which to focus
- **Undergraduate:** Bachelors degree is a three-year degree course in Science, Commerce and Arts.

- **Postgraduate and Professional Courses:** Medicine, Engineering, Management and Teacher Education

**Types of Schools**

There are mainly three streams of school education in India. Two of these are coordinated at the national level, of which one is under the **Central Board of Secondary Education (CBSE)** named Kendriya Vidyalayas, run by the central government. The second central scheme is the **Indian Certificate of Secondary Education (ICSE).** These are private schools. The third stream of school is Secondary School Certificate (SSC) run by each state government in India. Other schools in India are **National Open Schools** which provide education up to the higher secondary level for children whose schooling has been interrupted and they have been unable to complete formal education and **Special Needs Schools** which provides non-formal education and vocational training to children with disabilities.

Malini Sen (2007) reported that school in India at all the levels need to promote an education system that brings all learners onto a common platform. The curriculum needs to balance what is common for all and at the same time, take into account the individual needs of all the learners. The biggest challenge to inclusion of children with special needs is lack of awareness in school authorities and teachers in India. Most schools do not have the appropriate environment to make children with disabilities feel welcome. "Besides lack of resources and infrastructure, the current education system does not allow for individual development of children at their own pace. Teachers are unable to cope with differences in children, not because they do not want to, but due to lack of training to indentify students with disabilities. All this stems from lack of awareness," asserts Lilly Vishwanathan, Project Manager, Plan India and Delhi.

In a typical Indian class, there are fifty or more children, Firstly, children with disabilities, fall outside the teacher's tolerance level. Secondly, their nondisabled peers do not accept these students. Thirdly, the reason children with disabilities are especially vulnerable, particularly in the Indian milieu, is that teachers do not know how to deal with these children. There is a visible lack of awareness among teachers.
In India, the government and Non-Governmental Organizations (NGOs) are initiating measures to review and plan appropriate strategies for inclusive education. These measures include evolving policy guidelines, analyzing practices, developing teacher-training programmes, and creating resource persons and special teachers by establishing linkages to complement each other.

The National Curriculum Framework for School Education (National Council of Educational Research and Training-NCERT, 2000) has recommended inclusive schools for learners with special educational needs by making appropriate modifications in the content, presentation and transaction strategies, preparing teachers and developing learning friendly evaluation procedures.

Vijaya Prema, head of the education department, Child Study Centre, Spastic Society of Karnataka, Bangalore (as cited in Malini Sen, 2007) feels that children with disabilities can be part of mainstream education with early intervention. "If a child's specific learning difficulty can be detected by class III, then with right support of teacher he or she can overcome the difficulty by the time the child reaches middle school." Therefore, training for teachers at pre-primary and primary levels is most important. In fact, such training should be given to preservice teachers at the pre-service level teacher education course, so that they are trained to cater to children with disabilities when they join the schools as a teacher.

**Teacher Education Courses in India**
In India for aspiring teachers, several universities, affiliated colleges, private and open universities, provide teacher education courses at different levels along with internship programs in real classroom settings.
There are three levels of teacher education courses
- **D.T.Ed Diploma in Teacher Education:** it prepares teachers for primary school.
- **B.Ed Bachelor of Education:** it prepares teachers for secondary and higher secondary schools for which minimum educational requirement is to pass bachelors degree with 50% marks and Common Entrance test (CET).
- **M.Ed Master of Teacher Education:** it prepares teachers for teaching at B.Ed or D.T.Ed levels. Minimum educational requirement for entering in to the course is to pass Bachelors of Education degree course with 50% marks and Common Entrance Test (CET).

Those working in the field of Teacher Education feel that teacher education programmes in India at all levels D.Ed, B.Ed and M.Ed requires a complete transformation. Teachers need to be sensitized and equipped to help students with different needs. With the need felt to prepare teachers for inclusive education, teacher education courses at B.Ed and M.Ed levels have revised the curriculum and incorporated a course on inclusive education. However, it has been kept as an elective to choose from and therefore, there are not many takers for this course. This indicates that teachers do not seem interested or are not aware of the significance of this course.

In India, State Council of Educational Research and Training (SCERT) Pune in Maharashtra State has designed the curriculum of Diploma in Teacher Education D.T.Ed. The state Government approved the curriculum of D.T.Ed course, which includes subjects like Indian Society and Primary Education, Psychology of Learning and Teaching, Education Evaluation, Educational Management, Child Psychology. Apparently, D. T. Ed course does not offer a course on inclusive education.

Seamus Hegarty and Alur Mithu (2002) have suggested that early detection of disabilities is very important to provide appropriate remedy and help the students to develop in right direction. Therefore, teachers at pre primary and primary levels should have the awareness about different disabilities and inclusive education. The present primary education teacher-training course barely creates to such awareness.

Hence, the researchers' personal interest in this area and the urgency to make the preservice teachers aware about inclusive education, the researcher felt the need to develop an inclusive education awareness programme, implement it at D.T.Ed level, and study its effectiveness. With this, in view the present study was undertaken.

**Variables of the Study**
**1. Independent Variable:** inclusive education awareness programme developed
by researcher implemented using different interactive methods of teaching.
**2. Dependent Variable:** awareness of inclusive education
**3. Moderator Variables:** social intelligence, emotional intelligence and socio-
economic status, was considered to see whether they interact with independent and
dependent variables.
**4. Control Variables:** variables held constant by the researcher or eliminated as the
potential causes of the effect observed were age, types of institutions and medium of
instruction.

**Definition of the Variables**
**A. Operational Definition of Inclusive Education Awareness Programme:** It is
defined as a plan, which is developed for training D.T.Ed students-teachers to create
awareness about inclusive education using various interactive teaching methods such
as discussion, case studies, power point presentations, educational video films ,
conducting field visits and group work activities

**B. Operational Definition of Awareness of Inclusive Education:** It is defined as the
extent of knowledge and understanding among D.T.Ed students-teachers about the
following aspects of inclusive education…
**1. Concept of Inclusive Education:** includes the meaning, philosophy, objectives,
characteristics, need and benefits of inclusive education.
**2. Legal Aspects of Inclusive Education:** refers to the historical perspective, current
policies, educational and financial provision that have legal sanction for children
with disabilities.
**3. Basic Information about Disabilities:** refers to the concept of impairment,
disability, handicap, types, characteristics, symptoms, and causes of disabilities,
approaches and techniques for identification of disabilities.
**4. Skills and Competencies Required for Inclusive Education:** refers to the skills
and competencies required in planning and management of inclusive classroom, use
of assistive devices for learner with disabilities and creating barriers free
environment.

**C. Operational Definition of the Moderator Variables**
**Social Intelligence**: refers to N.K. Chadha and Usha Ganesha's (1986) definition of
social intelligence. It comprises of eight dimensions which are as follows…
    A: Patience: Calm endurance under stressful situations
    B: Cooperativeness: Ability to interact with others in a pleasant way to be able to
    view matters from various aspects
    C: Confidence level: firm trust in oneself and ones chances.
    D: Sensitivity: to be acutely aware of and responsive to human behaviour
    E: Recognition of Social Empowerment: Ability to perceive the nature and
    atmosphere of the existing situation
    F: Tactfulness: delicate perception of the right thing to say or do
    G: Sense of Humour: capacity to feel and cause amusement; to be able to see the
    lighter side of life
    H: Memory: ability to remember all relevant issues; names and faces of people

**Emotional Intelligence:** refers to Waghmare's definition of emotional intelligence which includes combination of skills such as empathy, self-control, self-awareness, sensitivity to feelings of others, persistence and self-motivation

**Socio-Economic Status:** refers to Patel's definition of Socio-Economic Status as cited in Pereira Jessica (2006), wherein it refers to the wealth, power, prestige enjoyed by the family. It refers to, students' indication of their material possessions, size of the family, occupational and educational status of the parents and their cultural and recreational activities.

## Objectives of the Study:

1. To compare the experimental and control groups scores on the following moderator variables
   a) Social Intelligence
   b) Emotional Intelligence
   c) Socio- Economic Status
2. To compare the experimental and control groups pretest scores on awareness of inclusive education
3. To compare the experimental and control groups pretest scores on awareness of inclusive education in terms of the following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education.
4. To compare the experimental and control groups posttest scores on awareness of Inclusive Education
5. To compare the experimental and control groups posttest scores on awareness of inclusive education in the terms of following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education.
6. To compare the experimental and control groups pretest and posttest scores on awareness of Inclusive Education
7. To compare the experimental and control groups pretest and posttest scores on awareness of inclusive education in the terms of following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education
8. To compare the experimental and control groups gain score (posttest-pretest) on awareness of inclusive education
9. To study interactive effect of following moderator variables and treatment on awareness of inclusive education scores
   a) Social-Intelligence
   b) Emotional Intelligence
   c) Socio-Economic Status
10. To estimate the effect size of the treatment on experimental group on awareness of inclusive education

**Hypotheses of the Study:** For the present study null hypothesis were formulated

1. There is no significant difference in experimental and control groups scores of moderator variables on
   a) Social Intelligence
   b) Emotional Intelligence
   c) Socio- Economic Status
2. There is no significant difference in experimental and control groups pretest scores  on  awareness of inclusive education
3. There is no significant difference in experimental and control groups pretest scores on awareness of inclusive education in terms of the following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education
4. There is no significant difference in experimental and control groups posttest scores on awareness of Inclusive Education
5. There is no significant difference in experimental and control groups posttest scores on awareness of inclusive education in the terms of following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education
6. There is no significant difference in experimental and control groups pretest and posttest scores on awareness of Inclusive Education
7. There is no significant difference in experimental and control groups pretest and posttest scores on awareness of inclusive education in the terms of following components
   a) Concept of inclusive education.
   b) Legal aspects of inclusive education
   c) Basic information about disabilities
   d) Skills and competencies required for inclusive education
8. There is no significant difference in experimental and control groups gain score (posttest-pretest) on awareness of inclusive education
9. There is no significant interactive effect of following moderator variables and treatment on awareness of inclusive education scores
   a) Social-Intelligence
   b) Emotional Intelligence
   c) Socio-Economic Status

10. To estimate the effect size of the treatment on experimental group on awareness of inclusive education

**Design of the Study**
**Methodology of the Study:**
*Quasi-Experimental Design*: The pretest and posttest non-equivalent group design.

**This design is described as follows**
$O_1$     X      $O_3$
$O_2$     C      $O_4$
**Where,**   $O_1$ and $O_2$ = Pretest and    $O_3$ and $O_4$ = Posttest
X: Experimental Group (treatment given) and C: Control Group (no treatment given)

*Factorial Design*: By using factorial design, researcher can determine whether the treatment interacts significantly with some other variables. Therefore, factorial design was used to analyse the interaction effect of the moderator variables with the treatment on the dependent variables.

**Sampling Technique and Sample of the Study:**   For the present study, the researcher has made use of purposive sampling. Two colleges offering D.T.Ed (Diploma in Teacher Education) where chosen. Sample consisted of 77 preservice teachers in the experimental group and 53 in the control group. Intact classes were included in the study.

**Tools of Research: Awareness of Inclusive Education Questionnaire was constructed by the researcher**, It comprised of 48 questions on four aspects namely concept of inclusive education, legal aspects of inclusive education, basic information of disabilities and skills and competences required for inclusive education. This questionnaire has four options. For each correct option, the score was "1" and for incorrect option, the score was "0". Reliability and validity of the tools was established and the reliability index calculated by Split –Half method was 0.85 and by Cronbach Alpha it was 0.88.

**Ready Made Tools:** To study the moderator's variables following tools were used…
1. Social Intelligence Scale (SIS) By Dr. N.K.Chadha and Ms. Usha Ganesan. (1986): This scale has three options. The total number of items was 66 in 8 dimensions. For each option in dimensions A, B, C, D the score was 1, 2 or 3 and for dimensions E, F, G and H for correct option score was 1 and for incorrect option, the score was "0".

2. Emotional Intelligence Scale (EIS) By Dr. S. Waghmare (2002): This rating scale consisted of 40 questions both positively and negatively stated on five dimensions such as self-awareness, self-regulation, motivation, empathy, and social skills.

3. Socio-Economic Status Inventory (SESI) By Dr. Patel (1997): This tool has 36 questions with multiple options to answer. Each option has score ranging from 0 to 8.

**Development and Implementation of the Inclusive Education Awareness Programme: (Treatment)**

**Treatment:** The content of inclusive education awareness programme was designed based on in-depth review of literature on different areas of inclusive education. The researcher conceptualized the following components necessary for developing awareness of inclusive education among preservice teachers.

Components 1 Concept of inclusive education
Components 2 Legal aspects of inclusive education
Components 3 Basic information about disabilities
Components 4 Skills and competencies required for inclusive education

These components were explained using different interactive teachings methods such as debate, discussion, showing educational video films, documentary films, field visits activity methods using games, case studies, group work and lecture with power point presentations. The total duration of programme including the pre and post testing in both experimental and control group was 52 hours for five weeks.

The rationale for selecting different interactive methods was to create interest among the preservice teachers about inclusive education and provide direct experiences.

**Analysis of the Data:** Data was analysed using **descriptive statistics** i.e. mean, median, mode, standard deviation, skeweness, kurtosis and **inferential statistics** i.e. t-test, ANNOVA (Two-way), Tukey HSD test and Wolf's Test.

**Results of the Study**
• **Differences in the Moderator Variables**

| Table 1 : Differences in Moderator Variable Scores for Experimental and Control Groups | | | | | | | |
|---|---|---|---|---|---|---|---|
| Moderator variables | Groups | df | Mean | S.D | t- ratios | p values | Level of significance |
| Social Intelligence | Experimental | 128 | 103.66 | 8.79 | 1.16 | 0.24 | Not Significant |
| | Control | | 105.07 | 8.59 | | | |
| Emotional Intelligence | Experimental | 128 | 114.61 | 8.40 | 0.76 | 0.44 | Not Significant |
| | Control | | 113.30 | 10.95 | | | |
| Socio-Economic Status | Experimental | 128 | 65.19 | 15.63 | 0.95 | 0.34 | Not Significant |
| | Control | | 68.86 | 13.48 | | | |

From Table 1 it can be inferred that no significant difference was seen in the moderator variables. Preservice teachers from both the experimental and control groups were similar in their **social intelligence (t = 1.16; p > 0.05), emotional intelligence (t = 0.76; p > 0.05) and socio-economic status (t = 0.95; p > 0.05)**. This assured that both the groups were similar before administering the        pre-tests on awareness of inclusive education and implementation of the treatment. This helped to remove any biases regarding their social intelligence, emotional intelligence and socio-economic status.
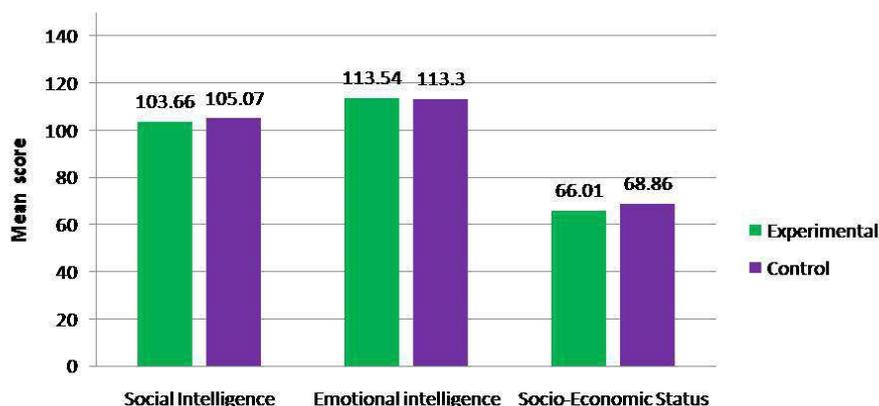
**Figure 1: Bar Graph of Mean Scores of Moderator Variables for Experimental and Control Groups**

## Differences in the Experimental and Control Group Pretest Scores on Awareness of Inclusive Education.

| Dependent Variables | Groups | N | Mean | S.D | t- ratios | p values | Level of significance |
|---|---|---|---|---|---|---|---|
| Awareness of Inclusive Education | Experimental | 77 | 24.93 | 8.81 | 0.47 | 0.63 | Not Significant |
| | Control | 53 | 24.26 | 6.20 | | | |

Table 2 : Differences in Pretest Scores of Awareness about Inclusive Education of Experimental and Control Groups.

| Components | Groups | N | Mean | Percent Mean | S.D | t- ratios | p values | Level of significance |
|---|---|---|---|---|---|---|---|---|
| A:Concept of inclusive education | Experimental | 77 | 6.66 | 60.56 % | 2.29 | 0.09 | 0.92 | Not Significant |
| | Control | 53 | 6.62 | 60.20% | 2.13 | | | |
| B:legal aspects of inclusive education | Experimental | 77 | 3.23 | 46.19% | 1.68 | 1.75 | 0.08 | Not Significant |
| | Control | 53 | 2.73 | 39.08% | 1.44 | | | |
| C:Basic information about disabilities | Experimental | 77 | 5.37 | 41.35% | 2.38 | 1.74 | 0.08 | Not Significant |
| | Control | 53 | 4.71 | 36.28% | 1.66 | | | |
| D: Skills and competencies in identification | Experimental | 77 | 9.66 | 56.83% | 3.81 | 0.85 | 0.39 | Not Significant |
| | Control | 53 | 10.18 | 59.93% | 2.85 | | | |
| | Total | 130 | | | | | | |

Table 3 : Differences in Pretest Scores on the Components of Awareness of Inclusive Education for Experimental and Control Groups

From Table 2 and Table 3 it can be inferred as no significant difference in the pretest scores of experimental and control groups on awareness of inclusive education was found. **(t = 0.47; p > 0.05).** Also no significant difference in the experimental and control groups was found in the pretest scores on the **four components** of awareness of inclusive education **(t = 0.09, 1.75, 1.74, 0.85; p > 0.05).** This indicates that at the pretest level both the groups had knowledge and understanding of **concept of inclusive education**, **legal aspects of inclusive education**, **basic information about disabilities**, **skills and competencies** required in planning and management of inclusive classroom to the same extent. This assured that both the groups had equal

level of awareness before the intervention of the treatment i.e. the inclusive education awareness programme.
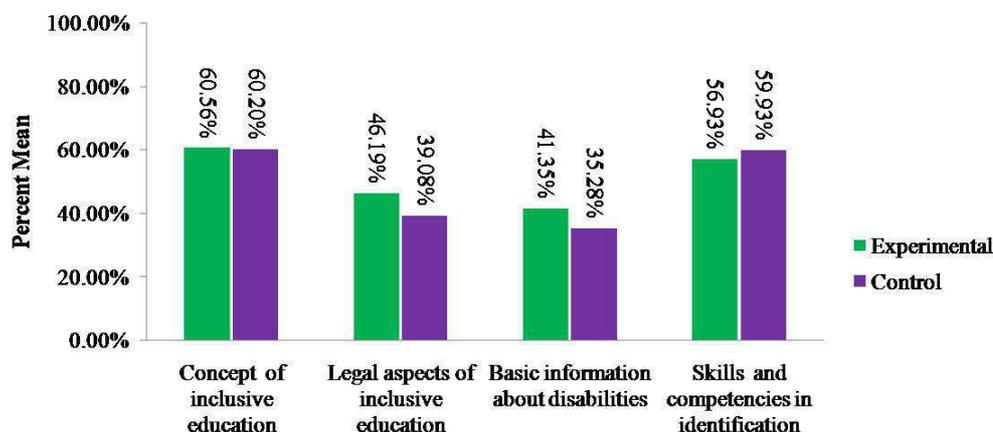


**Figures 2:** Bar Graph of Pretest Percent Mean Scores on Components of Awareness of Inclusive Education for Experimental and Control Groups

- **Differences in Experimental and Control Groups Posttest Scores on Awareness of Inclusive Education.**

| Table 4: Differences in Posttest Scores of Awareness about Inclusive Education of Experimental and Control Groups. | | | | | | | |
|---|---|---|---|---|---|---|---|
| Dependent Variables | Groups | N | Mean | S.D | t- ratios | p values | Level of significance |
| Awareness of Inclusive Education | Experimental | 77 | 30.44 | 9.43 | 3.56 | 0.00 | Significant at 0.05 |
| | Control | 53 | 25.41 | 6.66 | | | |

| Table 5 : Differences in Posttest Scores on the Components of Awareness of Inclusive Education for Experimental and Control Groups | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Components | Groups | N | Mean | Percent Mean | S.D | t- ratios | p values | Level of significance |
| A:Concept of inclusive education | Experimental | 77 | 7.89 | 71.78 % | 2.39 | 2.02 | 0.04 | Significant at 0.05 |
| | Control | 53 | 7.01 | 63.80 % | 2.44 | | | |
| B:legal aspects of inclusive education | Experimental | 77 | 3.93 | 56.21 % | 2.05 | 2.79 | 0.00 | Significant at 0.05 |
| | Control | 53 | 3.07 | 43.93 % | 1.45 | | | |
| C:Basic information about disabilities | Experimental | 77 | 7.20 | 55.44 % | 2.49 | 4.69 | 0.00 | Significant at 0.05 |
| | Control | 53 | 5.30 | 40.78 % | 2.10 | | | |
| D: Skills and competencies in identification | Experimental | 77 | 11.40 | 67.07 % | 3.91 | 2.31 | 0.02 | Significant at 0.05 |
| | Control | 53 | 10.01 | 58.93 % | 2.90 | | | |
| | Total | 130 | | | | | | |

From Table 4 and Table 5 it can be inferred that a significant difference in the posttest scores of experimental and control groups on awareness of inclusive education was found **(t = 3.56 ; p < 0.05).** A significant difference in the experimental and control groups was also found in the posttest scores on the four components of awareness of inclusive education **(t = 2.20, 2.79, 4.69, 2.31; p < 0.05).** The mean scores of experimental group were higher than that of the control group. The results indicate

that preservice teachers from experimental group had gained greater awareness of inclusive education than the control group.
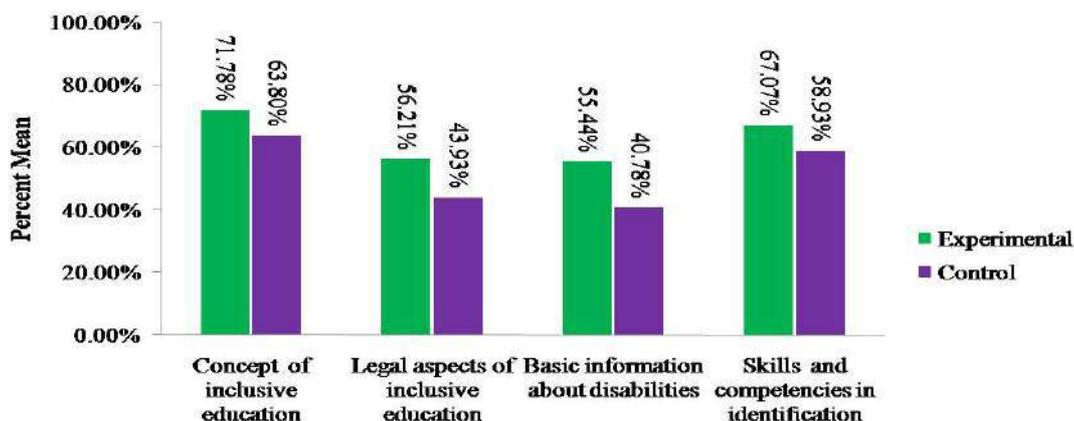


**Figures 3: Bar Graph of Posttest Percent Mean Scores on Components of Awareness of Inclusive Education for Experimental and Control Groups**

- **Differences in the Experimental and Control Group Pretest-Posttest Scores on Awareness of Inclusive Education.**

| Table 6: Differences in Pretest and Posttest Scores of Awareness about Inclusive Education of Experimental and Control Groups. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Dependent Variables** | **Groups** | **Tests** | **N** | **Mean** | **S.D** | **t- ratios** | **p values** | **Level of significance** |
| Awareness of Inclusive Education | Experimental | Pretest | 77 | 24.93 | 8.81 | 3.66 | 0.00 | Significant at 0.05 |
| | | Posttest | | 30.44 | 9.43 | | | |
| | Control | Pretest | 53 | 24.26 | 6.20 | 1.23 | 0.22 | Not Significant |
| | | Posttest | | 25.41 | 6.66 | | | |

From Table 6 it can be inferred that a significant difference in the pretest and posttest scores of experimental group on awareness of inclusive education was seen (**t = 3.66 ; p < 0.05**)  However, no significant difference in the pretest and posttest scores on awareness of inclusive education of control group was observed (**t = 1.23 ; p >0.05**)

- **Differences in the Experimental and Control Group Pretest-Posttest Scores on Components of Awareness of Inclusive Education**

| Table 7: Differences in Pretest and Posttest Scores on the Components of Awareness of Inclusive Education for Experimental Group | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Groups** | **Components** | **Groups** | **Mean** | **S.D** | **t-ratios** | **p values** | **Level of significance** |
| Experimental | A:Concept of inclusive education | Pretest | 6.66 | 2.29 | 3.25 | 0.00 | Significant at 0.05 |
| | | Posttest | 7.89 | 2.39 | | | |
| | B:legal aspects of inclusive education | Pretest | 3.23 | 1.68 | 2.53 | 0.01 | Significant at 0.05 |
| | | Posttest | 3.93 | 2.05 | | | |
| | C:Basic information about disabilities | Pretest | 5.37 | 2.38 | 4.59 | 0.00 | Significant at 0.05 |
| Total N=77 | | Posttest | 7.20 | 2.49 | | | |
| | D: Skills and competencies in identification | Pretest | 9.66 | 3.81 | 2.69 | 0.00 | Significant at 0.05 |
| | | Posttest | 11.40 | 3.91 | | | |

| Table 8: Differences in Pretest and Posttest Scores on the Components of Awareness of Inclusive Education for Control Group | | | | | | | |
|---|---|---|---|---|---|---|---|
| Groups | Components | Groups | Mean | S.D | t- ratios | p values | Level of significance |
| Control | A:Concept of inclusive education | Pretest | 6.62 | 2.13 | 1.25 | 0.21 | Not Significant |
| | | Posttest | 7.01 | 2.44 | | | |
| | B:legal aspects of inclusive education | Pretest | 2.73 | 1.44 | 1.74 | 0.08 | Not Significant |
| | | Posttest | 3.07 | 1.45 | | | |
| Total N= 53 | C:Basic information about disabilities | Pretest | 4.71 | 1.66 | 1.77 | 0.08 | Not Significant |
| | | Posttest | 5.30 | 2.10 | | | |
| | D: Skills and competencies in identification | Pretest | 10.18 | 2.85 | 0.41 | 0.67 | Not Significant |
| | | Posttest | 10.01 | 2.90 | | | |

From Table 7 and Table 8 it can be inferred that a significant difference in the pretest and posttest scores of experimental group on all the four components of awareness of inclusive education was found (**t = 3.25, 2.53, 4.59, 2.69; p < 0.05**). No significant difference was seen in the pretest and posttest scores of control group on the all the four components of awareness of inclusive education **t = 1.25, 1.74, 1.77, 0.41; p > 0.05).**)

- **Differences in the Experimental and Control Group Gain Scores on Awareness of Inclusive Education**

| Table 9: Differences in Gain Scores of Awareness about Inclusive Education of Experimental and Control Groups. | | | | | | | |
|---|---|---|---|---|---|---|---|
| Dependent Variables | Groups | N | Mean | S.D | t- ratios | p values | Level of significance |
| Awareness of Inclusive Education | Experimental | 77 | 5.50 | 13.18 | 3.66 | 0.02 | Significant at 0.05 |
| | Control | 53 | 1.15 | 6.76 | 1.23 | | |

From Table 9 it can be inferred that a significant difference in the gain scores of experimental and control groups seen (**t = 2.21; p < 0.05**) The gain score of experimental group was 5.50 and for control group it was 1.15. The gain scores of experimental group was thus higher than that of the control group. This indicates that the preservice teachers from experimental group have gained more knowledge and understanding of inclusive education. It means the treatment given in the form of inclusive education programme to experimental group was effective.

- **Interaction Effect of Moderator Variables, Social Intelligence, Emotional Intelligence, Socio-Economic Status and Treatment on Awareness of Inclusive Education Scores.**

**Social Intelligence (High, Average, Low)**

| Table 10 : F-ratios of Interactive Effect of Treatment and Social Intelligence (High, Average, Low) on Awareness of Inclusive Education | | | | | | |
|---|---|---|---|---|---|---|
| Sources of Variance | SS | df | MS | F- ratios | P values | Level of Significance |
| Rows Factor A (Treatment) | 793.14 | 1 | 793.14 | 11.09 | 0.00 | Significant at 0.05 |
| Columns Factor B (Social Intelligence ) | 40.46 | 2 | 20.23 | 0.28 | 0.75 | Not Significant |
| A * B (Interaction) | 164.47 | 2 | 82.24 | 1.15 | 0.32 | No significant Interaction |
| Error | 8866.92 | 124 | 71.51 | | | |
| Total | 9864.99 | 129 | | | | |

| Table 11: Difference Between the Means of Rows Factor A | | | |
|---|---|---|---|
| Total Mean of Treatment Group (Experimental) | Total Mean of No Treatment Group (Control) | Difference between Rows Total Means | Level of Significance |
| 30.44 | 25.41 | 5.03 | Significant at 0.01 |
| Critical Values for the Tukey HSD Test at 0.05 level = 2.98 and at 0.01 level = 3.95 | | | |

From Table 10 and Table 11 it can be inferred as there is a significant difference in the experimental and control group on awareness of inclusive education **(F= 11.09; p < 0.05)** and difference between the experimental and control group means was significant **(5.03; p < 0.05).** No significant effect of social intelligence was seen **(F=0.28; p >0.05).** No significant interaction was seen between treatment and social intelligence **(F=1.15; p > 0.05)**
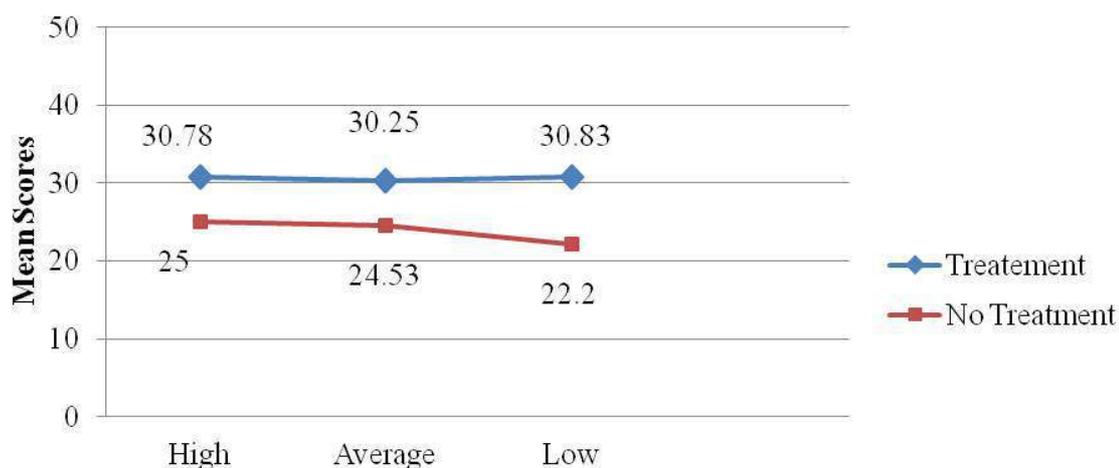


**Figure 4: Line Graph Showing Interactive Effect of Treatment and Social Intelligence**

**Emotional Intelligence (High, Average, Low)**

| Table 12 : F-ratios of Interactive Effect of Treatment and Emotional Intelligence (High, Average, Low) on Awareness of Inclusive Education | | | | | | |
|---|---|---|---|---|---|---|
| Sources of Variance | SS | df | MS | F- ratios | P values | Level of Significance |
| Rows Factor A (Treatment) | 701.67 | 1 | 701.67 | 9.44 | 0.00 | Significant at 0.05 |
| Columns Factor B ( Emotional Intelligence ) | 135.88 | 2 | 67.94 | 0.91 | 0.40 | Not Significant |
| A * B (Interaction) | 169.42 | 2 | 84.71 | 1.14 | 0.32 | No significant Interaction |
| Error | 9217 | 124 | 74.33 | | | |
| Total | 10223.97 | 129 | | | | |

| Table 13: Difference Between the Means of Rows Factor A | | | |
|---|---|---|---|
| Total Mean of Treatment Group (Experimental) | Total Mean of No Treatment Group (Control) | Difference between Rows Total Means | Level of Significance |
| 30.14 | 25.41 | 4.73 | Significant at 0.01 |
| Critical Values for the Tukey HSD Test at 0.05 level =3.04 and at 0.01 level =4.03 | | | |

From Table 12 and Table 13 it can be inferred as there is a significant difference in the experimental and control group on awareness of inclusive education (**F= 9.44; p < 0.05**) and difference between the experimental and control group means was significant (**4.73; p < 0.05**), No significant effect of emotional intelligence was seen (**F=0.91; p > 0.05**) No significant interaction was seen between treatment and emotional intelligence (**F=1.14; p > 0.05**)
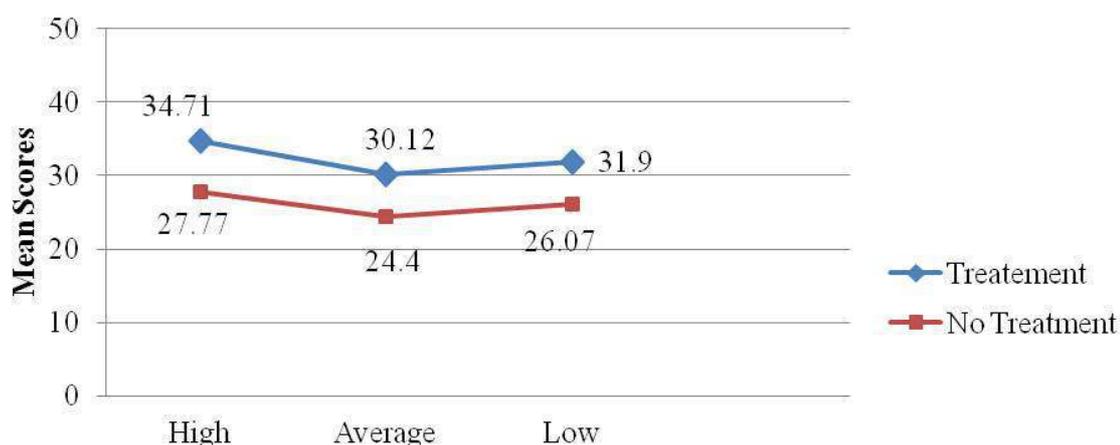


**Figure 5: Line Graph Showing Interactive Effect of Treatment and Emotional Intelligence**

**Socio-Economic Status (Upper, Middle and Lower)**

| Table 14: F-ratios of Interactive Effect of Treatment and Socio-Economic Status (Upper, Middle, Lower) on Awareness of Inclusive Education | | | | | | |
|---|---|---|---|---|---|---|
| **Sources of Variance** | **SS** | **df** | **MS** | **F- ratios** | **P values** | **Level of Significance** |
| **Rows Factor A (Treatment)** | 793.14 | 1 | 793.14 | 11.05 | 0.00 | Significant at 0.05 |
| **Columns Factor B ( Socio-Economic Status )** | 154.15 | 2 | 77.08 | 1.07 | 0.34 | Not Significant |
| **A * B (Interaction)** | 15.77 | 2 | 7.89 | 0.11 | 0.89 | No significant Interaction |
| **Error** | 8901.93 | 124 | 71.79 | | | |
| **Total** | 9864.99 | 129 | | | | |

| Table 15: Difference Between the Means of Rows Factor A | | | |
|---|---|---|---|
| **Total Mean of Treatment Group (Experimental)** | **Total Mean of No Treatment Group (Control)** | **Difference between Rows Total Means** | **Level of Significance** |
| 30.44 | 25.41 | 5.03 | Significant at 0.01 |
| Critical Values for the Tukey HSD Test at 0.05 level = 2.99 and at 0.01 level = 3.96 | | | |

From Table 14 and Table 15 it can be inferred as there is a significant difference in the experimental and control groups on awareness of inclusive education **(F= 11.05; p < 0.05)** and difference between the experimental and control group means was significant **(5.03; p < 0.05), No** significant effect of socio-economic status was seen **(F= 1.07; p > 0.05).** No significant interaction was seen between treatment and socio-economic status **(F=0.11; p > 0.05)**
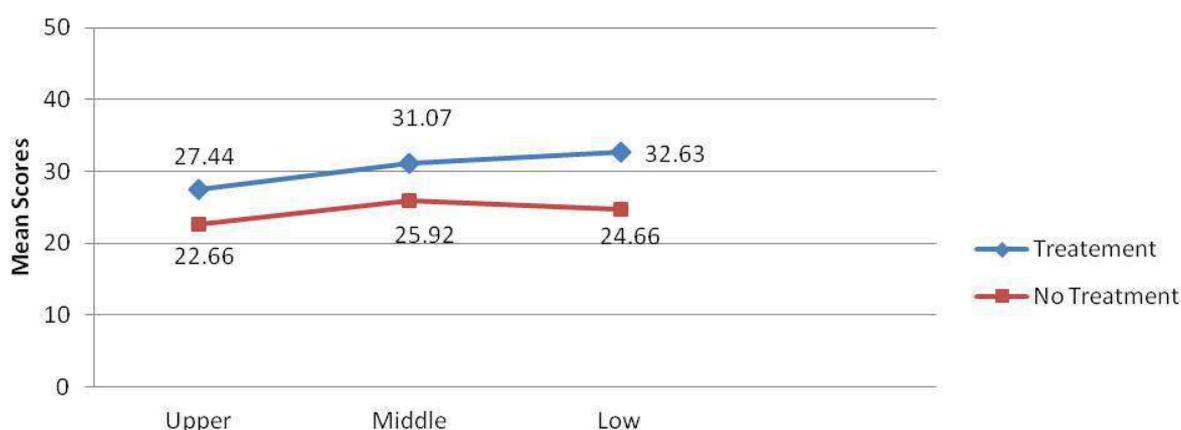


**Figure 6:  Line Graph Showing Interactive Effect of Treatment and Socio- Economic Status**

Results show that moderator variables gender, socio-economic status, social intelligence and emotional intelligence of the preservice teachers did not interacts with the treatment. This confirms that the awareness gained by the preservice teachers is due to the treatment only. This indicates that the treatment given to the experimental group was effective.

**Effect Size of Treatment on Preservice Teacher's Awareness of Inclusive Education**

The following criteria provided by Wolf's have been used for interpreting the results:

<u>Magnitude</u>                                     <u>Effect Size</u>

0.2                                     Minimum Effect
0.5                                     Moderate Effect
0.8                                     Maximum Effect

If the obtained Effect Size (d) is greater than 0.8, it indicated that there have been maximum effect of the treatment on the students.

| Table 16: Effect Size of Treatment on the Dependent Variables | | | | | |
|---|---|---|---|---|---|
| Dependent Variables | Mean of Experimental Group | Mean of Control Group | S.D of Control Group | Effect size | Magnitude of the Effect |
| Awareness of Inclusive Education | 30.44 | 25.41 | 6.66 | 0.75 | Moderate Effect |

From Table 16 it can be seen that effect of treatment on awareness of inclusive education was calculated using Wolf's Test and its effect size obtained was **(0.75)**. The treatment had moderate effect. It means preservice teachers from the experimental group had gained awareness about inclusive education to a moderate extent.

**Discussion**

Preservice teachers in experimental group became aware of **the concept of inclusive education** that all students from any class, gender, disability, religion, culture and language can be a part of the school. Preservice teachers realized that all schools should have inclusive education because it deals with human rights issues and helps in building stimulating relationships. It breaks barriers of prejudice and rejection. Inclusive education will help students with disabilities to educate themselves and develop the ability to earn a livelihood and thereby contribute to society.

Enhanced awareness about **legal aspects of inclusive education** was also seen among preservice teachers of the experimental group. Preservice teachers became aware of different legal acts related to student with disabilities, especially the Person with Disability (PWD) Act, which talks about provisions of equal opportunities, protection of rights and full participation. This act is a comprehensive education scheme provided by Indian government, which specifies free education to children with disabilities in an appropriate environment till he/she attains the age of 18 years. This act also mandates removal of architectural barriers from schools, colleges and other educational institutions for easy access for students with disabilities. It also specifies restructuring the curriculum for the benefit of students with disabilities.

Preservice teachers in experimental group have gained more knowledge and understanding of **the basic information about disability**. They became aware of the meaning of impairment, disability and handicap. They were able to differentiate between them and realized that authorization from a medical authority is necessary to certify any disability. The certificate has to be given to person with disability which indicates person suffering from more than 40 % disability and which has permanent loss of the function of the particular organ.

Preservice teachers in experimental group understood that the **causes of disabilities** can be due to accident, injury, effect of heredity, prolonged illness, improper care of the mother during pregnancy and lack of health and hygiene. They were able to identify different types of disabilities and categorise them according to their characteristics. They also realized that early identification and intervention of students with disabilities is possible with the help of primary health centers, voluntary organizations, and school teachers. They also gained more knowledge and understanding of skills and competencies required for teacher. They realized that in order to handle an inclusive classroom, teachers require various skills such as mentoring, facilitating and should posses the ability to understand the individual needs of the learners.

Preservice teachers also realized that for successful inclusion adaptation in the environment, curriculum and instruction are necessary. This will also help to reduce the psychological and social barriers. They realized that teacher-assisted learning and peer-group learning is the best method useful for students with disabilities.

Since no treatment was given to the preservice teachers in control group, they showed no changes in their awareness about inclusive education. However, preservice teachers from experimental group were more enthusiastic during field visit. They actively interacted with teachers, counselors and students with disabilities. They were motivated to visit the center and volunteer themselves for the various activities organized by the center. They showed willingness to learn more about inclusive education so that they can be well equipped with all the information, knowledge and understanding about inclusive education, which will help them in their job after acquiring their diploma. The content of the inclusive education programme was very informative and in-depth. The preservice teachers in the experimental gained adequate knowledge about various aspects of inclusive education. The results of the present study proved that use of interactive methods or approaches is effective in developing awareness about inclusive education.

**Conclusion**
The roles of the teachers today are very diverse and they need to understand their contribution towards making a good individual out of every student. To understand the students with disabilities, training of teachers is necessary. The present study revealed that it is possible to develop awareness of inclusive education among preservice teachers. The responsibility to train teacher lies on the preservice teacher education. The present situation demands preservice teachers become confident, competent, and skillful to handle any situation in an inclusive setup.

# References

Advani, L. and Chadha, A. (2002). The inclusive initiative in India. *Journal of the International Association of Special Education* pp 17-22.

Alur, M and Evan, J. (2004). *Early Intervention in Inclusive Education in Mumbai: The 'Why and the 'How' Manual 1 Policy makers at National and State level,* UNICEF, Canadian International Development Agency (CIDA).

Barton, L. (1997). Inclusive Education: Romantic, subversive or realistic? *International Journal of Inclusive Education*, 1(3), 231-242.

Buch, M.B. (1993-2000). *Sixth Survey of Research in Education.* Volume 1, NCERT, New Delhi, India.

Campbell, D.T.Stanley, J.C. (1996). *Experimental and Quasi-experimental Design for Research,.* Rand McNally Chicago.

Garg, Indu. (2014). Teacher Education, APH Publishing Corporation, New Delhi, India.

Gokte P, Pingle S. (2009). *Readiness of Schools for Inclusive Education: A Comparison based on School Types.* Unpublished M.Ed Dissertation, University of Mumbai.

Mani, M. N. G. (2001). *Inclusive education in India: issues and challenges,* [paper presented] National Workshop on Inclusive Education for Children with Disabilities, Prospects and Challenges, NIPCD and Planning Commission New Delhi.

N.K Chadha & Ganeshan.U. (1986) *Social Intelligence Scale (SIS)* [Manual], Agra, National Psychological Corporation, India.

Pereira Jessica. (2006). *"A Study of Course-Related Stress in relation to Cognitive and Emotional Intelligence of Preservice teachers of B.Ed colleges in Greater Mumbai."* Unpublished Master Dissertation, University of Mumbai.

Pingle Sudha. (2011). *"Development of Inclusive Education Programme and its Effect on Awareness of and Attitude towards Inclusive Education among Student-Teachers at D.Ed Level".* Ph.D, Unpublished Thesis, Department of Education, University of Mumbai, Maharashtra, India.

Sebba, J. & Ainscow, M. (1996). International Developments in Inclusive Schooling: Mapping the Issues, *Cambridge Journal of Education, 26*(1), 5-18.

Sen Malini. (September 24 2007). A School for All, *Education Times*, *Times of India News paper.*

Seamus Hegarty and Alur Mithu. (2002). Education and Children with Special Needs: From Segregation to Inclusion, Sage Publication, New Delhi, India.

Waghmare S. (2006). "A Study of the Effectiveness of Activity Centered Methods for Pupil Teacher". Ph.D, Unpublished Thesis, Yashwantrao Chavan Open University (YCMOU), Maharashtra, India.

**Contact:**
Sudha Pingle- gsudha6@rediffmail.com, sudhapingle@edu.mu.ac.in
Indu Garg-indu55garg@gmail.com

## A Community Project as a Prototype of a Learning Society for Adult Lifelong Learning – Planning for Change

Ann M. Brewer, The University of Sydney, Austrailia

**Abstract**

A new Community Precinct (CP) development required a re-conceptualisation of what is meant by a learning community proposed by Government.

The vision is to create a series of living-learning communities (aligned to each other) that enhance the experience of all residents and workers in the CP through opportunities for everyday learning, creative expression, vocational and experiential learning, ethical community leadership and service as well as formal education within their own living environments.

Secondly, to cultivate multi-faceted 'learning communities' that value individual and collective diversity in learning; willingness to enhance learning through partnerships as well as life and career transitions and personal growth while fostering responsible citizenship. People learn best when their physical, mental, emotional, and other needs are met, but most local communities rarely have the time and resources available to meet those needs. It is envisaged that if the CP find a way to engage all residents, employees, families, then it is more likely to succeed.

A living-learning strategy is realised by establishing a set of relationships and partnerships that connect existing and potential community-learning "territories" e.g. existing schools, family, employers; government, business, NGOs, community centres, politicians & locals). The CBPR approach will facilitate "researchers" engagement with participants directly on the way forward for intervention and implementation. The following themes outline the planning and outcomes of this project:

  a) Community-based needs analysis from a 360-degree perspective
  b) Ownership
  c) Giving Voice
  d) Gaining Commitment
  e) Progress and challenges

**Living Learning Community**

A learning society is one catalyst for lifelong learning. Theoretically not only does the learning society provide the framework in which lifelong learning may flourish but also one mutually reinforces the other. For example, a learning community creates the demand and capacity for lifelong learning, through socialising individuals to participate and contribute based on their knowledge and skills (see Goede, 2011).

The diffusion of lifelong learning in a community is traced back to Eduard Lindeman(1961) in 1926, a North American adult educator influenced by John Dewey (1966) stated that four principles:

a) Education is life: 'not merely preparation for an unknown kind of future living...The whole of life is learning, therefore education can have no endings. This new venture is called adult education not because it is confined to adults but because adulthood, maturity, defines its limits...' (p. 4-5).

b) Adult education should be non-vocational: 'Education conceived as a process coterminous with life revolves about non-vocational ideals... adult education more accurately defined begins where vocational education leaves off. Its purpose is to put meaning into the whole of life' (ibid.: p. 5).

c) Situational learning: 'The approach... will be via the route of situations, not subjects... In conventional education the student is required to adjust himself to an established curriculum; in adult education the curriculum is built around the student's needs and interests' (ibid.: p. 6).

d) Experiential: 'The resource of highest value in adult education is the learner's experience... all genuine education will keep doing and thinking together' (ibid.: p. 6-7).

Both OECD and UNESCO for almost 50 years have promoted lifelong learning as a central philosophy of a knowledge-based, community economy (OECD 2000). Active learning occurring anywhere [Cisco Systems Inc. (2010) in that it is extra-mural, decentralised and learner-directed characterises this type of learning. This approach supports a knowledge economy (Spring, 2009).

A 'learning society' is a relevant strategy today given the broader issues of globalisation whereby developed nations are increasingly dependent on "knowledgeable workers" drawn from diverse learning backgrounds. Most people today engage in work whereby they need to conceptualise, transfer knowledge into doable actions and skills as well as transfer learning from one specialist setting to another. Learning is more universalised, continuous and demanding over a lifetime.

**Learning Connections, Partnerships and Other Strategic Alliances**

Learning is rooted in work and everyday life in social aspects (Fenwick, Edwards, and Sawchuk, 2011). As learning is increasingly demand-driven, people need to access it seamlessly. This approach is particularly true for accredited learning, bridging the gap between different institutional channels: higher, technical, vocational, school, community-based. Working in partnerships with cohabiting labyrinths or networks of relationship maximises individual and organisational learning. This method ought not to render it less scholarly in its intent or development.

Institutional learning needs to merge with the community and provide the incubator for innovation and development. Almost every member of a university or a school could form a partnership with the surrounding community or region in some way for learning, research and community engagement. Boundary spanners from both community and institutional sides

would work across each other's borders to address this. This approach also includes virtual partnerships. Partnering through distance and self-directed learning is vital to address local meets global.

**Exploring a Learning Community**

Policy makers in the 21st century appear to be "getting it" that is, lifelong learning (LLL) is a social good whose public value needs to be developed further for the future benefit of nations, states, cities and institutions. For example the NSW Government, Australia, is considering seriously a proposal for a living-learning strategy to establish a community that would reflect this. The collective community facilitates people sharing interests and goals at least in part by virtue of engaging in the locality where they reside. Members of a learning community – like members of a learning organisation – are not passive actors and interact as equals, expressing ideas and challenging themselves and each other to achieve communal goals. A learning community promotes learning together alongside working and living, for the collective good and for themselves. Learning is dynamic and fluid and accessible at need. How to conceptualise, realise and measure a learning community is challenging. A learning community is one whose environs, material, communal, cultural, interest-based and economic facilitate the development of learning and processes that engage residents, workers and visitors to participate in activities and roles to bring this about. Just as in a learning organisation, the quest is how to sustain it once initiated that survives beyond its founding members. All attributes of the community that is, its social, physical and economy need to be in sync with each other. A new community has a good opportunity to utilise these dimensions as its design principles. These dimensions coupled with an action-learning approach provide the framework for this case study. An action-learning approach includes self-directed learning, discovery; collaborative action learning in groups or "sets" to address a major, complex problem in the community.

In summary a learning community is characterised by:-

   a. facilitating engagement as widely as possible
   b. Incorporating participants vertically and horizontally in activities
   c. Inclusive of demographic background
   d. incubating further developments towards learning 'capital'
   e. Assuring cultural values including aboriginal and those representing the array of cultural backgrounds
   f. Artists, artisans of all disciplines to fuel a creative community and economy
   g. Orientating participants to the living-learning strategy

Sustainability of the living-learning strategy for its beneficiaries, current and future is paramount once the community has been established. Both public and private are involved in creating CP to realise the vision, develop work communities alongside the local culture. Network theory provides a way of conceptualising how organisations and social interrelations between government, tourism producers and community work (Dredge 2006). She states that networks exist at macro levels, micro levels and in-between; coinciding and dovetailing, some self-sufficient, others creating co-dependencies so on. Adjusting to changes in this network assures sustainability of learning communities especially if virtual learning is realised and aligned to actual forms of learning (Page and Scott 2001).

CASE STUDY

**Vision for the New Learning Community**

The NSW State Government's initiative is aimed at realising lifelong learning for both young people and adults as a central principle towards building a knowledge-based economy and community through a specific community zone.

Generally in the area of lifelong learning, there is a leaking pipeline of skills and knowledge for people over their lifetime coupled with a lack of realisation of the significance of this issue for the community to continue learning from the cradle to the grave. With this initiative, the NSW Government is to shape a ''learning community'' from the ground up, based on learning that connects and influences people, living and working together within an urban context. The project demonstrates the value of learners as individuals and together, the investment in learning and the development of learning resources, when people learn together.

The vision for the Community Precinct (CP), representing 80 hectares of prime real estate in this case study to create living-learning communities (aligned to each other) on site that enhances the experience of its residents and employees through opportunities for everyday learning in all its forms.

Secondly, to cultivate multi-faceted 'learning communities' that value individual and collective diversity in learning; willingness to enhance learning through partnerships as well as life and career transitions and personal growth while fostering responsible citizenship. People learn best when their physical, mental, emotional, and other needs are met, although most local communities rarely have the time and resources available to meet those needs. If the CP can find a way to engage all residents, employees, families it is more likely to succeed.

A living-learning strategy is realised by establishing a set of relationships and partnerships that connect existing and potential community-learning "territories" e.g. existing schools, family, employers; government, business, NGOs, community centres, politicians & locals). The CP approach facilitates "researchers'" engagement with participants directly on the way forward for intervention and implementation. The following themes outline the CP planning and outcomes for this project:

f) Community-based needs analysis from a 360 degree perspective of diverse stakeholders;
g) Encouraging ownership from within the community;
h) Giving voice to the community;
i) Gaining commitment from the key stakeholders; and
j) Addressing progress and challenges as the strategy unfolds.

THE CP'S LEARNING MISSION AND CORE VALUES

The CP strategy maximises opportunities for every person, their families and communities, living and working in the precinct through learning, research, training and development as well as relevant advocacy by various providers working together. The living-learning strategy values equity and accessibility, integrity, collegiality, respect, intellectual rigour, innovation and transformation as well as social responsibility and justice.

KEY OBJECTIVES OF LEARNING IN THE CP

1. Ensure that every person is accessing learning in some form, regardless of the demographic profile.
2. Intensifies learning focus through various phases as depicted in Figure 1.
3. Becomes a community learning model for CP and transferable to other precincts

4.  Achieves a measurable increase in accessibility to learning comparative to other NSW residents.
5.  Initiates a new lifelong learning approach from the grass roots upwards, not a top-down national or state approach based on a combination of actors/agents.
6.  Develops links between cultural participation and learning so that the division of learning for work or school is blurred.
7.  Develop and share learning resources, readily accessible to all e.g. art centres acting like libraries, where people of all ages drop in to paint a picture or make a sculpture, or swap a recipe or listen to an elder about advice on parenting or
8.  Promote EDU-businesses: start-ups or converting leisure interests into commercial realities.
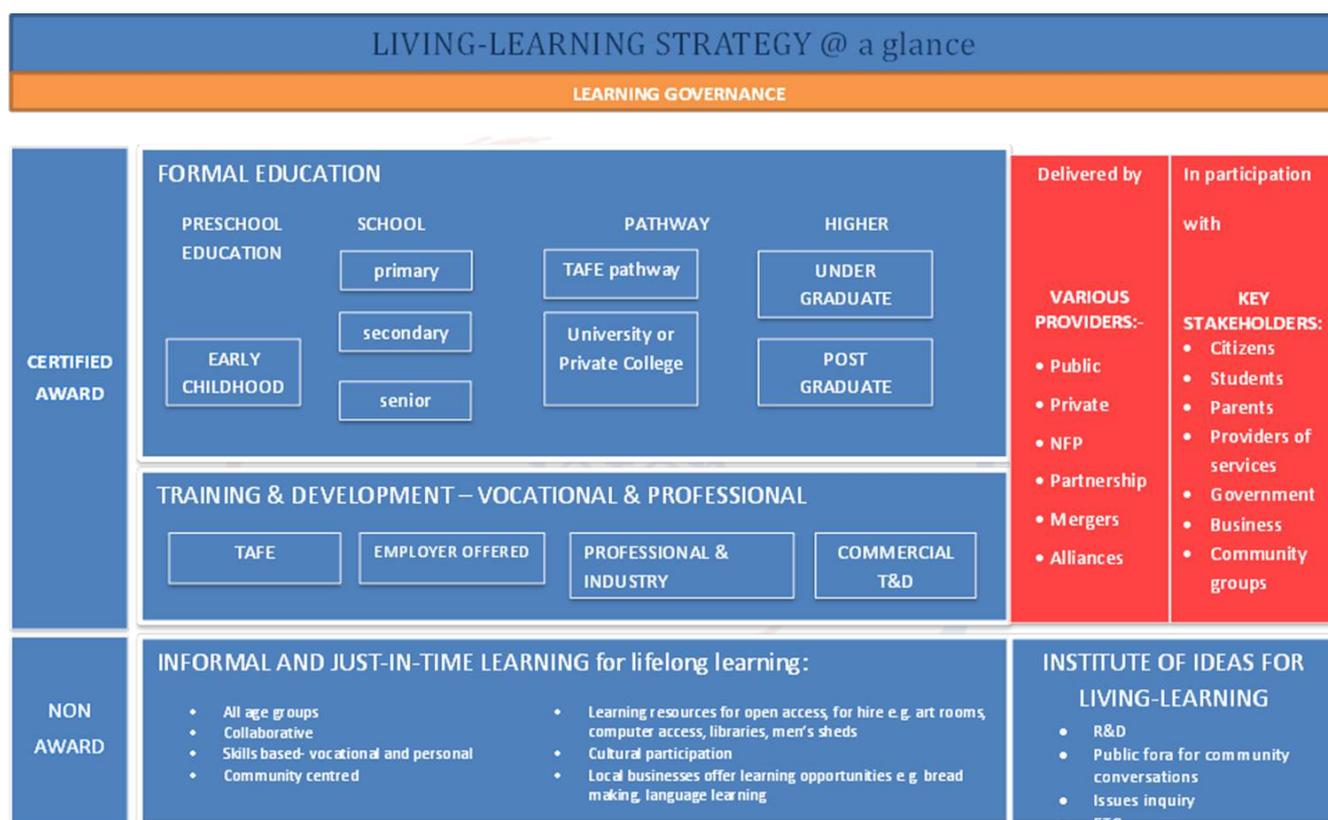


## STRATEGIC IMPLEMENTATION

The research site, located in central Sydney, was established previously as an industrial precinct which progressively ceased operation. This living-learning strategy is to be embedded in its urban renewal program. Some parts of the precinct will be redeveloped for small business, recreational space and tourism as it is surrounded by water and not far from the epicentre of Sydney Harbour. Being government owned land, a small team is tasked with investigating possible uses with a focus on community participation in every sense including residential.

The project develops into a comprehensive learning precinct providing not only a workforce, but also housing, and other services, including cultural preservation programs. Its focus would be on all citizens, middle class as well as marginalised, focusing on community engagement across traditional boundaries.

**INTERNAL CAPACITY** to the Bay's
Precinct: existing and new

**LINKING AGENTS** co--ordinating for the Learning Strategy
horizontal & vertical linkages across the bys prccint

**EXTERNAL RESOURCES**: universities, TAFE, services
for special learning needs
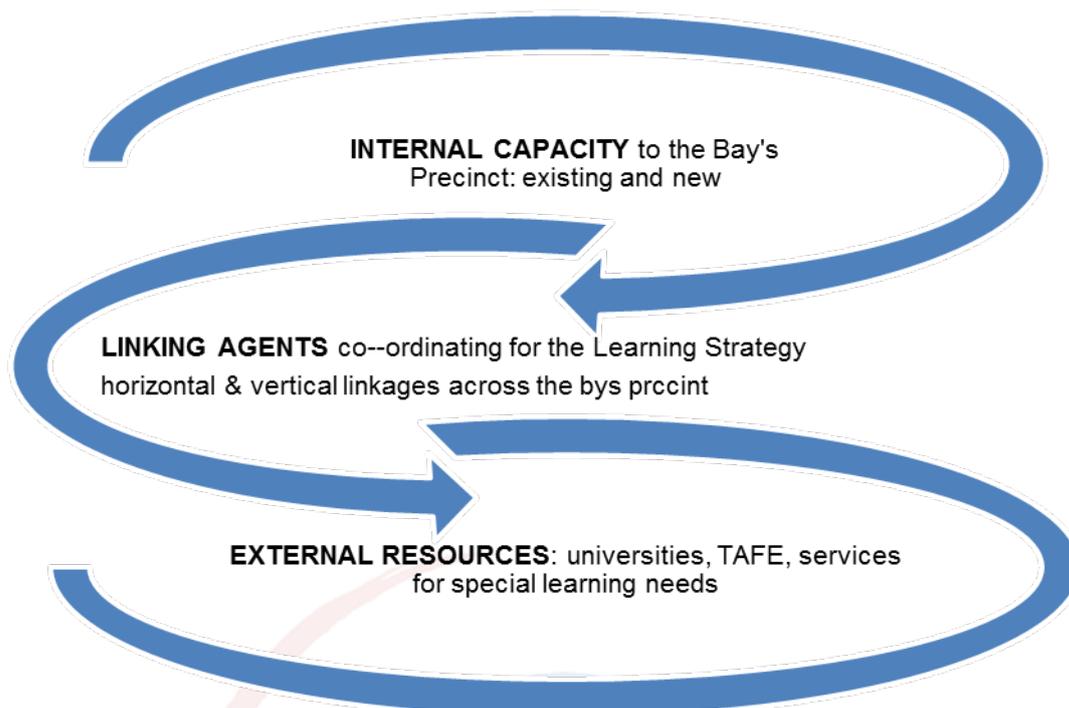
Implementation is considered from three perspectives:
1. Internal capacity
2. Linking agents and
3. External resources.

1. INTERNAL CAPACITY: Government, community and "researchers" co-ordinating teams involved in learning strategy development and evaluation. This is where the living-learning strategy is implemented.

HOW? This is achieved through "action-research", i.e. learning while doing, derived from the experience of those from within and outside, shaping and implementing the strategy together. Action research provides flexibility to make any adjustments as the interventions proceed, based on feedback from the community, observations and actual experience. This process leads to strengthening the credibility of the project as well as a greater sense of ownership and trust; especially when issues become sensitive, competitive or overly politicised. Also the project implementers (community members, sponsors, managers, implementers, researchers) are introduced to the 'local theories' and these are checked and reciprocated by insights gained from the community against the "researchers" assumptions and processes of learning, both informal and formal.

Another important consideration is that this process is aimed at including the voices and participation of minority and disadvantaged sub-groups (cultural, gender, socioeconomic status), throughout the different stages of the research (planning, recruitment, conducting the activity, coming up with solutions and applying them, to finally reaching sustainability) in partnership with the managers of the learning projects. For those charged with the responsibility of overseeing implementation, this gives them better and wider understandings of the social and cultural dynamics of the living-learning strategy. An interactive participatory process between the community members and the external implementers contributes significantly to building trust and rapport, due to the sharing of information and decisions from the outset. Members entering the community from government, universities

and other institutions are not there to colonise by imposing given ideas or results (especially where outsiders may be regarded as having hidden agendas). The richness of information and data (both quantitative and qualitative) also means a more realistic approach to strategy development and more effective implementation with less resistance and greater stakeholder "buy in" and energy from all.

CP Method
This approach includes:
    a. An on-line survey measuring individual-level data to describe people's understanding and expectations of learning and their level of engagement in the proposed project
    b. Confidential interviews with representative stakeholders drawn from a vertically integrated slice of the intersecting segments in the community as well as others from a range of institutions
    c. A critical incident analysis completed in a community-wide 'search conference' to capture interaction within different segments of learners, geographical groupings and to reflect on the community-wide survey
    d. Learning diaries especially for active retirees and others in transition
    e. An inventory of communication and information technologies and available infrastructure
    f. An inventory of geographical locations within CPs' Precinct and learning opportunities within these sub-precincts
    g. Systematic content analysis of current policies relevant to CPs' Precinct and the residents and employees
    h. Identifying community informants and "influentials".

2.     Linking Agents: Coalition-building denotes a capability development process through establishing reciprocal partnerships among groups towards achieving a common purpose. Each group looks beyond its aims and limitations to extend a bridge to another and share in learning and other resources (Rubin and Rubin, 2008). Key players (e.g. government) accountable for developing the linkages between community, Local and State government agencies together with private providers build capacity become pivotal in sustaining these connections.

3.     External Resources: sources, services, capacity and means from inside and outside CP's Precinct.

Governance Implementation of CP learning strategy
Governance is demonstrated by:-
    1. Establishing a governance council (e.g. an NFP Board) to
        a. oversee the living-learning strategy; provide steerage and co-ordination of actions;
        b. aligned strategies e.g. risk; media and PR; financial, learning and research.
    2. Ensuring a collaborative approach based on mission and values statement (above).
    3. Overseeing the design of learning elements into a bay-led community experience as well as "curricula", programs and services for the different objectives (listed above), defined around several key pillars from health and fitness awareness to building small business enterprise, providing work experience.
    4. Establish a Living-Learning Charter.

**Conclusion**

Apart from realising a learning community which is both actual and virtual, the process is educative in that it builds capability in key areas that reinforce its sustainability. Firstly, a greater understanding of interconnectedness including influences, exchanges and compromises as well as dealing with expected and unexpected outcomes. Secondly, it creates a sense of looking ahead beyond immediate horizons: time, space, distance and future planning. Thirdly community engagement both in small coalitions is vital for inter-generational learning and taking on pluralistic and trans-disciplinary thinking. Finally it leads to action and thinking how to manage change at local and community levels and how to engender commitment and overcome resistance.

## References

CISCO "The Learning Society". Retrieved September 14, 2010, from Cisco Systems Inc.: http://www.cisco.com/web/about/citizenship/socioeconomic/docs/LearningSociety_WhitePaper.pdf]

Dewey, J. (1966) *Democracy and Education*. New York: Macmillan Company.

Dredge D. 2006 "Networks, Conflict and Collaborative Communities", *Journal of Sustainable Tourism* Vol. 14, No. 6, pp. 562-81.

Fenwick T., Edwards R., Sawchuk P. (2011) *Emerging Approaches to Educational Research: Tracing the Sociomaterial*. New York, NY: Routledge.

Goede, M. (2011) The wise society: beyond the knowledge economy *Foresight*, Volume 13, Issue 1, pp. 36 – 45.

Jarvis, P. (2000). "Globalisation, the learning society and comparative education." *Comparative Education*, 36 (3), 343-355.

Lindeman, E. (1961) *The Meaning of Adult Education*, Montreal: Harvest House.

OECD. (2000). "Knowledge Management in the Learning Society". Paris: OECD Publishing.)

Rubin H. J., Rubin I. S. 2008 Community Organizing and Development. 4th edn. Boston, MA: Allyn and Bacon;.

Senge, P. (1990), The Fifth Discipline: The Art and Practice of the Learning Organization, Doubleday, New York, NY.

Smith, P.A.C. and Sharicz, C. (2011), "The shift needed for sustainability", The Learning Organization, Vol. 18 No. 1, pp. 73-86.

Spring, J. (2009). "Globalisation of Education: An Introduction". New York: Routledge.

## A Proposed Model of Teacher Researcher's Network to Create Instructional Innovation for Raising Students' Learning Achievement in Science and Mathematics

Kaewurai Wareerat, Naresuan University, Thailand
Kaewurai Rujroad, Naresuan University, Thailand
Chanunan Skonchai, Naresuan University, Thailand
Supap Wanintorn, Naresuan University, Thailand
Sawangmek Sureeporn, Naresuan University, Thailand

**Abstract**
The main objective of this article is to develop a model of teacher researcher's network to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level. The research followed the research and development methodology as the followings; phase 1: preparing the collaborative strategies for supporting the teacher researcher's network, phase 2: developing the teacher researcher's network, phase 3: evaluating the quality of the teacher researcher's network and phase 4: disseminating and extending the teacher researcher's network participation. The target groups were classified into 3 groups as follows: 1) The 110 teachers from the learning substance of mathematics, science, physics, chemistry and biology in secondary education schools and 2) 5 educational supervisors and 3) 6 lecturers as researcher team from education faculty, 3 lecturers from science faculty. This research is currently in phase 2. The results revealed that, in area-based context, there were five major science and mathematics-related projects which represented the importance and value of the learning activity. The model of teacher researcher's network was developed and consisted of 5 important processes as follows: 1) the paradigm shift of teacher's perceptions toward the classroom action research 2) the situation analysis to delegate responsibility to work together as a learning community network, 3) both the innovation of teaching and the classroom action research to raise students learning achievement was considered as a collaborative and mutual responsibility of teachers 4) the monitoring, evaluating and reviewing and 5) sharing and reviewing the work to develop.
Keywords: teacher researcher, teacher researcher's network, instructional innovation

iafor

The International Academic Forum
www.iafor.org

**Introduction**

During the Eleventh Plan (2012-2016), Thailand will encounter more complicated domestic and external changes, and fluctuations that will present both opportunities for and threats to national development. Thus, it is necessary to utilize the current resilience of Thai society and its economy, and prepare both individuals and society as a whole to cope with the effects of such changes and pave the way toward well-balanced development under the Philosophy of Sufficiency Economy. In terms of development strategies, Thailand will promote a peaceful society with the growth of quality and sustainability. In dealing with rapid changes and complicated and unpredictable environmental events, a set of development strategies will be formulated for better risk management and to create a firm foundation for development. In addition, the quality of human capital will be developed through better access to resources and fair distribution of development benefits. To create and utilize economic opportunities, knowledge, technology and creativity will be crucial factors for environmentally friendly production and consumption leading to sustainable development. Key development strategies especially in the second strategy: developing a lifelong learning society; development guidelines including develop human resources aimed at increasing resilience to deal with changes. The ability of Thais at all ages should be increased. Skills for lifelong learning should be developed by focusing on knowledge, innovation, and creativity, and based on the development of five types of mind — the disciplined mind, the synthesized mind, the creative mind, the respectful mind and the ethical mind — in order to be capable of working in various positions relevant to the changing labor market over a lifetime. Values should be instilled in people for social responsibility, and respect for laws and human rights, as well as for environmentally friendly production and consumption. Citizens should learn to cope in appropriate ways with climate change and disasters. (Office of the National Economic and Social Development Board, 2012, p. 23)

The quality of education and factors related to international recommendations and the quality of education in science and mathematics can be summarized as follows: the quality of education in the country which was assessed by a national evaluation and the national institute of educational testing service such as NT, O-NET, A-NET, B-NET etc. In addition, the evaluation of the ability of students in science, mathematics and reading at international level such as TIMSS from year 1995 to 2007 and PISA from year 2000 to 2006 reflect the quality of Thai students which tended to decrease in all areas and in all those years. The Thai Education Ministry evaluated the ability of students in science and mathematics subject in the country with the leading countries in the region, Thailand have found that students had demonstrated very low academic achievements both in science and mathematics subject especially in secondary education levels. Evaluation of the student's ability both Thailand are also lower than the international average which should be developed urgently. (Educational Testing Bureau, 2009, p.1)

Education in the 21st century will have to prepare learners to develop the knowledge and skills necessary to think, learn to solve problems, communicate and collaborate more effectively. Factors related to such matters include teachers in the institution. This is because the education system will be whether successful or not. It is significantly dependent on teachers. (Bellanca & Brandt, 2010) This is consistent with Cochran-Smith (2006 cited in Shroyer, Yahnke, Bennett, & Dunn, 2007) who points out that the quality of teachers is a key factor affecting the success of the students as well as to

raise the quality of education. It is therefore obvious that the quality of teachers is a key component of education. It is necessary and urgent problems that must be resolved in order to raise the quality of national education. The research concerning the study of the problems of classroom action research of teachers was revealed that Thai teachers have been trained to do research in class as a part of their teaching routine but the achievement in the classroom action research, the quality of research and the value of such research, the idea of returning teachers were in moderate level, due to teachers lack of motivation and knowledge to do research in class. (Suksunai, Wiratchai & Khemmani, 2011, p. 2)

To raise the quality of education mentioned above, one factor which is particularly important in the implementation of successful educational reform is the quality of teachers. Improving the quality of teachers who facilitate the students' learning is therefore necessary to give priority to drive to achieve quality output to society. Teachers with skills in various areas need the ability to conduct the research. This is a skill that teachers use to find answers to problems about teaching, improve teaching, research and development work leading to the development of the students. Teachers should have skills in research, especially research to develop innovative teaching to raise student achievement in science and mathematics. The quality and youth meet the educational needs of the country are geared towards competition.

Operating in a network and dealing with a process that generates the power, Faculty of Education, Naresuan University as a leading teacher education faculty and producer of educational research network of the National Research Council should take responsibility as a hub of educational research and development network, teachers, researchers in innovative teaching to raise student achievement in science and math education using participatory research process to induce learning together. The establishment of a network of teachers, researchers will be innovative teacher. Professional development of teacher, therefore, is very important because it has helped to drive the sustainable development for quality education, the power to drive education reform. Fellow teacher researchers are thinking and co-operation, and being encouraged to do research. The sharing of resources and experience to do the research is linked to the mission, with the goal to aim at the quality of the students. This will enable teacher researchers see the importance and benefits of the research and inspired in the research process used in the development, management practices and continuous learning.

The researchers are aware of and appreciate the importance of raising the standard of education and the role of development, learning to drive a successful policy of education reform in the second century. It intends to develop a network of teacher researchers. The guidelines for the development of teacher researchers differed from the original context that is characterized by direct coordination network between researchers, teachers and others involved in the same province and a process that is connected to the area of study more when the project ends, it ends up no event coordinator for the network. The researchers then determined from the context of the learning process for teachers in the area. The manners in which the relative performance characteristics coupled together, learn the two districts that are the hallmark of quality student achievement science and mathematics are different form each other. The districts are the basis of a network to improve the quality of education and higher education institutions. The university's role as an agencies, including the

board of education, the agency also supports is the faculty of science, the districts include the secondary educational service area office 39 and 42, both districts to voluntarily participate in the program. The development process is focused on the development process by creating the coaching and mentoring system. As one of the key techniques that will enhance the learning of personnel to staff the learning will be crucial to the success and benefit the organization and its staff in working to achieve the goal to a professional learning community in a network of researcher teachers develop instructional innovation to solve low science and mathematics learning achievement.

**State of the Art**

This research article presents assumptions and research concerning; the constructivist theory that the focus is on the students who create the knowledge themselves.

The idea that education leaders in new leadership should be creative and productive; the development of human resources has been developed and accumulated knowledge in various areas, including innovation as strategic and organizational goals, to bring new ideas into practical use or modernization practices that lead to effective solutions for developers to create chances, in order to gain competitive advantage.

The concept of network and network development; the network of individuals, organizations, agencies or institutions are linked together under the coordination or agreement, either together as a system and doing activities together to express the behavior of the network with the key elements include common perception, common vision, mutual interests/benefits with the participation of members of the network in all stakeholders' participation, interdependence, interaction, the level of cooperation from low to high; networking, coordination, cooperation, and collaboration.

Benchmarking is the process of comparing the best practices in the manner to find out how to best practices from other agencies for similar processes and good practices or best practice of other organizations for application in their agency to improve efficiency and effectiveness.

Coaching and mentoring is an important technique to help promote the learning of personnel to staff the learning will be crucial to the success and benefits to the organization and personnel work to achieve the following goals by coaching taught to learn the guidelines and process research innovation to stay in school, in the work undertaken by the recipients of teaching is a research laboratory classes in the standard section, mentoring is a consulting or teaching to teachers, researchers in both the performance or teacher, researcher of the old school who has a high level of standards in matters relating to research, develop innovative ways to raise achievement and to make the potential to become a teacher, researcher higher that will contribute to the development of the organization in the future.

Professional learning community (PLC) is an extended learning opportunity to foster collaborative learning among colleagues within a particular work environment or field, through planning a shared vision the mutual exchange of learning and the culture or community to share and learn in organization.

## Conceptual Framework
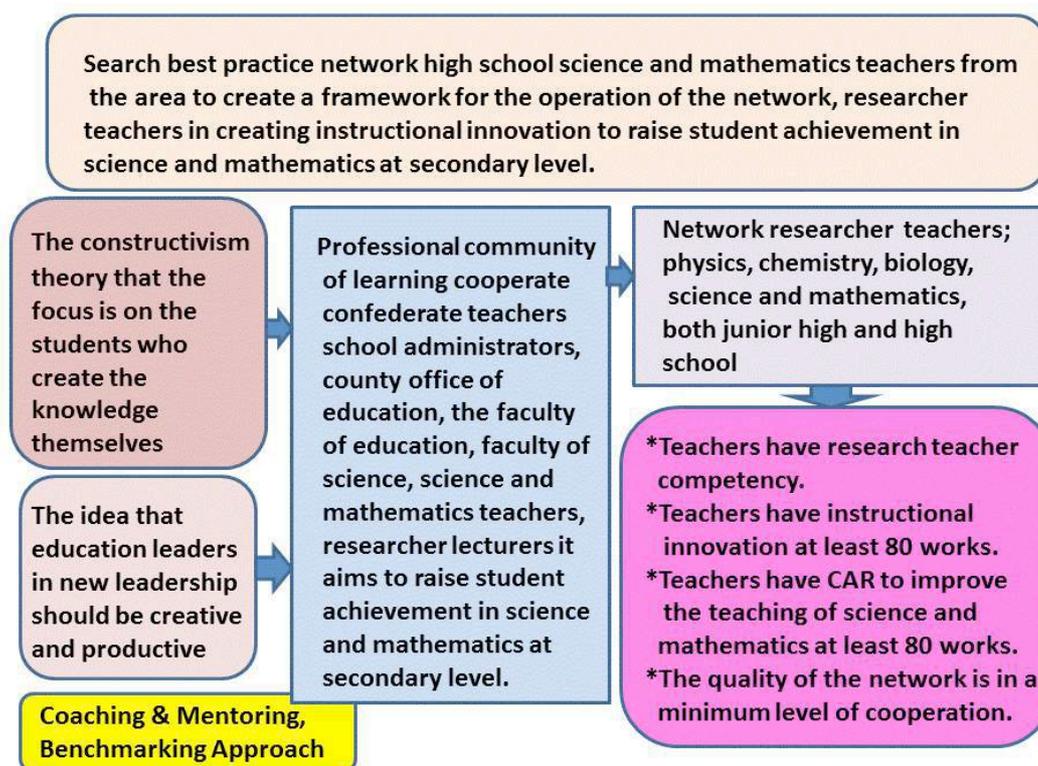


## Research Question

      1. What are activities supporting the creation and development of instructional innovation for raising students' learning achievement in science and mathematics education?

      2. However bench marking and coaching and mentoring strategy are the process of developing strategies to create a teacher researcher's to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary level?

      3. How is the effectiveness of teacher development to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level?

      4. How are the factors and obstacles to the implementation of a network of teacher researcher's network to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level?

## Research Objective

The main research objective is to develop a model of teacher researcher's network to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level. The sub-objectives aimed to;

      1) Prepare the implementation framework of the teacher researcher's network.

      2) Develop the teacher researcher's network by using benchmarking and coaching & mentoring strategy.

      3) Study the effectiveness of the model of teacher researcher's network.

      4) Disseminate a body of knowledge of the teacher researcher's network and extend the participation and performance evaluation of the network.

**Research Methodology**

The research followed the research and development (R & D) as the followings;
**Phase 1: Preparation of strategic guidelines of cooperation in educational development**. It operated by providing the framework for the operation of the network, teachers, researchers in creating instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level. Gather information about programs and resources that are essential to learning, group learning science and mathematics in the Naresuan University. It collects various projects related to the development of teaching and learning in basic education levels between Naresuan University and institutions in Phitsanulok province, qualifying projects to enhance learning and education. Science and mathematics teachers selected to participate in the project through coordination with supervisors from the secondary educational service area office 39 and 42, both districts to voluntarily participate in the program. Meeting in small groups is an activity to develop strategies and elaboration of the strategy. The variables studied include 1) the importance and value of activities that have a system of education, science and mathematics education in the area 2) projects/activities that will enhance learning and education, teachers, researchers in creating innovation.

**Phase 2: Developing a model of teacher researcher's network to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level**.

It operated by using the data based on the first step to create a network of teachers, using the dual strategy benchmarking relative performance and the coaching process by supervisors and mentoring by faculty researchers. The components of the developed model of teacher researcher's network include; 1.Objective 2.Principle 3.Process and 4.Learning outcome. Action was reviewed by considering the appropriateness and feasibility of the implementation problems are actually from the barrage of comments from stakeholders representing teachers, supervisors, faculty researchers and qualified educators in a total of 15 people.

**Phase 3: Evaluating the quality of the teacher researcher's network**.

The effectiveness of the network of researcher teachers in this process conducted with 110 teachers from the secondary educational service area office 39 selected schools participating 9 School teachers attended by 44 people, the secondary educational service area office 42 has teachers participating on a voluntary basis including 66 people from 28 schools. The process leading network model to a focus on participatory action research process, the study focused on the outcome and teachers in three areas: 1) Teachers have research teacher competency 2) Teachers have instructional innovation at least 80 works 3) Teachers have CAR to improve the teaching of science and mathematics at least 80 works and the quality of the network is in a minimum level of cooperation networks, and the results on the strength of the network operation.

**Phase 4: Disseminating a body of knowledge of the teacher researcher's network**.

The target groups were classified into 3 groups as follows: 1) The 110 teachers from the learning substance of mathematics, science, physics, chemistry and biology in secondary education schools in 6 sub-networks under the jurisdiction of the office of secondary educational service area 39 and 42 and 2) 5 educational supervisors from the office of secondary educational service area 39 and 42 and 3) 6 lecturers as researcher

team from education faculty, 3 lecturers from science faculty and a professor of educational research as a program consultant.

**Conclusion**

This research is currently in phase 2. The results revealed that:

1. In area-based context, there were five major science and mathematics-related projects which represented the importance and value of the learning activity in educational system. After the small groups meeting, the issues related to the development of 5 strategies include creating and linking were proposed as follows: 1) building the teacher researcher's network 2) developing the capability of teacher researcher's network 3) constructing the relationship between the 6 sub-networks of teacher researcher's network 4) monitoring and supporting the operations of teacher researcher's network and 5) empowering the development of socio-political and educational policies concerning the reformation of teacher education and professional development of teacher as researcher.

2. The model of teacher researcher's network was developed and consisted of objective model is to develop teachers participating; 1. A network of teacher researcher's network to create instructional innovation for raising students' learning achievement in science and mathematics at the secondary education level with a strong network of no less than the level of cooperation as agreed. 2. Capable teacher researchers 3. Innovative teaching that can lift student achievement in science or mathematics education. 4. Research the classroom to improve teaching science or mathematics education, principle model consists of; 1. Action network is a system, the sequence of steps consistent with the objectives and principles. 2. The teacher participants to learn by participating learning network members focused operating strategies match the performance. 3. Highlights the supervisors who served coaching and university research serves mentoring, 5 important processes as follows: 1) the paradigm shift of teacher's perceptions toward the classroom action research (CAR) – the teachers started from the problems analysis in innovative ways in order to gain insights about how to raise students learning achievement 2) the situational analysis to determine the workload, delegate responsibility to work together as a learning community network, set professional goals and agreements, empower and motivate the adoption of AIC technique 3) Both the innovation of teaching and the classroom action research to raise students learning achievement was considered as a collaborative and mutual responsibility of teachers 4) the monitoring, evaluating and reviewing of the principal researchers and 5) sharing and reviewing the work to develop the guidelines for improvement. Brainstorming sessions with stakeholders indicated that the teacher researcher's network model, it is appropriate to put into practice. Variations into practice focus on providing innovative solutions to teachers teaching science and mathematics in a class of its own. Bring innovation to focus on student learning is important by focusing on the students' learning process. The network is a teacher in the same subnetwork as a voluntary partner learning. Facebook a network of researcher teacher in science and mathematics is a learning resource of teachers, supervision has served as a coach of instructional development, researchers from Naresuan University as a mentor in classroom action research provides activity tracking progress and exchange knowledge about instructional innovation and action research in the classroom.

**Recommendation for Adoption**

1. The potential to be developed to enable teachers to become teachers, researchers need to do the following; developed for teachers to have the competency for research to improve the quality of their teaching process to students can develop to occur in both cases at the beginning of the attention needs to be developed by the teachers themselves and managed by the regulatory bodies. The process must be on building a common understanding, system of a partner engaged couple learns, the focus is on area-based context, working together with goodwill and mutual respect, there were 5 strategies include creating and linking were proposed as follows: 1) building the teacher researcher's network 2) developing the capability of teacher researcher's network 3) constructing the relationship between the 6 sub-networks of teacher researcher's network 4) monitoring and supporting the operations of teacher researcher's network and 5) empowering the development of socio-political and educational policies concerning the reformation of teacher education and professional development of teacher as researcher similar findings of Kaewurai, Wattanatorn, Kearmaneerat, Suwannasri and Thummasit. (2012, p. 261) to give recommendation for adoption in the philosophy of Sufficiency Economy for initiative a principle for the development thus focus should be on creating a consistent understanding of all parties to truly achieve the goal. Especially those who are critical, enterprise-class university is Dean of the Faculty of Education, Associate Dean for Academic Affairs of each institution should adopt a common policy for planning, and integrating the philosophy of Sufficiency Economy in each course in the teaching profession. Students Teacher continues to develop early in the course of a teacher as well as practical experience has led to teachers in schools. As well as a visionary teacher, teacher professional development, learning and understanding in students. Support measures, including the approach to supervision in the learning process and a friend. The process of action research has four main research processes using a step by step plan, the implementation of the plan, and the evaluation of the performance. And to develop action plans to improve teaching and learning. There are things that must be considered is made to understand the contents related to the philosophy of sufficiency economy.

2. The model of teacher researcher's network consisted of 5 important processes as follows: 1) the paradigm shift of teacher's perceptions toward the classroom action research (CAR) – the teachers started from the problems analysis in innovative ways in order to gain insights about how to raise students learning achievement 2) the situational analysis to determine the workload, delegate responsibility to work together as a learning community network, set professional goals and agreements, empower and motivate the adoption of AIC technique 3) Both the innovation of teaching and the classroom action research to raise students learning achievement was considered as a collaborative and mutual responsibility of teachers 4) the monitoring, evaluating and reviewing of the principal researchers and 5) sharing and reviewing the work to develop the guidelines for improvement. Brainstorming sessions with stakeholders indicated that the teacher researcher's network model, it is appropriate to put into practice. This represents a change would cause a behavior or an action to start with the idea to change the view in the paradigm shift of teacher's perceptions toward the classroom action research (CAR) then create a better understanding of what causes such clarity similar findings of Moomark, Onthanee, Kaewurai, and Rinjalean (2014) who has done research a curriculum development to enhance classroom action research's competency with knowledge management network for teachers, and met 1.

The essential classroom action research's competency for teacher was categorized into three facts: content knowledge classroom action research 1) The important and meaning of the research 2) Objective of the research 3) Process of the research 4) The innovation 5) Evaluation and Assessment. The competency of classroom action research consisted of four steps as follows: 1) Finding problem 2) Selecting the innovation 3) Constructing innovation 4) Reporting the innovation and knowledge management network can be divided in to four sessions; 1) to create network and define what they want to know 2) to find knowledge 3) to construct innovation and sharing the knowledge 4) to store knowledge and publication. 2. Components of the curriculum were1) principles and necessities, 2) objectives 3) content structure 4) knowledge management network activities, 5) evaluation. The quality of curriculum was appropriate at a high level. 3. The results of using training curriculum revealed that: 3.1 the comparing knowledge and understanding of teachers after training was higher than before the use of training at the level of significance of .01 3.2 the study and compare classroom action research's competency with knowledge management network for teachers were higher than the criterion 75 percent. 3.3 Study attitude of teacher on the use of curriculum development to enhance classroom action research's competency with knowledge management network for teachers after training level very good.
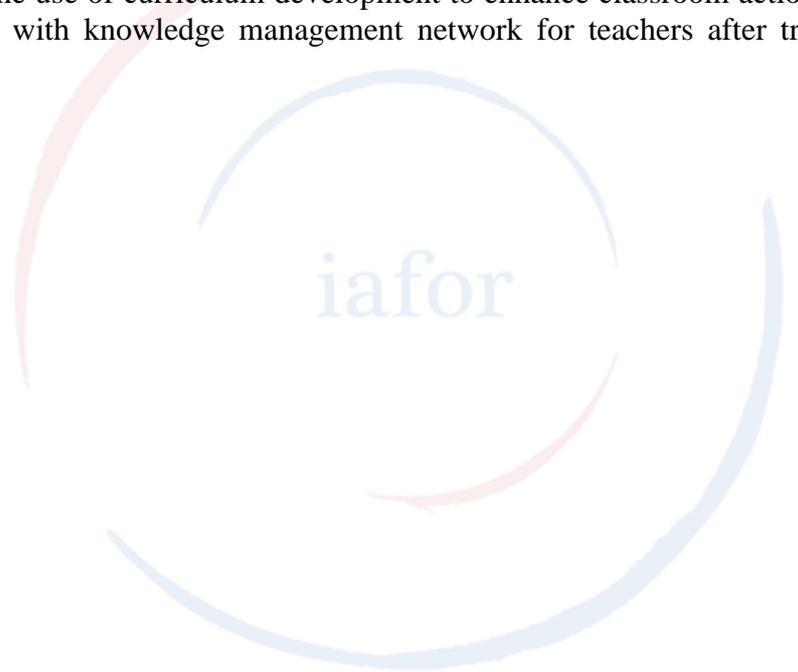
## References

Educational Testing Bureau. (2009). Conclusion the quality of education and international factors the guidelines relating to improving the quality of science and mathematics education. Retrieved from http://siteresources.worldbank. org/EDUCATION/Resources/278200-1121703274255/1439264- 1264455051293/6734290-1264455075354/Summay_policy_recommendations _Thai_Nov2009.doc.

Moomark, M., Onthanee, A., Kaewurai, W. and Rinjalean, A. (2014). A curriculum development to enhance classroom action research's competency with knowledge management network for teachers. Phitsanulok: Thesis Ph.D. in Curriculum and Instruction, Naresuan University.

Office of the National Economic and Social Development Board. (2012). Summary the eleventh national economic and social development plan (2012-2016). Bangkok: National Economic and Social Development Board Office of the Prime Minister. Retrieved from http://www.nesdb.go.th/Portals/0/news/ plan/p11/SummaryPlan11_Eng.pdf

Suksunai, D., Wiratchai, N., and  Khemmani, T. (2011). Effects of motivational psychology characteristics factors on teachers' classroom action research performance. Research in Higher Education Journal,10, 1-12.

Kaewurai W., Wattanatorn, A., Kearmaneerat, K., Suwannasri, N. and Thummasit, P. (2012). A Learning Management Model Based on the Sufficiency Economy Philosophy for Teaching Profession Course Cluster: Universities in Northern Thailand. Journal of Teaching and Education, CD-ROM. ISSN: 2165-6266:: 1(6):255-262 (2012). UniversityPublications.net.

Contact email: wareeratk@nu.ac.th

# Integrating Research into Undergraduate Curriculum: A Vehicle for Developing Skills and Competencies for the Twenty-First Century

Robert Craig, Petroleum Institute, Abu Dhabi, UAE

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

According to one recent study, pedagogical initiatives in many institutes of higher education are still largely drawn from faculty intuition and their experiences as students and teachers. The same report calls for future enhancements, particularly those related to the learning environment, to be grounded in learning theory. One approach for enhancing student engagement in higher education is the practice of integrating research components in undergraduate courses and programs of study. However, in order for undergraduate research to be incorporated successfully into curricula, research skills need to be foregrounded in the general education years of the degree program. This paper describes a program of study, initially designed to compensate for a range of twenty-first century skills and competencies found to be lacking in students, and developed to promote engagement, enhance communication and research skills, and to foster cognitive development. The two Communication courses described here target first year undergraduate students at an engineering school in the Middle East, where English is the medium of instruction. For the vast majority of this population, English is an additional language, and the approach to studying and learning is one they had not experienced in high school. As well as developing undergraduate skills and competencies, engaging students in basic research at an early stage provides them with hands-on experience of how knowledge is created and shared through the simulation of adult, professional activity.


Keywords: First-year students, undergraduate research, learning theory, life-long learning

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Perhaps one of the biggest barriers for higher education to overcome, and meet the challenges of the twenty-first century, is the traditional ivory tower perception that knowledge is power. While knowledge is central to both teaching and learning, it is the ability to generate and share knowledge that is of the utmost importance in a knowledge society. Du Toit (2000, p. 188), suggests that in order to create high levels of learning, and of innovation, a culture of open dialogue is required. Wenger (2004) believes that moves towards building communities of practice (COP) address this issue. Such developments, in which voluntary groups of practitioners with shared interests meet and learn from each other, transform outdated notions of power, to an understanding that while 'knowledge is power, sharing knowledge is more powerful' (Spisiakova, 2012).

Much has been written on the subject of knowledge management and of COP (Barab & Duffy, 1998; Du Toit, 2000; Wenger, 2004; Witt, McDermott, Peters, and Stone, 2012; Skyrme, 2012). However, the future of universities lies not only in generating and sharing knowledge; if universities are to take such bold steps then a paradigm shift is needed to develop a culture which present and future generations of students adopt and become participating members of the community themselves.

One relatively recent study (ASEE, 2009, p4) stated that while there has been a commitment to improving (engineering) education, "there are major gaps between our reports and our curricula, our desire to graduate diverse talent and our ability to deliver, and our encouragement for educational innovation and our follow through to support it." Such a statement came a decade (or more) after arguments for a change from traditional teaching methodologies such as lectures and tests, to pedagogies which promote critical and creative thinking, active learning and collaboration. Hainline, Gaines, Feather, Padilla, and Terry (2010), called for the new paradigm to encourage undergraduates to be "discoverers rather than receptacles of knowledge" (p7). Unfortunately, Jamieson and Lohmann (2012), state that the main barrier to effective educational innovation is that fact that, in engineering education at least, it is largely based on "faculty intuition drawn from personal experiences as students and teachers." They are also critical of the lack of assessment of effectiveness in achieving stated objectives of initiatives which are implemented.

**Towards the paradigm shift**

One of the main concerns of higher education today is that it prepares undergraduates to participate meaningfully in society, communities, and in regional and global economies. If students are to embrace and contribute to the challenges of the twenty-first century, and fully understand how modern knowledge society functions, then the learning environment needs to change, as the present education system was not designed for Generation Y (Prensky, 2001) or indeed, Gen Z. The gap between the skills taught in high school and in undergraduate education, and those required in the work-place, (Moylan, 2008) still exists today. The range of skills students need includes critical thinking, analysis, teamwork, and problem solving which along with information and communication technology (ICT) literacy, are prerequisite for a knowledge based society.

One approach to enhancing undergraduate education which would address some of these concerns, encourage knowledge sharing and learning, and facilitate future

participation in learning communities, would be to integrate research into the undergraduate curriculum. Informed by findings from the learning sciences, the integration would promote the acquisition and development of research and thinking skills, and enhance abilities to work in a team, enabling undergraduates to develop into contributors and not just consumers (Buckley, 2011; Karantzas, Avery, Macfarlane, Mussap, Tooley, Hazelwood and Fitness, 2013). This, of course, demands that the focus of faculty changes significantly, from that of imparting knowledge to one of creating stimulating learning environments (Adam & Felder, 2008; Bransford, Vye, and Bateman, 2002; Duderstadt, 2008, NRC 2000). Such a shift in approach, it is believed, facilitates the development of cognition through the acquisition, internalization and articulation of knowledge. Studies into the impacts of engaging undergraduate students in research suggest a wide range of benefits. Among those most highlighted are increased academic development and metacognition (Kinkead, 2003), improved ability to persist with ambiguous problems (Guteman, 2007), greater self-motivation and appreciation life-long learning, enhanced higher order thinking and deep learning (Gomez, 2013), teamwork, and communication skills, higher self-confidence, and greater problem solving abilities (Karantzas et al, 2013). These are competencies deemed important by all disciplines and professions, and endorsed by accrediting bodies. Zhan (2014) states that research experience for undergraduates has shown to be effective for enhancing the overall educational experience, thereby improving student retention, and also that students graduating with such experience are likely to have stronger hands-on experience and as such make a quicker and more effective transition from academia to the workplace. Helm and Bailey (2013) also believe that it serves as important preparation for post-graduate courses.

The potential of undergraduate research to address so many areas of development should not be surprising. Research from the learning sciences over the last twenty five years shows that higher order thinking skills, are activated when "individuals encounter unfamiliar problems, uncertainties, questions, or dilemmas," (Zhan (2014). The author continues to state that the result of successful application is an understanding that is "critical, logical, reflective, meta-cognitive, and creative." Kinkead (2003), says that learners "are active agents involved in constructing knowledge, refining their understanding, and learning socially through sharing with peers and teachers." Young adults in particular learn best when working together, sharing their learning, and building on knowledge and understanding (Mariam and Caffarella, 1991; Chau), and they find the approximation of real-life, adult, professional practice considerably more appealing, and as such more conducive to learning.

However, in order for undergraduate research to be incorporated successfully into curricula, research skills need to be foregrounded in the early years of the degree program.

**Context**
The Petroleum Institute University and Research Center (PI) was established in Abu Dhabi, capital of the United Arab Emirates in 2001 with a goal of becoming a world-class institution in both engineering education and energy industry research. The PI currently has nearly 2000 undergraduate and graduate students, over 200 faculty, and has quickly become a leading teaching and research institution in the Middle East

region. The PI is fortunate in that its sponsors and affiliates include the Abu Dhabi National Oil Company (ADNOC) and four major international oil companies that include BP, Japan Oil Development Company, Shell and Total. It offers baccalaureate degrees in Chemical Engineering, Electrical Engineering, Mechanical Engineering, Petroleum Engineering, Petroleum Geosciences Engineering, and recently added Material Sciences. It was accredited by ABET in 2012. Students initially follow a two-year program in the Arts and Sciences Program (the freshman and sophomore years) which provides a broad educational foundation in mathematics, chemistry and physics, communication and a range of humanities and social sciences subjects. The program also offers two introductory engineering courses, known as STEPS - Strategies for Team-based Engineering Problem Solving, which aim to facilitate good engineering practices with a focus on team and communication skills, and the engineering design process.

The vast majority of students at the PI are studying in an additional language, as the medium of instruction is English. Most undergraduates arrive after completing a traditional, public school system that generally focuses on the transcription, memorization, and repetition of material delivered in the classroom. As such the shift to an enquiry-based approach is a substantial and significant change for them.

**Learning to research**

Learning how to participate in research projects, whether as part of a course or an independent project, provides students with opportunities to discover how knowledge is created, how research contributes to the development of the knowledge society, how a modern knowledge society functions, and perhaps most importantly at this stage, how to access, verify, and differentiate the quality and reliability of different sources of information. Acquisition of the skills needed to do this, as shown in Table 1), and an ability to transfer these skills to other courses and beyond, requires that students are introduced to them at an early stage in their academic career.

Table 1: Basic research skills for first year undergraduate students

| Research skills | Critical Thinking |
|---|---|
| Search strategies | Identification of problem /issue |
| Critical reading | Perspectives, context & assumptions |
| Source analysis and evaluation | Application of Bloom's taxonomy |
| Note taking and annotation | Assessment and evaluation of key data/evidence |
| | Conclusions, implications & consequences |

Research is seldom undertaken alone and implicit in a research-based approach is that participants will build on existing knowledge, be actively and purposely engaged in

the pursuit of a deeper conceptual understanding of the research topic, and thereby facilitate higher order thinking. Opportunities need to be provided for students to engage in situations and tasks which require knowledge sharing, problem solving, analysis and interpretation of data, and effective communication. As these skills are generally developed as part of a relatively long-term process, it is important that they are introduced early, and carefully supported across a spine of undergraduate research across the curriculum, as shown in Fig 1, below.

Fig 1: Learning to Research across the Curriculum
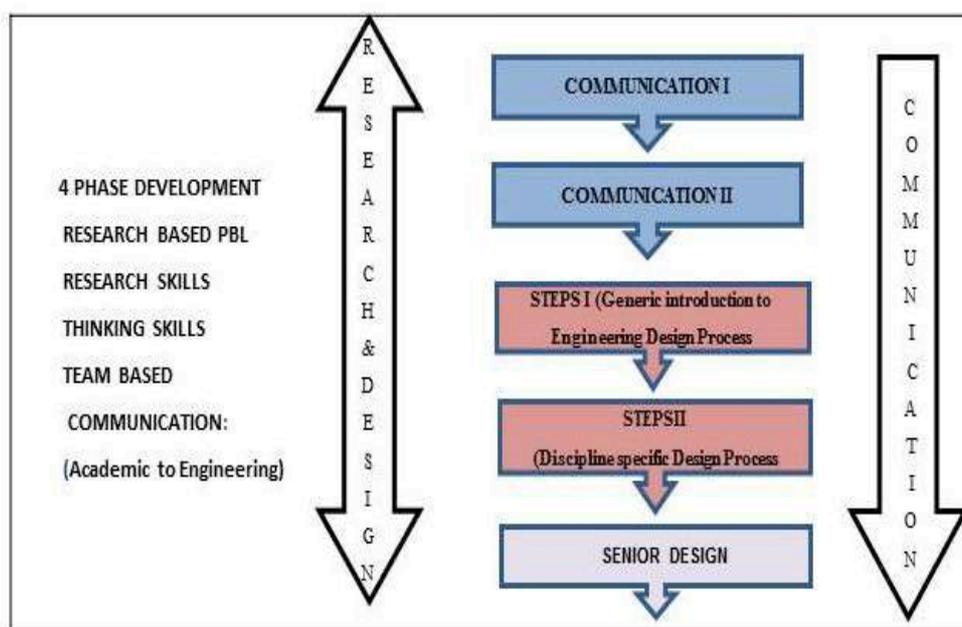


As suggested by the two headings immediately above and below, the approach to Inquiry Guided Learning (IGL) in the first two years of study at the PI has its basis in the Learning to Write-Writing to Learn approach of the Writing across the Curriculum (WAC) movement, established in higher education the US over 30 years ago. At the PI, research projects are introduced during the first semester of degree studies starting in Communication I, and continuing through further phases of development across the curriculum, as shown in Figure 1.

Communication I and II are primarily designed to develop the language and communication are required for undergraduate study. Four broad learning outcomes are addressed: effective written, spoken and graphic communication, an ability to develop and use data gathering instrument(s), an ability to work effectively in teams, and life-long learning. An integral part of the development is the focus on critical reading and writing. Knowledge gained, analyzed and evaluated, is articulated in formal recommendation reports and culminates in oral presentations, as shown in Table 2, below.

Table 2: Communications skills for sharing research

| Technical & Academic Writing | Technical & Academic Presentation |
|---|---|
| Recognition of genre, functions, conventions | Effective use of appropriate media & graphics |
| Effective synthesis & integration | Cohesive & coherent delivery |
| Individual & collaborative writing | Appropriate non-verbal communication |

These skills are developed in a context of team research projects, which also target the development of time management skills, teamwork and meta-cognition. The first step is for the team to identify global issue for further investigation. Topics are selected by students (with guidance from faculty) and have recently included educational related topics (transition issues, skills for undergraduate study), social concerns (use of mobile phones, gaming) and technical issues (use and abuse of water and electricity). Search strategies for identifying and selecting suitable sources of information are then taught using library data-bases. Once the literature review is drafted, each team states the purpose, scope, focus, hypothesis and main research questions of its localized research project. This is followed by the development of appropriate data gathering instruments (normally quantitative for the first course, and a combination of quantitative and qualitative in Communication II). Data is collected, collated and analyzed graphically to enable team members to answer and support their research questions. The next step is to attempt to explain their findings, comment on likely causes, short and longer term consequences before making recommendations.

**Researching to learn**

The development of the team is of particular importance as it facilitates the development of a range of essential skills, not just for the immediate task in question but for life-long learning and self-esteem. Team-based research provides natural opportunities for skills practice and confidence develops through project ownership and sharing common goals with team members.

Table 3: Inter and intra-personal skills for team-based research

| Interpersonal communication & Teamwork | Intrapersonal communication: Metacognition/Professional Awareness |
|---|---|
| Development of responsibility & accountability | Recognition of learning styles & methods |
| Understanding of roles | Understanding of task requirement, standards and expectations |
| Decision making | |
| Conflict identification & resolution | |

First year students have varied experiences and perspectives, and as such knowledge and understanding is distributed among team members. In order to arrive at a common and shared understanding, team-members work within their 'zone of proximal development'(Vygotsky, 1978) communicating explanations, interpretations and queries, before arriving at a reconstructed vision. In this way, undergraduate research

promotes learning through hands-on experience, collaboration and building on knowledge and understanding. Such real world, adult activity engages these young 'apprentice researchers', and higher order thinking demands that they use language as a tool to aid understanding and learning.

The introduction to research in the first year of undergraduate study is developed in each of the following years of study through a 'spine' of research and design (see Fig. 1). The approach of foregrounding research early on enables undergraduate students to take responsibility for their own learning, and address each new phase with more confidence. While development across all skills and competencies varies, particularly in terms of analysis and synthesis, students do develop a sense of learning through sharing, and are able to participate, not only in required course projects but also in national and international undergraduate competitions and conferences. Further evidence of the success of the approach includes feedback from junior and senior year faculty who indicate that the vast majority of their students are able to collaborate effectively.

**Conclusion**

This paper has highlighted an approach to addressing concerns that initiatives, particularly in engineering education, are not informed by best practice as indicated by research from the learning sciences. The description of how undergraduate research can be integrated into the curriculum to foster deep learning and provide a platform for continuity may provide higher education with a means to promoting lifelong learning, and engagement in the learning process through the sharing of knowledge. In this way graduates may be better positioned to contribute to society as participating members of communities of practice.

Further research into the impact of such an approach perhaps might focus on evidence of participation in professional societies, and community service after graduation. Only then will we be able to confirm that shared knowledge is indeed more powerful than merely possessing it.

**References**

Adams, R.S. and Felder, R.M. (2008) Reframing professional development: A systems approach to preparing engineering educators to educate tomorrow's engineers. Journal of Engineering Education 97(3): 239-40. Retrieved from:https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=34435792&site=ehost-live&scope=site

American Society for Engineering Education. (2006). Advancing the scholarship of engineering education: A year of dialogue. Main Plenary, 2006 ASEE Conference & Exposition, Chicago, IL.

Barab S., & Duffy, T. (2000). From practice fields to communities of practice. In D. Jonassen & S. Land (Eds.) Theoretical foundations of learning environments (pp. 25-57). Lawrence Erlbaum Associates, Mahwah, N.J.

Bransford, J., Vye N,. & Batemen, H. (2002) Creating high quality learning environments: Guidelines from research on How People Learn. In *The Knowledge Economy and Post Secondary Education: Report of a Workshop*. P.A. Graham and N.J. Stacy, eds. Committee on the Impact on the Changing Economy on the Education System. Center for Education, National Research Council. Washington, DC: National Academies Press.

Buckley, C. A. (2011) Student and staff perceptions of the research-teaching nexus. *Innovations in Education & Teaching International*. 48(3): 313-322. Retrieved from: https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=63968163&site=ehost-live&scope=site

Chau, J. and Cheng, G. (2010) Towards understanding the potential of e-portfolios for independent learning: A qualitative study. Australasian Journal of Educational Technology. 26(7): 932-950. Retrieved from: http://www.ascilite.org.au/ajet/ajet26/chau.html

du Toit, A. S. A (2000). Knowledge management: an indispensable component of the strategic plan of South African universities. South African journal of education, 20(3), 187-191.

Duderstadt, J.J. (2008) Engineering for a changing world: A roadmap for the future engineering practice, research and education. Ann Arbor, MI. The University of Michigan. Retrieved from: http://www.google.ae/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CBwQFjAA&url=http%3A%2F%2Fwww.pserc.wisc.edu%2Fdocuments%2Fpublications%2Fspecial_interest_publications%2Fworkforce%2FEngr_for_a_changing_world_2008.pdf&ei=ubyHVdzmMMMqjsAGtzJiADA&usg=AFQjCNEgo_aqisZ8KLjC4psfAXT2xfocSg

Guterman, L. (2007). What Good Is Undergraduate Research, Anyway?. Chronicle of Higher Education, 53(50), 11. Retrieved from: https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=26247270&site=ehost-live&scope=site

Hainline, L., Gaines, M., Feather, C. L., Padilla, E., & Terry, E. (2010). Changing students, faculty, and institutions in the twenty-first century. Peer Review, 12(3), 7. Retrieved from: https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=54710243&site=ehost-live&scope=site

Helm Jr., H. W., & Bailey, K. G. (2013). Perceived Benefits of Presenting Undergraduate Research at a Professional Conference. *North American Journal of Psychology*, *15*(3), 527. Retrieved from:

https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=91957086&site=ehost-live&scope=site

Jamieson, L. H. and. Lohmann, J. R. (2012) Impact through innovation: Creating a culture for scholarly and systematic innovation in engineering education, Phase 2. Washington, DC: ASEE (2012).p5. Retrieved from: http://www.asee.org/member-resources/reports on 20 June, 2014.

Karantzas, G.C., Avery, M.R., Macfarlane, S., Mussap, A., Tooley, G., Hazelwood Z., & Fitness, J. (2013) "Enhancing critical analysis and problem-solving skills in undergraduate psychology: An evaluation of a collaborative learning and problem-based learning approach." Australian Journal of Psychology., 65(1): 38-45. Retrieved from:https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=85317668&site=ehost-live&scope=site.

Kinkead, J. (2003) Learning through inquiry: An overview of undergraduate research. *New Directions for Teaching & Learning.* Issue 93. Retrieved from:https://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=d176d7e0-99ee-4ccb-8f47-ffa81271ad05%40sessionmgr114&vid=3&hid=121.

Marriam, S.B. and Caffarella, R.S. (1991) Learning in Adulthood. San Francisco: Jossey-Bass.

Moylan, W.A. Learning by Project: Developing Essential 21st Century Skills Using Student Team Project. The International Journal of Learning, vol. 15, no. 9, 2008, pp. 287-291. Retrieved from:
https://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=36933476&site=ehost-live&scope=site

Prensky, M. Digital natives, digital immigrants part 1." On the horizon 9.5 (2001): 1-6. Retrieved from: http://www.nnstoy.org/download/technology/Digital%20Natives%20-%20Digital%20Immigrants.pdf

Skyrme, D. (2012). Capitalizing on knowledge. Routledge.

Spisiakova, M. (2012) From 'Knowledge is Power' to 'Sharing Knowledge is More Powerful': The challenge of developing knowledge-sharing culture in innovation systems. CAPSA – Palawija Newsletter, Vol. 29, No. 1. Retrieved from: http://www.uncapsa.org/Palawija/pn1204.pdf

Vygotsky, L. S. (1978). Mind in Society: The development of higher psychological processes. Cambridge, MA: Harvard University Press (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds. and Trans.; original works published 1930–1935).

Wenger, E. (2004). Knowledge management as a doughnut: Shaping your knowledge strategy through communities of practice. Ivey Business Journal, 68(3), 1-8. Retrieved from: http://iveybusinessjournal.com/publication/knowledge-management-as-a-doughnut/

Witt, N., McDermott, A., Peters, M., and Stone, M. 2007. A knowledge management approach to developing communities of practice amongst university and college staff. Proceedings ascilite Singapore 2007. Retrieved from http://www.ascilite.org.au/conferences/singapore07/procs/witt.pdf

Zhan, W. (2014) Research experience for undergraduate students and its impact on STEM education. *Journal of STEM Education: Innovations & Research.* 15(1): 32-38. Retrieved from:
https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=96381828&site=ehost-live&scope=site.

**Contact email:** rcraig@pi.ac.ae

# Early Childhood English Language Acquisition of Hausa Children Living in Rural Communities of Kano State Nigeria

Elizabeth Adesomon Dopemu, Federal College of Education, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

This paper examines the problem with early childhood English language acquisition of Hausa children living in rural communities in Kano State in that most of the children who grow up in rural communities do not know and cannot speak English language despite the fact that it's a medium of communication in their schools. Yet the English variant (pidgin) which they learn to speak in order to be able to communicate with their peers and other members of their society in their environment, cannot be said to ascribe solid competence and performance to them in the English language. The ultimate purpose of this paper therefore, is to look at the early childhood English language acquisition of Hausa children living in rural areas of Kano State and to offer suggestions that could lead to their solution. As a prelude to this, however an attempt is made to examine the theoretical framework of English language: Its meaning, how its generally acquired, its uses in early childhood education and its relationship with culture.


**Keywords:** Early childhood, English Language, Rural Communities, Children Acquisition, Education

iafor

The International Academic Forum
www.iafor.org

**Introduction**

**Background of the Study**

Language is perhaps the most distinctive behaviours that make human beings human.  It is among the very form of behavior that one learns as children.  Language is the primary vehicle through which human culture and unique experience is shared and transmitted from one generation to the next.  Language is an indispensable means of interaction.  As people interact with language, they construct meaning and social reality within the context of culture and unique experience within where they live.  Language is important not only as a system or symbol of communication but also as a way of organizing a people's mode of thought. Language is an embodiment of ethnic identity, indeed each and every language represents a unique expression of the culture and identity of a people.  (Otile & Ogionwo, 1994).

Language as it is known enables homo sapiens to communicate a variety of messages, meanings, intentions, thoughts, requests, commands and items of information.  Language is crucial to human existence and it stands at the centre of human affairs.  According to Urdanga (1998), language is a body of words and systems common to people of the same community, nation of the same geographical area or the same cultural tradition.  It is also the communication by voice, using arbitrary, auditory symbols in conventional ways with conventional meanings.  It is any set or system of such symbols as used in a more or less uniform fashion by a number of people, who are thus enabled to communicate intelligibly with one another.

There is no doubt that English is a global language.  As such, it is spoken by millions of people as first, second or foreign language.  The colonial masters introduced the English language to Nigerians as they did not value the native languages.  The English language was considered as the only means of instruction in training people to serve in the government and the only official means of communication.  The Quality, efficiency and effectiveness of Nigeria's education and educational curriculum relied on the English language as the lingua franca cum official language.  English became a second language in Nigeria due to the multi – lingua nature of the nation and it helped in the unification of the country.  Nigeria was divided into two protectorates, the Northern protectorate and Southern protectorates.  The country was amalgamated in 1914, and presently it has been divided into thirty six states.  In the Southern Nigeria homes, children were taught and encouraged from the cradle to speak English as a language of communication.  People speaking any of the Nigerian languages in environments where the English language would have been spoken are derogatorily considered as not to have arrived.  In Northern Nigerian homes, Hausa language (mother tongue) appeared to have found approval and favour above English language.  This derogation and relation have found approval mostly among the Hausa children living in rural communities of Kano State.

The average Hausa children in rural areas still find it overwhelmingly difficult in learning the skill of written and spoken English.  This problem is unequivocally placed at the door steps of teachers of English, parents and government.

Ashby notes that;

The quality of English used in the

classroom is such that all pupils are at a

serious disadvantage.  It cannot be

> doubted that thousands of the most
>
> gifted are unable to further their
>
> education because they were not taught
>
> well the language in which they were examined.

Early childhood English language acquisition can easily equip the children in rural communities to confidently meet other people from other English – speaking nations of the world for all transactions.  Above all children in the rural communities need to acquire a competence in the English language in order to be fluent in it.

Early childhood learning/acquisition varies in scope and seems to be closely linked to geographical location.  While the main thrust of some definitions is based on age brackets, some consider the environment within which the education is delivered, others combined both.  Early childhood education has been considered to be a pre-school, semi-formal education outside the home.  It includes the crèche, the nursery and kindergarten.  This programme was introduced for children between the age of 0 – 5 years.

All children are born ready to learn language to communicate with the significant people in their lives.  Within the first few years of life, virtually all developing children master the basics of one language.  Although this is a complex task that requires much effort, it is expected and considered normal. Increasingly, in Kano State, young children are in learning environments where more than one language is used.  There is a growing and convincing body of research that high quality early childhood acquisition of English language can improve the educational achievement of children from diverse linguistic and rural backgrounds and help to reduce this achievement gap before kindergarten. Therefore, it is important for the early childhood profession to have a clear understanding of how children acquire a second language in order to design high quality learning environments for children who are in the process of acquiring English as their second language.

It is commonly assumed that pre-school-aged children in rural areas can just 'pick up' a second language without much effort or systematic teaching.  However, becoming proficient in a language is a complex and demanding process.  As with any type of learning, children will vary enormously in the rate at which they learn a first or second language.  The speed of English language acquisition is due to factors both with the child and in the child's learning environment.  The child's personality, aptitude for English languages, interest and motivation interact with quantity and quality of language inputs and opportunities for use to influence the rate and eventual fluency levels.

That language acquisition and development are dependent upon some factors such as the milieu or the type of contacts that a child has during his linguistic puberty and that is why this study investigates early childhood English language acquisition among Hausa children living in rural communities of Kano State with a view to determining the influence environment, parents and religion has on a child's English language acquisition and the effect of this acquisition on indigenous language.

The linguistic setting of rural communities where this study is based already favours not the use of English language to bridge the communication gap created by multilingualism.  Emphasis is placed much on Hausa and Arabic languages. Unfortunately many parents in rural communities of Kano State do not see the need of children acquiring English language.  Therefore, Hausa

language serves as a lingua franca and its technically imposed on one with the saying 'Ba Turanchi'. Only the literate and semi literate families favour and tend towards acquiring English at the child is early stage. A trend which became noticeable in the 1990s among the elite, upper and middle class parents who deliberately encourage their children to acquire English, only or simultaneously with indigenous (Hausa) language. This is attributable to the prestige attached to a good command of the language. There are also academic and economic advantages associated with English.

Consequently, parents in urban areas see early acquisition of good English as a strategy to avoid failure. In actual fact, some parents prefer to send their children to very expensive schools where it is believed that the standards are high enough to ensure adequate mastery of English. This is not the situation in the many rural communities where this research is carried out.

**Statement of Problem**

Kano State has a population estimated to be above 5 million people. English is the official language, the principal lingua franca, the language of wider communication, politics, mass media, and international commerce, as well as the medium of instruction at all levels of education. Proficiency or a certificate in English, is required of anyone who aspires to elective or public office, and anyone who wants to function outside his immediate linguistic environment.

Parents, teachers and government has not promoted early child acquisition of English language in rural areas of the state. This has serious negative implications on the rural children development. Above all, when these children growing up in rural areas are taken to the urban areas they function less and they are regarded as ignorant and uncivilized, a most unhealthy growth and development situation for the children of a society.

The problem which necessitated this study stems from the above observation and if this trend is not checked, it will in the next few years, start manifesting negatively in that the child will not be able to function properly outside his linguistic environment.

**Purpose of the Study**

The major purpose of this study was to investigate early childhood English language acquisition of Hausa children living in rural communities of Kano State.

Specifically, the study sets out to –

1. Ascertain the types of language(s) spoken in the child's home.
2. Find out the language of instruction in the school the child attends.
3. Find out why the parents of Hausa children living in rural communities are not interested in English language.
4. Reveal the effects of a child's acquisition of English as a second language.

## Significance of the Study

Early childhood English language acquisition of Hausa children living in rural communities of Kano State failure is attributed to the environment and early acquisition of English language will improve the educational achievement of the rural children who will be able to compete favourably with their counterparts in urban areas.  As the child is growing, there are also socio-economic advantages associated with English.  A credit pass in English is required by most employers and for admission to institutions of higher learning and the attitude of parents who do not encourage their children to acquire and speak English language.

In short, failure in English places one at a disadvantage in terms of employment, further studies and other areas of national life.

Teachers, policy maker and students would find the result of this study useful in that it will contribute significantly to the knowledge and understanding of early childhood education and for further and future research.  From this study, parents would be made to know that they have a role to play in encouraging their children to speak English language more often than mother tongue (Hausa language).

## Research Questions

The following questions were raised in line with the purpose of study to guide the research work.

1.  What languages are spoken in the child's home?

2.  What is the language of instruction in the school the child attends?

3.  Are the parents interested in encouraging the child to acquire English as second language?

4.  What are the effects of a child's inacquisition of English as a second language?

## Research Methodology

## Research Design

A survey research design will be used to elicit information from the respondents Olaitan and Nwoke (1999) defined a survey research design as a descriptive study in which the entire population or representative sample is studied by collecting and analyzing data from the group through the use of questionnaire.  The survey design is therefore considered suitable, since the study will seek information from a sample that will be drawn from a population, using questionnaire.

**Area of the Study**

This study was carried out in seven rural communities of Kano State namely: Tsanyawa, Badume, Kwa, Bichi, Shanono, Gwarzo and Dambatta.

**Research Population**

This study concentrated on children within the age range of 2 – 5 who already speak a first language. A total of 82 respondents form the population of the study. This number comprises parents of children under study and selected teachers in the schools that these children attend.

**Sample Size/Sampling Technique**

The sampling technique adopted for this study is the purposive sampling technique. This sampling technique was adopted because the researcher had to look for certain characteristics that must be represented. Using this technique, a sample size of 61 was drawn from the population.

**Research Instrument**

To obtain basic information, parents and teachers were interviewed. The researcher also visited homes of the children, and observed them as they interacted with their parents and at play with their peer group. However, the primary research instrument used was questionnaire which was administered to teachers in the 14 selected schools. Also, the head teachers of some visited schools granted the researcher audience as they were interviewed.

**Data Collection Procedure**

The instruments for data collection used were two sets of questionnaire and interview schedule. Six structured/close ended questions and five structured or open – ended questions were posed to elicit detailed information. This type of instrument is preferred in order to bring the researcher face – to – face with the interviewees or respondents. Teachers in the 14 visited schools were personally handed the questionnaires, which were collected immediately upon their filling the required details. It must be reported that some of the children's parents met were illiterate and did not personally fill the questionnaires. Instead, they were interviewed and one used their responses to fill the questionnaires on their behalf.

This method of data collection constituted the primary data. For the secondary data, relevant textbooks, unpublished project works and journals were used to enrich the quality of the work.

**Data Presentation and Analysis**

A total of (61) sixty one questionnaires were administered in the fourteen (14) schools. The collected data are presented on tables and analyzed using simple percentages. Two sets of questionnaire were distributed to different respondents. One set was designed specifically for teachers, while the other set was prepared for parents of the children under investigation. A total of 61 copies were given out to respondents for the purpose of collecting data. Thirty one copies were given out to teachers, while thirty copies were distributed to parents who served as respondents. Out of a total of sixty one (61) copies of the questionnaire distributed 58 were returned, but only 54 were properly filled. Hence, this analysis was based on the 54 copies that were properly filled and retrieved.

**Research Question 1**

What language(s) is/are spoken in the child's home?

Data relevant to this research question were collected using two questions from the questionnaire. The summary of data is presented in table 1 below.

Table 1: The languages spoken in the child's home.

| S/No. | Question Item | No. of Respondents | Response Language | No. | Frequency of Response |
|-------|---------------|--------------------|--------------------|-----|------------------------|
| 1 | What is your mother tongue or first language? | 54 | Hausa | 48 | 89% |
| | | | Yoruba | 2 | 4% |
| | | | Igbo | 4 | 7% |
| | | | English | 0 | 0% |
| 2 | What is the language of communication at home? | 54 | Hausa | 52 | 96% |
| | | | Yoruba | 1 | 2% |
| | | | Igbo | 1 | 2% |
| | | | English | 0 | 0% |

From the data collected, 48 respondents representing 89% of the children's parents have Hausa as their mother tongue or first language. 2 respondents representing 4% speak Yoruba as their first language, 4 respondents representing 7% speak Igbo as their first language while none speak English.

For the second question, 52 (or 96%) of the respondents speak Hausa to the children at home, 1 respondent (or 2%) speak Yoruba, 1 respondent representing 2% also speak Igbo to their children at home, while none speak English to their children at home.

From the analysis above, it shows that most parents speak their mother tongues to their children from birth.

**Research Question 2**

What is the language of instruction in the school the child attends?

Data relevant to this research question were collected using question 3, 4 and 5 of the questionnaire. The summary of data is presented in table 2 below.

Table 2: The language of instruction in the school the child attends.

| S/No. | Question Item | No. of Respondents | Response Language | No. | Frequency of Response |
|---|---|---|---|---|---|
| 3 | Which language does the child speak in the class? | 54 | Hausa | 54 | 100% |
| | | | English | 0 | 0% |
| | | | Others | 0 | 0% |
| 4 | Which language does the child speak with his/her mates? | 54 | Hausa | 54 | 100% |
| | | | English | 0 | 0% |
| | | | Others | 0 | 0% |
| 5 | In which language is the child taught in school? | 54 | Hausa | 36 | 67% |
| | | | English | 18 | 33% |
| | | | Others | 0 | 0% |

Analyzing the first question on the table 2 which is the third question of the questionnaire, 54 respondents representing 100% were of the view that the child expresses him/herself in Hausa language in the class while no child expresses him/herself in English language as a medium of communication in the class. The second question on the table which is question 4 on the questionnaire sought to find out which language the child speaks with his/her mates. 54 respondents representing 100% agreed that the child speaks Hausa to his/her mates while at play and none speaks English language with his or her mate during play time. The third question on the table sought to find out which language the child is taught in the school. 36 respondents representing 67% agreed that they use Hausa in teaching the children, 18 or (33%) agreed that it is English language.

It is depicted from the analysis that majority of the children express themselves in Hausa language both in the class and at play time and that Hausa language is the major language of teaching the children in school.

**Research Question 3**

Are the parents interested in encouraging the children to acquire English as second language?

Data relevant to this research question were collected using question 6 and 7 of the questionnaire as presented in table 3 below.

Table 3: The parents' influence on a child's acquisition of English language.

| S/No. | Question Item | No. of Respondents | Response Language | No. | Frequency of Response |
|---|---|---|---|---|---|
| 6 | What language do you think the child acquired due to the influence of parents? | 54 | Hausa | 54 | 100% |
| | | | English | 0 | 0% |
| | | | Others | 0 | 0% |
| 7 | What language do you think the child acquired due to the influence of environment? | 54 | Hausa | 52 | 96% |
| | | | English | 2 | 4% |
| | | | Others | 0 | 0% |

Table 3 has questions meant to give answer to research question 3. 54 respondents representing 100% agreed that the child acquired Hausa language due to the influence and encouragement of the parents while 52 respondents were of the opinion that the child acquired Hausa language due to environmental factors.

From the analysis above, it is evident that parents and environmental factors did not encourage children to acquire English language at their early stage of language formation.

**Research Question 4**

What are the effects of a child's inacquisition of English as a second language in rural communities of Kano State?

To answer this research question, a number of opinions meant to answer the questions were presented. The analysis of the responses is displayed on the table below.

Table 4: Effects of inacquisition of English as a second language.

| S/No. | Options | Frequency | Percentage |
|-------|---------|-----------|------------|
| 8 | Negative attitude toward English language. | 18 | 33% |
| 9 | Inability to speak or express oneself in English language. | 14 | 26% |
| 10 | Feeling inferior outside one linguistic environment. | 10 | 19% |
| 11 | Inadequate use of English language in school especially at play | 12 | 2% |

From the above table 4, the majority of the respondents which is 18 representing 33% were of the view that a child's will form negative attitude and loose interest in learning and speaking English language. 14 respondents representing 26% were of the opinion that none early acquisition of English language by the children will not make them speak or express themselves better in English. 10 respondents representing 19% were of the view that the child that could not speak, communicate freely in English language feel inferior outside his linguistic environment. 12 respondents representing 22% agreed that children could not effectively use English language in school while at play.

## Discussion of Findings

This study was targeted at parents and teachers of Hausa children living in rural communities of Kano State. The researcher chose these groups of people because they are the closest to the child in the home and at school. As they respond to the immediate need of the child in that they have special roles to play in the child's early language acquisition.

This study employed the use of questionnaire which contains 11 questions to elicit information from the respondents. The areas of the study are homogeneous speech communities where Hausa language is the prevailing mother tongue or first language. It is for this reason that Hausa language is majorly directed to the child as a first language due to the fact that most of their parents are illiterates who did not start as early as possible to introduce the English language but only using the mother's tongue.

It was also gathered that the parents of these children speak their various mother tongue at home and fail to speak English language to the children.

On the question of which languages a child expresses his/herself, some of the respondents answered that some of the children use Hausa at home, outside the home and in the school. He or she responds to the language directed him which in most cases is the mother's tongue.

From the teacher's angle, it was gathered that the medium of instruction in the school is English language since English is the language of instruction in Nigeria, but the fact that the communities investigated are homogenous speech communities the teachers tend towards using mother tongue as a medium of instruction for a better understanding. Teachers pointed out that it is only in a few cases that the child is taught in English language in class or at play.

The respondents also agreed that it is the home and environment which the child finds him/herself that influence his early acquisition of English as a second language.

However, learning English in Nigeria is imperative as it is a global language which communication with outside world will be difficult. Children must be assisted, encouraged and aided for their ultimate success in academics, economics, politics and social activities in Nigeria and outside. From this analysis, it is evident that English language is not effectively used in the study areas and children are not encouraged by their parents and teachers to speak English as their first language. This finding agrees with Surakat (2009) and Osho, Aliyu, Okolie & Onifade (2014) statement that Nigerian children are no longer competent in their use of English language, thus, leading to low performance in their academics.

**Conclusion**

Based on the findings of this study, the following conclusions were drawn.

The average Hausa children still find it overwhelmingly difficult in learning the skill of written and spoken English. This problem is unequivocally placed at the door step of parents and teachers of English.

The quality of English used in the classroom and environment is such that all pupils are at a serious disadvantage. It cannot be doubted that thousands of the most gifted are unable to further their education because they were not taught well in the English language in which they were examined.


**Recommendations**

Based on the findings made and conclusions drawn from the study, the following recommendations were made:-

Parents should strive to encourage their wards to learn and speak English language for better academic performance.

Teacher should encourage and motivate the children to learn and speak English language therefore, it is important for the early childhood teacher to have a clear understanding of how children acquire a second language in order to design high quality learning environments for children who are in the process of acquiring English as their second language.

Parents and members of the language communities should also change their wrong attitude of seeing their indigenous language as superior. Thus, there is need for a general re-orientation on the psyche of parents and the society at large towards English language.

Since government appreciates the importance of English language as a means of promoting social interaction and national cohesion; and preserving culture. Government should introduce high quality early childhood acquisition of English language which can improve the educational achievements of children.

## References

Ashby, E. (1960). *Upgrading Primary and Secondary School Teachers. The Commission on Post – School Certificate and Higher Education In Nigeria.* Federal Ministry of Education.

Olaitan, S. O. and Nwoke, G. I. (1999). *Practical Research Method in Education.* Onitsha Summer Educational Publishers.

Omego, C. U. (2014). *Influence of Environment on a Child's Acquisition of English Language and the Gradual Extinction of Nigeria Languages.* An International Journal of Arts and Humanities Vol. 3 (3), July.

Otite, O. and Ogionwo, W. (1994). *An Introduction to Sociological Studies.* Ibadan: Heinemann Education Book Nigeria Limited.

Osho, L. O., Aliyu, N., Okolie, O. and Onifade, O. (2014). *Implementation of Early Childhood Education: A Case Study of Nigeria Universal Journal of Educational Research* 2(2) 111 – 125.

Surakat, T. Y. (2009). *The Acquisition of English by a Nigerian Pre-Schooler* LACUS Forum Vol. 32.

Urdang, L. (1968). *The Random House Dictionary of the English Languages.* New York: Random House.

# The Imperativeness of Female Education in Some Selected Rural Communities of Kano State, Nigeria

Oladipo Idowu Filaodun, Federal College of Education, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

Women function in various capacities ranging from family to professional roles. Their activities are of immense importance in national development. This paper is a modest attempt at examining the neglect of women education in rural communities of Kano State, Nigeria. It is however evident that, rural women in Kano State are educationally disadvantage, backward and the challenging facing them are multifarious and sophisticated. The paper highlights the importance of educating rural women in view of its numerous benefits to women, individual and society at large. This paper sought opinions on discrimination against women in the area of education; it looks at the studies of women in educational development in Kano State, Nigeria. The orientation efforts of the government and the gains such portends for overall national development. Finally, the paper suggest the type of education rural women need, in addition to some strategies for developing adequate intervention programme the will be meaningful and effective.

Keywords: Women, education, girl – child, imperativeness, rural, communities, development, strategies

iafor

The International Academic Forum
www.iafor.org

**Introduction**
In all countries of the world education is recognized as the cornerstone for sustainable development. It is a fulcrum around which the quick development of economic, political, sociological and human resources of any country revolves. (Ojobo, 2008). Education is a process that helps an individual to develop his/her whole being, physically, mentally, personally, politically, socially and technologically to enable him/her function in any environment in which he/she may find him/herself. Although Nigeria has had a National Policy on Education since 1981, it has not been implemented effectively and efficiently due to rapid population growth, insufficient political will, a long period of undemocratic governance and poor management of resources. Women and girls have been most affected by these negative factors. Education in northern Nigeria is in a poor shape; statistics have shown that some states in the north record girls' completion rates as low as 7.8%. Although there is a policy of free education in most of the states in Nigeria, data suggest that there are still significant disparities between girls and boys education (Duze Yar'Zever ,2013). It is a paradox and concerned that the states with the poorest education statistics are predominantly Muslim states.

In the traditional Nigerian society, there exists the degenerate believe that women are second class citizens. A woman is considered as a man's property or pleasure object. She is also considered as a 'machine' meant for producing children. This situation has resulted in unfair treatment of woman especially with regards to education. The average rural Nigeria parents would rather invest in the education of the son rather than the daughter. Gender inequality in Nigeria is promoted by religious and communal customs. Young girls particular in Kano (the area of this study) are denied the benefit of education. This has grave consequences for both the individual and the society at large. Early marriage is common in the rural areas and girls often married shortly after puberty within the ages of 12 – 13 and this is the period when most are expected to transit to secondary school (Tahir, 2005). This high rate of early marriage not only deprives them from pursuing their education but it also linked to early sexual initiation and early exposure to reproductive risk, early and unattended stillbirth, and other related health and social problems like VVF, divorce, broken homes which by extension has its attendant problems on society. (Duze and Yar'Zever, 2013).

Adeyokunu (1981) has reported that women in rural areas are more involved than men in virtually all areas of agricultural ranging from farm clearing to processing. In spite of this the women suffer and are victims of a social order that treats them largely as second position role players. This gender bias against women ranges from labour market discriminations to exclusion from policy making. According to Mamman (1996), this discrimination exacerbates poverty by preventing the majority of women from obtaining the credit, training, health services, child care legal status and education need, to improve their prospects. One clear area of noted imbalance against women has been in the area of education. It is therefore not surprising that women's inadequate access to education has been seen as the source of the various discriminations they suffer. Women in urban areas are making their foot prints in the sands of time. Women in urban areas are closing the educational gap between the male and female enrolment. The disparity between the male and female enrolment still remain wide in rural communities. The challenges facing the rural women of the day are both multifarious and sophisticated in politics social and economic development. Euler – Ajayi (1989) posited that it is universally accepted that women

constitute more than 50% of a country's population. It is however, a source of concern in many quarters that there is generally a wide gap between men and women in educational attainment in favour of the former. Marinho (1990) grouped rural women among the educationally disadvantage groups; others are the nomads, migrant, fishermen and special education groups.

With almost 70% of the Nigerian population living below poverty line, girls are often sent to hawk ware on the streets. Kano state like every other state in northern Nigeria, grapples with low girl – child enrolment in school and colleges. This has become a major source of concern and worries to Kano State government, non – governmental organizations and other stakeholders in the educational sector. This ugly trend has over the years, continued to deepen the educational and economic inequality between the men and women in the rural communities of Kano State. Furthermore, the rural areas in Kano State are the worst hit; they do not only lack good schools but also see no need for enrolment of the girl – child. This dehumanizing ignorance has continued to plague most rural dwellers in the rural communities from year to year. It is really a pathetic situation where people, from generation to generation, fail to realize that they could be of any use not only to themselves but to the larger society.

This paper focus on rural communities in Bichi Local Government Area of Kano State, they are Badume, Kwa, Santar – Sabo, Buden Waje, Dungurawa and Dangawo. These rural communities have their own major challenges of providing basic education to their citizenry especially the girl – child. The inability to encourage and provide adequate basic education for the girl child has continued to heighten the inequality between the male and female folk enrolment in schools. Low enrolment of the female in schools is widening the educational and economic gap between men and women in rural communities addressing the problems and challenges of women education in rural communities of Kano State has become imperative in view of not only the ignorance of rural dwellers on the importance of education but the dehumanizing practices of keeping the females out of schools.

It is against this background that the paper is aimed at examining the imperativeness of women education in rural communities of Kano State focusing on low participation of female in education when compare to that of male counterparts. To achieve this aim the paper look at the male and female enrolments in rural communities of Kano State, disparity between boys and girls school enrolment, imperativeness of women education in rural communities, socio – economic factors inhibiting women's education that which have contributed significantly toward female mass literacy in rural areas. It also discussed efforts and strategies needed to promote women's education. The paper thereafter rounded with some concluding remarks.

**Male and Female Enrolment in Rural Communities of Kano State**
In spite of efforts to create awareness about equal access to education for both boys and girls, not much has been achieved at rural communities. Statistics and records obtained from relevant agencies in the Local Government still paint a gloomy picture of girl – child education and access to education for girls in a mirage (Collins, 2014). From the table below, it can be seen that the percentage of girls to boys for each year average maximally 40% that was in 2014 when girls accounted for 9,565 out of total enrolment of 25,187 which represented 40%. This means that on average about 65% of students are boys.

361

Table 1 Bichi Local Government Summary of Some Selected Primary Schools Statistics for Ten Years (2005 – 2014).

| Year | No. of Schools | Total Enrolment | Male | % | Female | % |
|---|---|---|---|---|---|---|
| 2005 | 30 | 22,321 | 17,102 | 76.6% | 5,219 | 23.4% |
| 2006 | 32 | 22,452 | 17,213 | 76.7% | 5,239 | 23.4% |
| 2007 | 35 | 22,942 | 15,100 | 65.8% | 7,842 | 34.2% |
| 2008 | 35 | 22,001 | 15,320 | 66.6% | 7,681 | 33.4% |
| 2009 | 35 | 23,100 | 15,412 | 66.7% | 7,688 | 33.4% |
| 2010 | 40 | 23,201 | 15,461 | 66.6% | 7,740 | 33.3% |
| 2011 | 40 | 23,400 | 15,511 | 66.3% | 7,889 | 33.4% |
| 2012 | 45 | 23,482 | 15,561 | 66.3% | 7,921 | 33.7% |
| 2013 | 47 | 24,113 | 18,109 | 75.1% | 6,109 | 24.9% |
| 2014 | 50 | 25,187 | 15,622 | 60.0% | 9,565 | 40% |

Source; Local Government Primary School Education Board

Gender inequality has been identified by many as a major problem in the selected rural communities of Kano State and this has created a very wide disparity in the enrolment between boys in various academic institutions in the locality.

**Imperativeness of Women Education**
Many issues make it imperative for women education to be taken seriously and be given the needed attention.  It should be emphasized that education gives a good means of livelihood and sustenance to women; gives support for their economic role and development, gives and support the education of children.  Since one's level of education to an extent determines ones income and capacity, it is expedient therefore, that women gets education for better contribution to their families, society and world over (Eweniyi, 2013).

Adekola and Abanum (2010) in Alonge (2014) argue that development cannot take place without education.  They stress that development requires an educated and enlightened populace, and that the difference between the developed and underdeveloped countries of the world is related to the level of literacy among the populace.  In addition Belivia (2010) states that investing in women's literacy carries very high returns; it improves livelihood, housing, leads to better child and maternal health, clothing, transport, communication, entertainment and gainful use of leisure.  He further emphasized that when women are literate, it is the society that gains.  Education is seen as a powerful agent of socialization in that it plays a tremendous role in preparing an individual to render active and useful service both to the family and society in general.

Half of the world's population are women and two third of the work is done by them.  About 75 percent of agricultural output in Nigeria is produced through women's efforts.  Ironically, the people that participate most in and agricultural production are rural women and the least educated.  Therefore, provision of basic literacy and skill acquisition for illiterate females will no doubt ensure bomber agricultural production.  It is also pertinent to mention here that the higher the level of education the greater the likelihood that a women will stay in the labour force.

Women can also help government to achieve its laudable goals and objectives through public enlightenment and national mobilization campaigns. In general education wipes away ignorance, political apathy and encourages mutual understanding and co-operation among the various strata of society. The role of women in economic development of the nation cannot be overemphasized. The most important measurable forms of economic benefits include employment, earning, enhance general productivity, consumption behaviour, fiscal capacity, intergenerational effect, protection of girls from HIV/AIDs abuse, and exploitation. One of the most consistent correlations is between increased literacy skills and the probability of employment. Women education that is properly design and provided has the tendency of imparting skills and knowledge to participants and make them more productive in self – employment or in employment by others.

The empowering potential of women education can translate into political participation and thus contribute to the quality of public policies and to democracy. The relationship between education and political participation is well established. Educated people are more likely to vote and eschew tolerant attitudes and democratic values. Besides, Egbo (2000) asserts that literate women have been known to contribute to the political stability and peace of a country. Hence Kassim – Eghiator in Okemakinde (2014) stressed the fact that educated women participate in politics and are able to contribute their knowledge to national unity, reconstruction and development. Perhaps, with more women holding the mantle in a male – dominated political arena, the socio – political, state of affairs, the world over will definitely improve.

**Socio – Economic Factors Inhibiting Women's Education in Rural Communities**
So many factors have been reported to be responsible for low enrolment of female in schools in rural communities of Kano State. To majority of the parents, girl – child education is less important because no matter what level of education the girl attains, their hope is to see the girl – child get married. To some parents, western types of education is termed to be a way of negative transformation and initiation of an individual into materialism, promiscuity and inculcation of western cultural ideologies in an Islamic dominated societies.

Williams (1960), Ojobo (2008), Muktar et al (2011) identified the following as some of the factors militating against women education in rural communities.

- **Poverty and Illiteracy:** Poverty can be seen as the condition in which one lacks the means to satisfy his basic needs in terms of nutrition, housing, clothing and other essentials of life. In this vein majority of the rural people are poor and illiterate. Under stifling economic conditions women have less access to education.

- 

- **Economic Constraints:** Many parents in rural areas considered women's education as a waste of funds since she will soon be marry off, leaving only the boys to cater for their parents. Therefore, when families are faced with the option of choosing between son's and daughter's education, the daughter are always the victims.

- 

- **Religious Constraints:** Religion is an accomplice in the stereotyping of women and reinforces the barriers that prevent them from participating politically, economically, socially and educationally. The forces of religion are partly responsible for the

present plight of women's education in Nigeria. None of the three major religions in Nigeria, namely:  Christianity, Islam and Traditional religions in practice endorses equality between men and women.  The submission of women to men and the desire of the husband to rule over the women are the usual practiced among Christians.  The practice of Sharia purdah in Islam makes it difficult for married Muslim to fully benefit from educational system.   Similarly, in traditional religion women must always stay in the background.

•

• **Traditional Cultural Constraints:**   The culture and traditional of many ethnic groups in Nigeria are full of obvious signs of gender stereotyping.   Social conventions, values and mores combine to maintain the stereotype of women as kitchen dwellers who are only gatecrashers into sphere outside their matrimonial homes.  Women are socialized from birth to see their place as second to that of men.  The birth of a male child is warmly received to the extent that women often feel that their marriage is not secure until they give birth to male children.  Education for girls, right from the very beginning was designed to make them primarily effective mothers and housewives. Hence girls were brought up in the traditional family set – up to be passive, obedient "Lady like" and always submissive to men.  Boys on the other hand, were encouraged to be aggressive, competitive and independent.

**Negative Attitude of Parents and Male Chauvinism**
Some parents also have negative attitudes towards women's education, especially illiterate parents in rural areas who are fond of withdrawing their daughters from school in favour of their sons.  Some men are misogynists who do not believe the education of women including their female children and wives.  The adherents of the belief that "The place of the women is in the kitchen" have compounded women's desire for quality education by making things difficult for women when it comes to educational development.  Such men prefer to marry illiterate as wives for fear that the educated woman is too assertive, domineering, free and in general a threat to the male dominated society.

**Gender Stereotype:**  Nigerian society believes primarily in the role model of women as perfect housewives.  Most women therefore struggle to be successful house wives.  They were to stay at home and inculcate in their children the virtues of life while their husbands carried on with important societal tasks such as politics and governance.  The career development of women is often tailored along specific occupation without saying it loud the school system encourages the boy children to be a tough engineer or a medical doctor, lawyer, while at the same time encouraging the girl – child to become a gentle nurse or a primary school teacher.

**Early Marriages and Early Pregnancies:** In rural communities early marriage are a permanent feature, in which case, girls are given in marriage at the age of between twelve and thirteen years.  Early pregnancies and unwanted pregnancies are another factors inhibiting female education. They drop out more often from school.  In this case, the girls' opportunities are destroyed.  She then misses the chance of furthering her educational career and this no doubt can upset her otherwise peaceful life.

**Strategies Needed to Promote Women's Education in Rural Communities**
The place of education as a catalyst for women empowerment and development is indubitable. Women education can be promoted in rural communities through the following strategies:
Increasing access of female children to education, this can be achieved through increased advocacy and orientation of the masses in rural communities, especially on the need to educate the girl child in formal schools.

The Ministries of Women Affairs all over the federation need to play a great role in bringing to focus the fundamental challenges of the women folk which the government and other institution of state owe the responsibility to tackle. To achieve this, constant pressure should be brought to bear on the authorities to create positions of responsibility and government should strive to tackle the barriers to women education in rural areas, such as drop out, societal and institutional discriminations, early marriage and cultural practices. This can be achieved through provision of scholarships and bursaries for female children, infrastructure, facilities and instructional materials to schools. Recruitment and deployment of qualified teachers to school for effective teaching and learning should be prioritize by the Federal and States Ministry of Education. The concentration of qualified and large number of teachers in urban areas at the expense of schools in remote and rural areas should be discouraged.

Every women forum, whether in the city or rural areas should be effectively utilized as an avenue to educate the illiterate ones among them on skills, knowledge and values that will help them to improve their social, economic and political life style.
Parents, guardians and the society as a whole must allow and encourage their female children to enroll in schools, overcome the paralysis of illiteracy and acquire a proper awareness of their potentials, rights and higher responsibilities in society literacy programs should be incorporated with life skills components so that women can be well equipped to perform their roles more effectively.

Government at all levels should make concerted efforts to alleviate poverty at the grassroot, as this will undoubtedly overcome the challenge of not sending the girl – children to school by parents for reason of poverty.

Another responsibility that government should take up so as to tackle this menace is to provide free and compulsory primary and secondary education. Schools should be built, well staffed and equipped to provide quality education so that children in rural areas can compete favourably with their counterparts in urban areas.

Parents should be enlightened to encouraged the girl – child to acquire basic education, at least that will make her self – reliant and to secure a better future for herself, governments, non – governmental organizations, religious leaders and traditional rulers have a major role to play in leading this awareness and enlightenment campaigns on not only the importance of western education for the girl – child but also on the need to discard the various cultural and religious misconceptions that have militated against girl – child education in northern Nigeria over the years.

**Conclusion**

Education is the basis for the full promotion and improvement of the status of women. This is on the basis that despite their large population, women in rural communities are at disadvantaged position when compared to men. Among other indicators enrolment of girl – child in schools is low in rural communities, while there is prevalence of poverty among the women in rural areas. However, a cursory look at the pattern of women's involvement in education in rural communities reveals abysmal low levels. In spite of all the laudable goals, objectives and benefit derived from education, rural women still suffer a lot of constraints and inhibitions which militate against their personal national development.

Promotion of women education is a collective responsibility. Therefore, all stakeholders in the field of education have important roles to play in ensuring that girl – child benefited adequately from education. It is therefore imperative that all should show more commitment towards ensuring that quality education is provided to all, especially the females in rural areas.
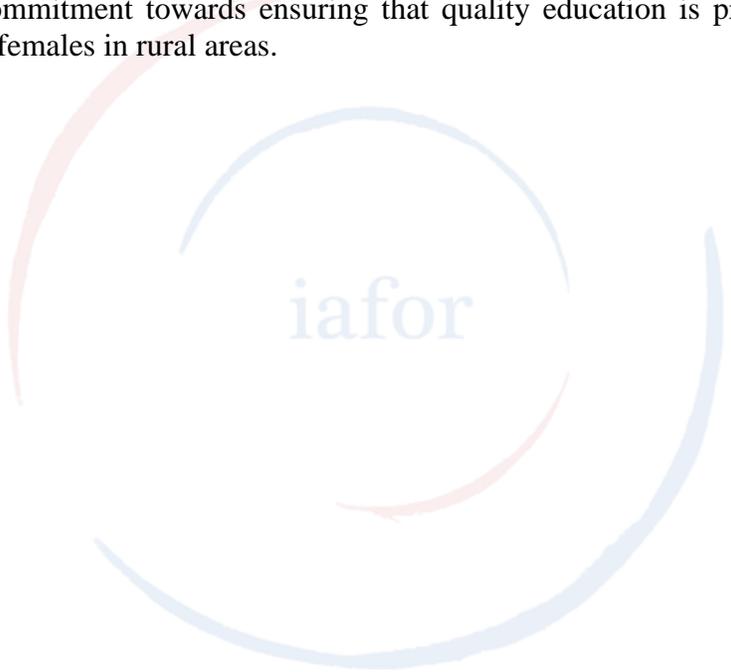
# References

Adeyokunu, T. O. (1981). *Women and Agriculture in Nigeria,* UNECA, Addis Ababa.

Alonge, H. O., Ige, A. M. and Osagiobare, O. E. (2014). *Women Empowerment for Self – \ Reliance: Educational Management Strategies in Nigeria Case.* Rome: MCSER Publishing.

Collins, E. N. O. (2014*). Socio – Economic Development and the Girl – Child Education in Plateau State.* African Research Review Vol. 8, (1) No. 32 January, 134 – 155.

Duze, M. C. and Yar'Zever, I. S. (2013). *Factors Influencing the Attitudes of Hausa Male Parents Towards Girl – Child Education in Kano, Nigeria.*Research on Humanities and Social Sciences Vol. 3(2) 203 – 214.

Egbo, B. (2000). *, Gender Literacy and Life: Chances in Sub – Sahara Africa.* Cleveland: Buffalo/Sydney, Multilingual Matters.

Euler – Ajayi, O. (1989). Training *Women: A Reflection of Nigerian Experience.* Education Today Vol. 3, No. 1, December 5 – 20.

Eweniyi, G. B. and Usman, I. G. (2013*). Perception of Parents on the Socio – Cultural, Religion and Economic Factors Affecting Girl – Child Education in the Northern Parts of Nigeria* http://dx.do1.org/10.4314afr.rev.v7i3.5.

Marinho, H. (ed.) (1990*). Coping with the Crisis in Education.* Education Today, Vol. 3, No. 4 September, 53 – 64.

Ojobo, J. A. (2008). *Education: A Catalyst for Women Empowerment in Nigeria.* Ethiopia Journal of Education and Science Vol. 4 No. 1 September 93 – 108.

Williams, D. H. (1960*). A Short Survey of Education in Northern Nigeria.* Kaduna: Government Press Northern Region.

# Health and Physical Education (HPE): local and global communities of practice

Timothy Lynch, Monash University, Australia

The European Conference on Education
Official Conference Proceedings 2015

## Abstract

This paper shares a university health and wellbeing community initiative. The project (2011-2014) 'Best Start: A community collaborative approach to lifelong health and wellness', adopts a strengths-based approach to education. What began as a partnership seed between a university and nearby schools, quickly grew to involve Australian Registered Training Organisations (RTO), the local health industry (local leisure and sports centre), Education departments and sport governing bodies. The collaborations involved pre-service teachers teaching Health and Physical Education (HPE) lessons to children from local schools, thus marrying theory with practice. The apparent pre-service teacher benefit was extended learning opportunities, as lessons provided 'hands on' practical, experiential learning and teaching. Lessons also provided local primary school children with quality swimming, sport sessions and tennis coaching (at no cost). Furthermore, professional development was delivered for classroom teachers.

Various communities were involved in curriculum and pedagogical research and reform. The project creatively optimised the resources available within a regional community through connections with the wider state of Victoria, as well as Australian and international communities. Program planning was strengthened through international research with data gathered from an England and Wales Office for Standards in Education (Ofsted) awarded UK Primary Physical Education course case study (2012 and 2014). International partnerships enabled identification of unique contextual opportunities, support networks and renewed purpose. This initiative offers new directions of research and discovery in local and global education and is significant to the European Conference in Education (ECE) 2015 theme of "Education, power and empowerment: Changing and challenging communities".

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Participants of the Third European Conference on Education (ECE2015) organised by the International Academic Forum (IAFOR) in affiliation with global university partners, were invited to explore and question ways in which education can change, empower and challenge communities, and the ways in which communities can challenge structures and constructions of 'education'. It was suggested that 'communities' be explored in their fullest meanings. The world is perceived as a global community under the banner of the United Nations (UN) and this paper focuses specifically on the implementation of the international goals for education, health and wellbeing. The UN movement provides a focal point for governments, influencing policies and programs at all community levels: global, regional, national and local.

To implement curriculum or enact international and national health goals, community partnerships are essential. In the United Nations Governor General's synthesis report 'The road to dignity by 2030: ending poverty, transforming all lives, and protecting the planet', Ban Ki-Moon wrote:

> Implementation is not just about quantity. It is also about doing things together, uniting around the problem. Inclusive partnerships must be a key feature of implementation at all levels: global, regional, national and local. We know the extent to which this can be transformative. The sustainable development goals provide a platform for aligning private action and public policies. Transformative partnerships are built upon principles and values, a shared vision and shared goals: placing people and the planet at the centre. They include the participation of all relevant stakeholders, in which mutual accountability is critical. This means principled and responsible public-private-people partnerships. (United Nations General Assembly, 2014, p. 19).

The Sustainable Development Goals (SDG) referred to include 17 proposed goals that succeed the 2000-2015 Millennium Development Goals (MDG). At present, goal 3 and 4 are 'Ensure healthy lives and promote well-being for all at all ages' and 'Ensure inclusive and quality education for all and promote lifelong learning', respectively. The two recurring themes of 'health and physical wellbeing' and 'community partnerships' form the core of this paper.

The health and wellbeing project, 'Best Start: A community collaborative approach to lifelong health and wellness' combined community strengths involving local and global partnerships. What began as a pathway seed quickly grew to involve an Australian university, schools, Australian Registered Training Organisations (RTO), the local health industry (local leisure and sports centre), Education departments, sport governing bodies and a leading international Teacher Education university course (UK). Similarly, the strengths-based model has been adopted by Sport England 'use our school' initiative who are "committed to helping people and communities across the country create sporting habits for life" (http://www.sportengland.org/facilities-planning/use-our-school/).

All local and international partnerships were initiated and developed without funding which makes this initiative appealing and tangible for teacher education globally. This distinct project espouses the power of human relations to optimise learning. In

exploring local and global communities of practice in Health and Physical Education (HPE) three underpinning themes are investigated:

- Local community health and wellbeing initiative
- Global influence and support
- Community strengths

**Local Community Health and Wellbeing Initiative**

The collaborations involved pre-service teachers teaching 'Health and Physical Education' (HPE) lessons to children during their university tutorials, marrying the theory traditionally learnt in university classrooms with the experience-based knowledge located only in schools. The lack of connection between the theory and practice is recognised as a perennial problem in Initial Teacher Education (ITE) courses and termed the Achilles heel of education (Zeichner, 2010). Hence, a 'hybrid space' was created, involving "non hierarchical interplay between academic, practitioner and community expertise" (Zeichner, 2010, p. 89).

While literature discusses the advantages of the 'hybrid space' ideal, high quality research is limited, if not non-existent within physical education. The 'Best Start' program initiative provides a model through the journey experience. The story that unfolds provides an example of how the UN ideals are transformed into local schools and communities. This project is significant to educators and governments from around the world who are challenged to rethink their connections between university courses, school experiences and community health promotion.

Various communities were involved in curriculum and pedagogical research and reform. The project creatively optimised the resources available within a regional/rural community through connections with the wider state of Victoria, as well as Australian and international communities. Program planning was strengthened through international research with data gathered from an England and Wales Office for Standards in Education (Ofsted) 'Outstanding' awarded UK Primary Physical Education course case study (2012 and 2014).

This unique local community partnership journey began in semester one, 2011 at Monash University – Gippsland campus (Figure 1). Monash University (Gippsland campus) is situated in Churchill, central Gippsland, Victoria (Australia). The Gippsland 'Best Start' program was deliberately designed so pre-service teacher confidence and competence could be progressively developed. Beginning with Level 1 higher education courses (first year), the students taught the content using peer teaching episodes (EDF1600 HPE in schools). This led to small group teaching experiences with children from local schools under teacher educator support, school teacher support and peer support. In Level 2 and 3 (second and third year) the pre-service teachers taught lessons to groups of children from Foundation Year to Year 6 in a chosen sport, tennis and swimming. The lessons only took place after the pre-service teachers evidenced they were prepared. The final teaching experiences were implemented independently by the students in the form of a residential camp and coaching experience within primary schools.

Community collaborations involved pre-service teachers teaching local children (Foundation – Year 6) swimming and water safety lessons (EDF2611 Experiencing Aquatic Environments), modified games (EDF1600 Health & Physical Education in

Schools), various sport sessions (netball, basketball, soccer, cricket, Aussie Rules football, tee-ball) and implementing tennis 'hot shots' (EDF3619 Sport & Physical Activity Education). University and school partnerships were timely and well received by education departments. The program was embedded within the Victorian Government 'School Centres for Teaching Excellence' (SCTE) initiative, which seeks to improve pre-service teacher education programs through stronger partnerships between schools and universities and a better integration of theory and practice. Learning and teaching involving 'quality experiences' is powerful, and as research suggests, high quality teaching has the largest impact on student learning outcomes, other than a student's socioeconomic background.

Primary education university students (ITE), who chose the Physical Education (PE) major stream, were required to study the unit EDF2611 'Experiencing Aquatic Environments'. It could also be chosen by education students as an elective. The pre-service teachers were not necessarily competent or confident swimmers but did have an interest in physical education and/or swimming. It was a requirement within this unit and also for the governing authority, Victorian Institute of Teaching (VIT) teacher registration that PE graduates from ITE programs in the primary school have a current teacher of swimming and water safety qualification (VIT, 2008). The unit at Gippsland campus previously required that students complete this during their own time and presented evidence of this qualification (approximate cost $350).

The question was asked that if the students were attending a weekly one hour lecture and a two hour workshop focusing on outcomes relating to aquatics and water safety education then with a carefully designed unit workshop programme why not create a pathway identifying the swimming and water safety course units of competency? This question initiated the journey of collaboration between Australian Registered Training Organisations (RTO), the local health industry (local leisure and sports centre) and external swimming instructors employed at the venue, local Primary schools and the University sector; Monash University - Gippsland. Through implementing 'hands on' practical teaching and learning experiences for the university students, subsequently the workshops enabled the provision of quality lessons at no cost for local primary school children (from a disadvantaged socioeconomic Gippsland region), who otherwise would not have received swimming lessons. This was of particular benefit as although, a considerable amount of work has been attributed to educating the Australian public about swimming and water safety awareness in a commitment to reducing drowning fatalities, research suggests that rural and isolated schools find it most difficult to conduct aquatic activities (Peden, Franklin & Larsen, 2009, p. 200). Furthermore, the best time to prepare children for safe aquatic participation and provide the skills and knowledge needed to have a lifelong safe association with water is during childhood (Royal Life Saving Society Australia, 2010).

Pathways created included the opportunity for the university students to obtain qualifications in Australian Swimming Coaches and Teachers Association (ASCTA) - Swim Australia Teacher (SAT), Royal Life Saving Society Australia (RLSSA) Bronze Medallion (BM) and RLSSA Resuscitation (RE) courses. By becoming an endorsed service member with Lifesaving Victoria the author was qualified to endorse the BM, RE and Bronze Rescue (BR). The students were required to have current resuscitation accreditation to obtain a Swim Australia Teacher qualification, so this enabled a pathway within a pathway.

The discussion paper released in August 2011 titled 'A tertiary education plan for Gippsland, Victoria' (Department of Education and Early Childhood Development, 2011) was written specifically for this context using recent national and state level developments including the Review of Australian Higher Education (Bradley Review). This paper supported such pathways as it "encourages building on existing partnerships and strengthening articulation arrangements between providers" (p. 4). In the written submissions for the discussion paper specifically focussing within the Gippsland context suggests that "the need for additional training capacity and improved collaboration between providers of tertiary education and industry was identified as a major concern" (DEECD, 2011, p. 10). There are five key outcomes identified by the Gippsland tertiary education plan project, a derivative of the Melbourne Declaration on Educational Goals for Young Australians, and it is specifically the third key outcome that supports the swimming and water safety pathway holistic vision:

> 3.Improved participation in education and training more generally for the community.

As mentioned a large percentage of the Gippsland region comprises of a socio-economically disadvantaged population. The goals established at the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA, 2008) were "about equity and social justice and improved learning outcomes for our most disadvantaged and isolated students" (Ewing, 2010, p. 127). Goals included:
Goal 1: Australian schooling promotes equity and excellence
Goal 2: All young Australians become:
- Successful learners
- Confident and creative individuals
- Active and informed citizens

These goals have driven the recent Australian Curriculum reform; supported by socio critical pedagogy in education and underpinned by a socio-cultural perspective. A commitment to action in achieving these goals included: promoting world-class curriculum and assessment; and improving educational outcomes for the disadvantaged young Australians, especially those from lower socio-economic backgrounds.

The next community collaboration involved six rural primary schools during semester one, 2012. Primary ITE university students (pre-service teachers), choosing the Physical Education (PE) major stream, also study the unit EDF3619 'Sport and physical activity education'. Through amendments made to this unit objectives involved the implementation of the Friday Sports program which was the second community collaboration in the 'Best Start' initiative. This program ran over five weeks and was the first program of this nature to be implemented within the area, where pre-service teachers were teaching HPE lessons to primary school children during tutorial time.

The Friday Sports program was designed to enable Year 5 and 6 children from the six participating schools to choose a sport that they would like to participate in during the one hour sessions over the five weeks. Each sport group consisted of 20-25 students,

were mixed sexes and mixed schools. Monash University provided the equipment, the human resource of five teacher education students per group who had planned the five week units, and collaboratively with the local health industry (local leisure and sports centre) provided the stadium and field facilities, all at no cost to schools. Subsequently, the implementation of this sport unit built relationships between Monash University (Gippsland campus) Faculty of Education and rural primary schools.

Stakeholders in the project 'Best Start: A community collaborative approach to lifelong health and wellness' included:
- the local health industry – Latrobe Leisure Churchill (Latrobe City Council);
- Australian Registered Training Organisations (RTO)
    - Australia Swim Coaches and Teachers' Association (ASCTA)
    - Swim Australia,
    - Lifesaving Victoria (Royal Life Saving Society Australia);
    - Tennis Australia
- local rural primary schools
    - Churchill Primary School
    - Churchill North Primary School
    - Hazelwood North Primary School
    - Lumen Christi Catholic Primary School
    - Thorpdale Primary School
    - Yinnar South Primary School
- Churchill Tennis club

Figure 1 Best Start program (2011-2014)

**Global Influence and Support**

The drive to continue providing opportunities to develop children's health, wellbeing and physical education opportunities was the localisation of The Convention on the Rights of the Child (CRC). CRC "is the most recognised international treaty setting out the basic rights of children, along with the obligations of governments to fulfil those rights. It has been accepted and ratified by almost every country in the world." (Garvis & Pendergast, 2014, p. 8). The Convention has 54 articles which have four fundamental principles: non-discrimination; best interests of the child; survival, development and protection; and participation.

'The best interests of the child' refers to "Laws and actions affecting children should put their best interests first and benefit them in the best possible way" (Garvis & Pendergast, 2014, p. 8). The strengths-based collaborations involved HPE curriculum change for schools and university teacher education. Previous teaching experiences would often be reflected upon to maintain realistic expectations in attempt to overcome barriers, to better understand the complexities involved when dealing with many different individuals with at times different priorities, and subsequently to enable sustainability.

'Partnerships' are recommended by the United Nations (UN) for continued efforts towards equality in health and wellbeing. The year 2015 marked the end of the timeline for UN Millennium Development Goals (MDGs). These goals "helped to lift more than one billion people out of extreme poverty, to make inroads against hunger, to enable more girls to attend school than ever before and to protect our planet" (United Nations, 2015, p. 3). The MDGs included:

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Global partnership for development

The Sustainable Development Goals (SDGs) succeed the MDGs and are "are a new, universal set of goals, targets and indicators that UN member states will be expected to use to frame their agendas and political policies over the next 15 years" (http://www.theguardian.com/globaldevelopment/2015/jan/19/sustainable-development-goals-united-nations). While these goals are to be discussed later this year, there are 17 proposed goals. Presently, the following goals are directly representative of health, wellbeing and physical education.

> 3. Ensure healthy lives and promote well-being for all at all ages
> 4. Ensure inclusive and quality education for all and promote lifelong learning

Goal 3 and 4 of the proposed SDGs, along with goal 8 of the MDG in collaboration with the identification of 2015 as the time for global action to end poverty, *promote* prosperity and *wellbeing for all*, protect the environment and address climate change, espouses the significance of 'health, wellbeing and physical education' and

'partnerships'. This UN movement provides a focal point for governments, influencing policies and programs at all levels: global, regional, national and local.

It is argued through the 'futures-oriented' curriculum perspective that community collaborations/ partnerships are ideal for implementing education curricula and forms guidance for education departments and governments for implementing physical education in schools and sport generally within communities. A partnership shift between universities and schools began in the USA and is occurring globally with recent reforms in Finland, Australia and UK (Department of Education and Early Childhood Education (DEECD), 2012; Douglas, 2014). Furthermore, such shifts have been experienced in (ITE) across all discipline areas.

A 'strengths-based' approach "supports a critical view of health education with a focus on the learner embedded within a community's structural facilitators, assets and constraints, and is enacted through resource-oriented and competence-raising approaches to learning" (Macdonald, 2013, p. 100). Community partnerships such as 'Best Start – a community collaborative approach to lifelong health and wellness' are underpinned by the 'futures oriented' curriculum perspective. As a result experiential learning is offered where the curriculum is relevant, engaging, contemporary, physically active, enjoyable and developmentally appropriate for all stakeholders; namely university pre-service teachers (Table 1), local primary school children and classroom teachers. This is supported by research which suggests that the optimum time for children to learn and refine their motor skills and to be introduced to positive HPE experiences is as early as possible, preferably during preschool and early primary school years. Furthermore, it has been argued in literature that although Australian education policies strongly advocate HPE and physical activity, requirements do not appear to be consistently enacted. A similar 'gap' also exists on an international scale (Hardman, 2008). Curry argues "state governments have standards in place to ensure all children are provided the opportunity to participate in physical education classes, these are rarely met due to the absence of a specialist PE teacher in many public primary schools." (2012, p. 17).

Table 1 accentuates the positive contribution community collaborations (across units EDF1600, EDF2611 and EDF3619) have made towards teacher preparation.

| Units involving community collaborations 5 – strongly agree 1 – strongly disagree | EDF 1600 2011 HPE in schools | EDF 1600 2012 HPE in schools | EDF 1600 2013 HPE in schools | EDF 1600 2014 HPE in schools | EDF 2611 2011 Swimming (offered biennially) | EDF 2611 2013 Swimming (offered biennially) | EDF 3619 2012 Sports/ Tennis (offered biennially) | EDF 3619 2014 Sports/ Tennis (offered biennially) |
|---|---|---|---|---|---|---|---|---|
| Positive contribution to practice | 4.79 | 4.30 | 4.70 | 4.67 | 4.30 | 4.75 | 4.72 | 4.75 |
| Previous rating (no community collaborations) | (2010) 3.92 | (2010) 3.92 | (2010) 3.92 | (2010) 3.92 | (2009) 2.33 | (2009) 2.33 | (2010) 2.67 | (2010) 2.67 |

Table 1 Student Evaluation of Teaching Unit (SETU). This unit made a positive contribution to my experiences during the fieldwork/ practicum.
*more than 15 enrolments and 10 or more completed surveys*

International partnerships enabled identification of unique contextual opportunities, support networks and renewed purpose. Program planning, learning and teaching was guided by international research. Data was gathered from a university course in south-west England, a Primary Physical Education course case study was conducted in January 2012 and January 2014. The course was purposefully chosen as it was awarded "Outstanding" by the national regulatory authority, England and Wales Office for Standards in Education (Ofsted) (2010/2011). Also, the major course strength explicitly stated in the review was community connections. A qualitative, interpretive study using a case study methodology was adopted to examine the successful primary education course.

The purpose of this study was to give insights into various dynamics of this award winning program. Careful analysis of data and further reflection suggests that the community connections do offer strong possibilities for course quality improvement, and therefore a strength-based approach in Health and Physical Education is conceivable (Macdonald, 2013). There are at times difficulties in this process (Douglas, 2014), however complexities appear to be minimised when the relationships are developed over a sustained period of time, where trust is built between stakeholders and not forced. Strength of partnerships is increased when the university lecturers are experienced, successful teachers and school leaders with the ability to act as hybrid teacher educators. If higher education is genuine in attempts at course improvement then intake numbers of pre-service teachers needs to be taken into consideration with regards to the quality of pastoral care.

Within this context the course was developmentally appropriate for teaching children PE in the primary school and therefore perceived as very relevant by all stakeholders. It also appeared to supplement and extend the various schools' PE learning opportunities and not saturate or compete with existing curriculum. Head Teachers had an important role in leading and determining the PE implementation within their school, deciding how this would be enacted and by whom. Finally, funding was made available for this course and was a necessary ingredient for initiating and maintaining partnerships.

The findings did suggest within this context that there were connections between having teacher educators with teaching experience in primary schools and the partnerships established. The teacher educators were also confident and competent with the children aged 5-11 years and felt comfortable working in, with and amongst primary school educators and communities. The various stakeholders perceived themselves as 'teachers' working together in the best interest of the children. The findings of this UK research into a successful ITE PE primary education course enabled international findings and insights that offered support to the 'Best Start' Gippsland initiative. It was comforting and offered a guiding framework for continued efforts towards course improvement and stronger partnerships.

**Community Strengths**
Equity and social justice advocated by international policy and literature which has filtered down to Australian curriculum documents, were enacted and satisfied. An apparent pre-service teacher benefit included extended learning opportunities, as lessons provided 'hands on' practical, experiential learning and teaching. Lessons also provided local primary school children with quality swimming, sport sessions and

tennis coaching (at no cost), creating learning experiences that they would otherwise not have had and connected them with valuable opportunities through local clubs and facilities. Furthermore, professional development was delivered for classroom teachers, assisting in developing teacher confidence and competence and subsequently promoting sustainability of children's health.

Learning and teaching over the four year 'Best Start' program (2011-2014) obtained outstanding results, as evidenced by Student Evaluations of Teaching Units (SETU) (Table 2 and 3). Quality learning and teaching improved and was achieved due to the community partnerships.

Table 2    EDF2611 Student Evaluation of Teaching Unit
(more than 15 enrolments and 10 or more completed surveys).

| Year EDF2611 offered | Overall Satisfaction with quality (5 – strongly agree, 1 – strongly disagree) | The learning resources in this unit supported my studies (5 – strongly agree, 1 – strongly disagree) | The feedback I received in this unit was useful (5 – strongly agree, 1 – strongly disagree) | This unit made a positive contribution to my experiences during practicum (5 – strongly agree, 1 – strongly disagree) | Overall impression of the ASCTA SAT course (5 – excellent, 1 – unsatisfactory) |
|---|---|---|---|---|---|
| 2009 | 2 | 3.1 | 2.63 | 2.33 | No course |
| 2011 (First year of community collaboration) | 4 | 4 | 4 | 4.3 | 4.7 |
| 2013 (Second year of community collaboration) | 4.4 | 4.61 | 4.22 | 4.75 | 4.8 |
| 2015 (Best Start program ceased. No community collaboration) | 2.6 | 3.17 | 2.86 | 3.63 | No course |

Table 3    EDF3619 Student Evaluation of Teaching Unit
(more than 15 enrolments and 10 or more completed surveys).

| Year EDF3619 offered | Overall Satisfaction with quality (5 – strongly agree, 1 – strongly disagree) | The learning resources in this unit supported my studies (5 – strongly agree, 1 – strongly disagree) | The feedback I received in this unit was useful (5 – strongly agree, 1 – strongly disagree) | This unit made a positive contribution to my experiences during practicum (5 – strongly agree, 1 – strongly disagree) |
|---|---|---|---|---|
| 2010 | 2.5 | 3.57 | 3.38 | 2.67 |
| 2012 (First year of community collaboration) | 4.56 | 4.67 | 4.56 | 4.72 |
| 2014 (Second year of community collaboration – 'tennis hotshots') | 4.40 | 4.25 | 4.25 | 4.75 |

Another indicator of teaching and learning quality was the growth of the units. At Monash University (Gippsland) on average 55 of the 80 (69.0%) first year intake Bachelor of Primary Education students chose to study the HPE major stream during the Best Start initiative. These numbers continued throughout second and third year where they increased as much as 62% in biennial units, from 39 (2011) to 63 (2013) for swimming and remained consistent in 2014 (Table 4). Furthermore, this has been achieved with no to very limited funding and without any increase to the overall cohort enrolment intake.

Table 4  Increase in student numbers to be involved in the community collaborations.
*Cohort enrolment intake remained constant.

| EDF2611  Experiencing aquatic environments 'Swimming'- Enrolment numbers | | EDF3619  Sport and Physical Activity Education - Enrolment numbers | |
|---|---|---|---|
| 2011(semester 1) (1st year of partnerships) | 39 | 2012 (semester 1) (1st year of partnerships) | 42 |
| 2013 (semester 1) (2nd year of partnerships) | 63  (62% increase) | 2014 (semester 1) (2nd year of partnerships) | 58  (38% increase) |

Parents came to support their children and comments from teachers, teaching assistants, parents and the children expressed their gratitude for the lessons provided. One teacher wrote; "My kids had a ball with the swimming. Like I said to you then, any time you need children feel free to approach us. We are very willing to assist." (personal communication, July 23, 2011). Another teacher stated that many parents "commented that it was good that the children were able to access the lessons and that they were free" (personal communication, June 13, 2013). The Yinnar South Primary school principal contacted the local newspaper to share the program with the wider community and was quoted in the article; "For our (students) to get one-on-one water experience is great; the parents have given really positive feedback and it's been thoroughly enjoyed by everybody" (Symons, 2013).

The Churchill Primary School Prep-Grade 2 team leader summarised the benefits of the program and gratitude within this context:

> It was a fantastic opportunity for our students as many have never had formal (swimming) lessons before. The low socio-economic situation of many families in this area means that many students are not able to have the opportunity of learning about water safety with instructors. While Churchill Primary School does offer a swimming lesson program we often find that those most in need of lessons find the price too high. By offering free lessons through the University program we had 100% attendance from Prep/One/ Two, which is amazing!

The children were very excited about going to the swimming lessons and were looking forward to going each time. They enjoyed getting to know their instructors and it was good to see the university students grow in their confidence of dealing with junior primary school children. Relationships between the instructors and students were just beginning to develop, so it was a shame there weren't more lessons.

We have also received many positive comments from parents about this wonderful opportunity. Many were amazed that the lessons would be offered free of charge. One family has three children in the Prep/One/Two area and normally sending all three to swimming lessons is too expensive. However, this time because they were free, all three children were able to go. Their Mum was so happy she didn't have to exclude any of her children from the lessons. (personal communication, June 13, 2013).

Tennis 'hot shots' was chosen by the author to be the focus for the 'Friday Sport Program' in the biennial unit EDF3619 Sport & Physical Activity Education (semester one 2014). Tennis Australia supplied 18 'hot shots' tennis courts, 100 racquets and 200 modified tennis balls. The 60 pre-service teachers provided four weeks of tennis 'hot shots' lessons to children from Lumen Christi (Year 3, 4, 5 & 6) and Churchill Primary (Year 5 & 6).

The overall ITE student satisfaction with the quality of the unit (Student Evaluation of Teaching Unit - SETU) received a median of 4.4 out of 5, more so, the 'positive contribution to experiences during practicum' received a median of 4.75 out of a maximum 5. University pre-service teachers shared that the best aspects of the unit was "Being able to teach children and the feeling of satisfaction when the children learn from what you taught them and when they enjoy the sport" (SETU, 2014, Q11). Another commented "I thoroughly enjoyed the opportunity to plan and implement lessons with the local schools. It was challenging and engaging" (SETU, 2014, Q11).

The children commented to their teachers and posted letters of thanks to the university. One boy wrote "I learnt how to backhand and it was a great program, even though I missed out on one", (personal communication, June 19, 2014). Another girl expressed her enjoyment; "I would like to say it was an awesome four weeks with our coaches and I got to learn a lot about tennis. I had a great time." (personal communication, June 19, 2014). Teachers also offered very positive feedback to the tennis program; "The program gave both students (children) and pre-service teachers a chance to develop new skills. The students (children) were always engaged and they looked forward to going." (personal communication, June 23, 2014).

## Concluding remarks

There were many obstacles that had to be overcome or evaded to enact what appeared on the surface to be a simple and common sense approach to optimising the health, wellbeing and physical education of community members. Diverse teaching experiences in various roles were drawn upon by the author when establishing community collaborations, these experiences along with the reassurance and support provided by the international 'outstanding' UK ITE program research, assisted and

provided the strength and drive for continuing partnerships. The intention of the program was 'in the best interest of the children' which provided motivation.

Another problem for the community collaborations was funding. It was surprising at the time that there was no funding available for either unit in Gippsland or equipment for the development of such a well-received program despite numerous applications for internal and external funding. The Health and Physical Education community collaborative lessons were espoused by the DEECD School Centre for Teaching Excellence initiative, yet this did not prosper any financial assistance. Unbeknown to all stakeholders there were plans made by Monash University and governments that offered an explanation for the lack of funds and which eventually led to the demise of the 'Best Start' program. In May 2013 Monash University announced that it was to transfer its Gippsland campus to be part of a new Federation University Australia (formally Ballarat University). This was described as a merger and occurred on 1 January 2014. Monash ceased making offers to new students, and made arrangements with Federation University for teaching its continuing students.

While the end of the 'Best Start' program was disappointing for the various stakeholders and Gippsland local community it enabled time to reflect on health and physical education: local and global communities of practice. The journey involved local and global community partnerships and models how an idea can grow into multi-dimensional strengths-based community collaborations. This paper aspires to both empower and challenge communities in optimising health and wellbeing and provides an example of how the UN ideals are transformed into local schools and communities.

**References**

Australian Government. (2008). *Review of Australian higher education (Bradley Review).* Canberra: Commonwealth of Australia.

Curry, C. (2012). Why public primary schools need specialist PE teachers. Active & Healthy Magazine, 19(2), 17-19.

Department of Education and Early Childhood Development. (2011). *A tertiary education plan for Gippsland, Victoria.* East Melbourne: Skills Victoria.

Department of Education and Early Childhood Development [DEECD]. (2012). *New directions for school leadership and the teaching profession discussion paper.* East Melbourne: State Government Victoria, Australia.

Douglas, A. (2014). *Student teachers in school practice.* Hampshire: Palgrave Macmillan.

Ewing, R. (2010). *Curriculum and assessment: a narrative approach.* South Melbourne: Oxford University Press.

Garvis, S. & Pendergast, D. (2014). *Health & Wellbeing in Childhood.* Melbourne: Cambridge University Press.

Hardman, K. (2008). Physical Education in Schools: A Global Perspective. *Kinesiology* 40: 5-28.

Macdonald, D. (2013). The new Australian Health and Physical Education Curriculum: A case of/for gradualism in curriculum reform? *Asia-Pacific Journal of Health, Sport and Physical Education, 4*(2), 95–108.

Ministerial Council on Education, Employment, Training and Youth Affairs. (2008)

*Melbourne declaration on education goals for young Australians.* Retrieved from http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf.
Peden, A., Franklin, R., & Larsen, P. (2009). Survey of primary schools across Australia: an examination of key water safety issues. *International Journal of Aquatic Research and Education, 2009*(3), 197-208.

Royal Life Saving Society Australia. (2010). *The national drowning report 2010.* Canberra: RLSSA.

Symons, R. (2013, June 10). Partnering up in the pool. *Latrobe Valley Express,* p. 3.

United Nations. (2015). *The millennium development goals report.* New York: United Nations.

United Nations General Assembly. (2014). *The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet.* New York: United Nations.

Victorian Institute of Teaching. (2008). *Victorian institute of teaching specialist area guidelines*. Retrieved from http://www.vit.vic.edu.au/finditfast/Teacher-education-programs/Pages/Assessmentofqualifications.aspx

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college and university-based teacher education. *Journal of Teacher Education, 61*(1-2), 89-99.

## Teaching through Inquiry: A Case-Based Approach

Sook Chia, SIM University, Singapore
Foo Kum Fong, Ministry of Education, Singapore

**Abstract**

Case study method has been used rather widely in Universities across the world. The literature has also reported widely on the merit of using case study approach. Through the use of real data, and providing real life examples to contextualize textbook concepts, case method approach aims to help students develop skills in concept application through discussing complex real-life examples. While prevalently used in Business courses, it is less often used in other disciplinary courses such as Mathematics or Statistics. Currently, in statistical courses conducted in Singapore, from primary to tertiary education, contrived data using discrete examples (often from textbooks) are used for teaching. Students are expected to sustain their learning and interest through monotonous building-bloc statistical concepts. The teaching activities are also calculation driven without bringing real world meaning and applications into practice. As a result, students are less likely to appreciate the relevance of real world applications in statistical calculations. This paper looks at the possibility of teaching statistics through using authentic and meaningful case examples and approach. The advantage of such an approach is that it is able to develop active learning amongst students which in turn leads to better application of concepts taught.

Keywords: Case-based teaching, Mathematics

iafor

The International Academic Forum
www.iafor.org

## Introduction

*Case study method* has been used rather widely in most Universities around the world. Its merit has also reported widely (Dunne and Brooks, 1994; Kerber, 2001; Kruntsz&Hessler, 1998 and Lundeberg, 1993). Using real data, and real life examples to contextualize abstract concepts, case method approach aims to help students develop skills in statistical concept application (Kerber, 2001; Kruntsz&Hessler, 1998).

While prevalently used in Business courses (eg. Bruns, 1993; Christensen, 1981; Erkskine et al., 1981 and Shapiro, 1984) it is less often used in Statistics. More often than not, contrived data using discrete textbook-based examples are used for teaching. Through monotonous "building-block" statistical concepts, students are then expected to sustain their learning interest. Given that the teaching activities are calculation driven without bringing real world meaning and applications into practice, students are less likely to appreciate the relevance of real world applications in statistical calculations.

With the increased use of statistical analysis to unravel complex data found these days, educators realise the need to develop in students sound conceptual knowledge of statistics and competency to apply these concepts appropriately in different contexts. According to Gattuso & Ottaviani (2011), globalization has led to a new perceived complexity in the teaching of statistics, shifting from content knowledge to competencies. This paper therefore discusses a case-based inquiry approach for developing statistical reasoning and competencies. The advantage of such an approach is that it is able to develop active statistical reasoning through application of concepts taught (Dunne and Brooks, 2004, Hammond 2002, Richards et al., 1995).

## Why is there a need to adopt a case-based approach?

There is a growing recognition that we need to change the way we teach undergraduate statistics. Many introductory statistics courses tend to be taught through lectures. As a result, students do not always benefit as much as they ought to. Cobb (1991) in his treatise, Teaching Statistics: More Data, Less Lecturing, lamented "lectures don't work nearly as well as many of us would like to think". According to him, if students do not understand statistical concepts, there is little value in knowing procedures.

Unfortunately, there is still an ingrained tradition perception of statistics as a discipline that relies solely on formulae and procedures. As a result, there have been calls to move away from this traditional notion, and to focus on students' understanding of statistics, its use and its value.
The literature is replete with examples of student not acquiring sufficient understanding of basic statistical concept and not able to engage in statistical reasoning or apply concepts taught. Our experience, along with most faculty members, also seem to suggest that a large proportion of university students, do not appreciate many of the statistical concepts they are studying. Students, in general, often appear eager to try out the computational formula or procedure without internally having conceived a representation of the statistical problem. While they

may be able to memorise the formulas, and follow the steps given, they seldom appear to understand the rationale or how these concepts can be applied in new situations. Unfortunately, without conceptual understanding, students could easily misuse or misapply the procedures and formulas they memorised.

According to Scheaffer (2006), developing statistical thinking or reasoning is just as important, if not more important, than statistical knowledge. Statistical reasoning, essential to the 21st century society, should be the core focus in Mathematics curricula. We are proposing that statistical reasoning could be developed through the case-based inquiry approach. This is also in line with the call for using authentic, real world problems context for the teaching of statistics, as recommended in the Guidelines for Assessment and Instruction in Statistics Education (GAISE, 2005).

**The Case-based Approach**

Current method to the teaching of statistics is contrived and ineffective in connecting learners to real world issues. To engage in statistical reasoning, teaching needs to be contextualized on real cases, bringing relevance and meaning to statistical data. Case inquiry here addresses ill-structured problems, where the problem statement, or statistical solution, lacks clarity or require negotiation. Through mathematical argumentation, reasoning, and hypothesis, case mathematical inquiry leads to fresh understandings, appreciation of complexities of given situations and ignites further questions for exploration (Magnusson & Palincsar, 2005).

Supporting the case-based inquiry approach are researchers such as Nolan and Speed (1999) who have successfully developed and tried out courses using in-depth case studies. Created as a package, our proposed project will include:

- Interwoven real case examples with statistical data
- Learner notes with guided cues
- Instructor notes with guided instructions

Our proposed case study approach aims to bring meaning to statistical data through real case examples and applications. Students will learn the fundamental ideas of statistics in the context of current real world situations through cases presented. Through the project, students will:

- See the relevance of statistical concepts in the real world
- Gain confidence in the application of statistical concepts
- Develop the ability to develop a statistical solution in addressing real world problems or issues posed.

In our approach, statistics is taught as a laboratory science (Cobb, 1992). This approach is similarly used by Nolan & Speed (1999) who explored in depth a model for developing case studies/labs for the use of the undergraduate mathematical statistics class. Theory in a lecture format is first delivered to the students before the lab sessions. During the lab session, students are grouped and are presented the case. Figure 1 below describes the case inquiry process which takes place.
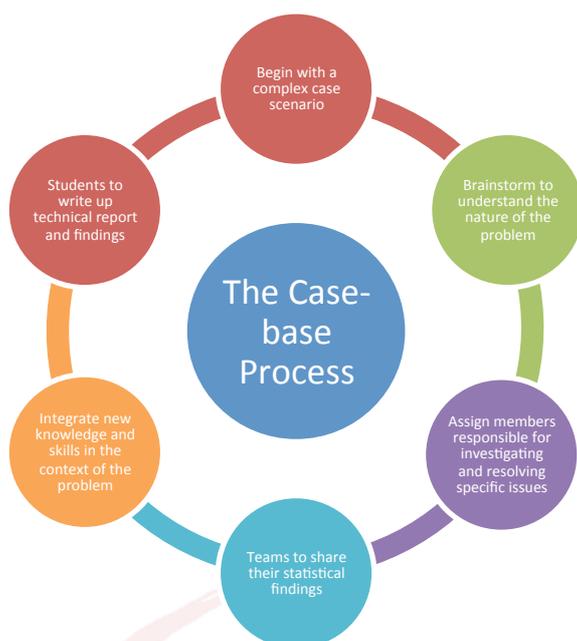
*Figure 1.* Case-based Process

Students are first provided an initial overview of the case and the statistical inquiry. They are to examine the sample, and data collected closely. Using the information given, students conduct relevant exploratory data analysis and test of assumptions. In groups, they interpret results within the context of the case, discuss findings and write up about the case findings.

In this process, tutors act as facilitators, and guide students in their investigations through questioning techniques and probes. In interacting with students, emphasis will be given to logical reasoning, mathematical thinking and proof. High level thinking skill questions such as 'why?', 'how?', 'what if?' are used in discussion. When developing the concept of covariation, for example, questions such as: "How do you describe the pattern in the data? Is there a positive linear pattern in the data? Can you generalise about the relationship from the sample to the population of students based on the data? Please provide your analysis" can be used. Likewise, when going through a case on fatality rate, the tutor could be asking: "Why couldn't we use the mortality rate to describe the case fatality rate? What rule have you found?", "Note that the daily incidence data are available in public websites but the detailed patient data are not. Can we make use of incidence data to obtain a better estimate or even a forecast of the case fatality rate? Why so and why not?"

In our proposed model, questions such as "Why?", "How?", "What if?", "How do you know that?" are used to stimulate students to think critically and to make use of logical deduction. Such questioning approach emphasises mathematical reasoning and promotes much verbal discussion and interaction between the tutors and students as well as amongst the students themselves.

Through such active exploration and inquiry process, students pick up the different aspects and extensions of the statistics and probability concepts. At the same time,

they are also given the opportunity to use software tools to support their statistical calculations. Finally, they learn to report their findings in proper written format

**Developing the Teaching Case**

Acquiring materials for the teaching cases might not be an easy task. However, within the discipline of Business and Operations Management, several case studies books focusing on statistics topics could be found. These include those by Bodily, Carraway, Frey, and Pfeifer (1996), and Lapin and Whisler (1996). The cases involve a range of topics such as inventory, queuing, simulation, and transportation and could include statistical topics such as regression and forecasting. Those teaching integrated quantitative methods course will find these cases useful.

Other than case studies books, a number of traditional textbooks also contain short statistical cases, more appropriate for introductory statistics courses. Among many others, such textbooks include those of Levine, Ramsey, and Berenson (1995) and Siegel (1997). More authentic cases could be collected through case reporting in research journals. An example is the Severe Acute Respiratory Syndrome (SARS) reported by Koh, Plant, & Eng (2003). Ideally, each teaching case should include the following:

- Clear scientific question presented in the context of the problem
- Background information of the problem
- Description of the data collected
- Required investigation

In the example of the Severe Acute Respiratory Syndrome (SARS), statistical data from a total of 8,096 cases reported globally (including those from Singapore) were collected. Examples of such authentic cases taken from local context provide interesting points of statistical investigation and discussion. To add realism, Yu, Chan and Fung (2006) suggested that students could assume the role of the consultant, statistician, policy officer or even data analyst to investigate the case questions. Student could also go on to discuss on the role of statistics in fighting against SARS (Koh, Plant, & Eng (2003).

**The Use of Technology**

Technology should be accessible for the students Instructors these days have the choice of selecting between a number of quality statistical software packages; SAS (http://www.sas.com), MINITAB (http://www.minitab.com), SPSS (http://www.spss.com), R (http://www.rproject. org), etc. Continuing upgrades of the software has led to menu-driven packages making it easy for the student.

Also available is Excel which could be used for easy computations. In the recent years there is a tremendous growth in the development of applets. Applet is also another tool to help students visualize the statistical concepts. Supporting the use of the tools is also the availability of the text books on technology commands and instructions.

Depending on the course learning outcomes, instructors should seek appropriate technology necessary to meet the learning goals of the statistic course. It is important to be able to provide allocate sufficient computer time for the course structure. The

other consideration is the level and need of students for the software and the licensing costing. In the lab based class discussed in this paper, we use Excel for simple statistical analysis as the students have easy access, and SPSS for the more complex statistical calculation and analysis.

**Value of this Approach**

Inquiry is relatively uncommon in statistics teaching using well-structured and context free problems. As a result, students in statistics may lack confidence to deal with uncertainties that arise. Therefore, initial experiences can be especially daunting (Anderson, 2002; Makar, 2010). Nonetheless, there is value in this approach once students overcome their fear and lack of confidence.

First of all, students gain practical experience and ability to apply theoretical concepts. This approach follows closely to what a statistician might do in reality. Rather than a straightforward and linear approach, the investigative process requires backtracking and revision as new findings emerge. As cases are authentic and have depth, the approach generates interest, and strengthens problem solving skills. Learning by cases also provides students the means to experience working with real data and statistical inquiry, and acquire some independent thinking. They examine the case, conduct their own analysis and make recommendations based on what they found. They also have the opportunity to compare what they did to what statistician did in the actual case study.

Secondly, students also learn to make errors in safe and secure environment. In this approach, the consequences of errors are fairly benign. Students do not lose credibility, or to live with the full consequences of their analysis. Our experience with our students show that they learned from others' contributions and strengthened their understanding. A further benefit of learning by the case approach is the opportunity to acquire experience mimicking what they might find in the real work environment. Thirdly, we would like to suggest that this approach is useful to developing transferable skills such as the following:

- *Practical skills.* Case studies might involve practical work and hands-on approach to conduct statistical analysis.
- *Information gathering and analysis*. Case studies require students to utilise a number of different sources (e.g. Internet, library and experts) for resource investigation,
- *Individual study skills.* Case studies encourages students to be self-directed learner and carry out independent research outside of the lecture/tutorial environment.
- *Group working*. Student benefit from learning to work with one another.
- *Presentation skills*. Students pick up presentation skills using a variety of formats, such as oral presentations, posters and reports.
- *Time management*. Students learn to manage time as they consider how best to carry out the tasks to be completed to the set deadline.

Finally, cases impart reality. In our work with students, students report increased confidence in their ability to apply statistical methods in the workplace, and to

communicate their findings to stakeholders through studying authentic cases. There is value in the use of the case-based approach to developing lifeskills.

**Conclusion**

This paper focuses on the teaching of statistics using inquiry case-based approach. Statistical teaching is successful insofar it moves away from the focus on formulae and procedures to statistical reasoning and thinking. Our proposed inquiry case-based approach is an approach to develop this statistical reasoning and thinking. Only through getting students involved in active analysis of real data do they see the relevance of statistics in the real world and appreciate the value of statistical concepts taught.

**References**

Anderson, R. (2002). Reforming science teaching: What research says about inquiry. *Journal of Science Teacher Education*, 13(1), 1–12.

Binnie, N. (2002). Using Projects to Encourage Statistical Thinking. Proceedings of ICOTS-6.

Bodily, S.E., Carraway, R.L., Frey, S.C., and Pfeifer, P.E. (1996), *Quantitative Business Analysis Casebook*, Chicago, Ill.: Richard D. Irwin, Inc.

Bradley, J. and Kemp, M., (2002). The "Plus" Provided by Graphics Calculators in Teaching Undergrduate Statistics. Proceedings of the 2nd International Conference on the Teaching of Mathematics, Greece. 3.

Bruns, W., Jr. (1993) Why use the case method to teach accounting, Harvard Business School, 9-193-177.

Christensen C R (1981) Teaching and the Case Method; Text, Cases and Readings. Boston, Mass.: Harvard Business School.

Cobb, G. (1991), "Teaching Statistics: More Data, Less Lecturing" in T. L. Moore (Ed.), *Teaching Statistics-Resources for Undergraduates,* published jointly by Mathematical Association of America and American Statistical Association, pp. 1-5.

Cobb, G. (1992). Teaching Statistics, in Heeding the Call for Change: Suggestions for Curricular Action, L. A. Steen(Ed), MAA Notes No. 22, Washington, D.C.: Mathematical Association of America, 3-23. 5.

Corey, E. R. (1998) Case method teaching, Harvard Business School, 9-581-058.

Donnelly,C, Ghani, A. C, Leung, G. M., Hedley, A. J., Fraser, C, Riley, S., Abu-Raddad, L. J.,

Ho, L. M., Thach, T. Q., Chau, P., Chan, K. P., Lam, T. H., Tse, L. Y., Tsang, T., Liu, S. H., Kong, H. B., Lau, E. M. C, Ferguson, N. M. and Anderson, R. M. (2003), "Epidemiological Determinants of Spread of Causal Agent of Severe Acute Respiratory Syndrome in Hong Kong," *The Lancet*, May 24, 361(9371), 1761–1766.

Dunne, D. and Brooks, K. (2004) *Teaching with Cases* (Halifax, NS: Society for Teaching and Learning in Higher Education), ISBN 0-7703-8924-4

Erskine, J. A., Leenders, M. R., and Mauffette-Leenders, L. R. (1981) Teaching with Cases: School of Business Administration, University of Western Ontario, London, Ontario, Canada.

Garfield, J., Hogg, B., Schau, C., & Whittinghill, D. (2002). First courses in statistical science: the status of educational reform efforts. *Journal of Statistics Education*, 10(2). http://www.amstat.org/publications/jse/v10n2/garfield.html 6.

Gattuso, L., & Ottaviani, M. G. (2011). Complementing mathematical thinking and statistical

Guidelines for Assessment and Instruction in Statistics Education College Report (2005) *American Statistical Association*. Retrieved March 2, 2015 from http://www.amstat.org/Education/gaise/GAISECollege.htm

Hammond, J. S. (2002) Learning by the Case Method, *Harvard Business School*, Report Number: 9-376-241, Cambridge, MA.*ICMI/IASE Study* (pp. 121-132). New York: Springer.

Kemp, M., Kissane, B., Bradley, J., (1998). Learning undergraduate statistics: The role of the graphics calculator. Proceedings of the International Conference on the Teaching of Mathematics. John Wiley, Samos, Greece, 176-178.

Kuiper, S. R. (2010). Incorporating a Research Experience into an Early Undergraduate Statistics Course.. Proceedings of ICOTS-8, IASE.

Koh, T., Plant, A., & Eng, H. L. (Eds.). (2003). *The new global threat: Severe acute respiratory syndrome and its impacts*. Singapore: World Scientific.

Kreber C (2001) Learning Experientially through Case Studies? A Conceptual Analysis.*Teaching in Higher Education* Vol. 6 No 2 pp217-228

Kuntz S and Hesslar A (1998) *Bridging the Gap between Theory and Practice: Fostering Active Learning through the case method, Annual Meeting of the* Association of American Colleges and Universities, p23

Lapin, L.L., and Whisler, W.D. (1996), *Cases in Management Science*, Belmont, CA: Duxbury Press.

Levine, D.M., Ramsey, P.P., and Berenson, M.L. (1995), *Business Statistics for Quality and Productivity*, Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Lundeberg, M. (1993) Case discussion in educational psychology, In V. Wolf (Ed.), Improving the Climate of the College Classroom, System Office of Equal Opportunity Programs and Policy Studies, University of Wisconsin, Madison, WI.

Magnusson, S., & Palincsar, A. (2005). Teaching to promote the development of scientific knowledge and reasoning about light at the elementary school level. In M. Donovan & J.

Makar, K. (2008, July). *A model of learning to teach statistical inquiry*. Paper presented at the Joint IASE/ ICMI-17 Study Conference, Monterrey, México.

Moore, D. S. (1997). New pedagogy and new content: the case of statistics. *International Statistical Review*, 65, 123-165.

Moore, D. S., Cobb, G. W., Garfield, J., & Meeker, W. Q. (1995). Statistics Education Fin de Siecle. *The American Statistician*, 49(3), 259-260.

Nodddings, N., Gilbert-MacMillan, K., & Lutz, S. (1980). *What does an individual gain in small group mathematical problem solving?* Paper presented at the meeting of the American Educational Research Association, Montreal.

Nolan, D. & Speed, T. P. (1999). Teaching Statistics Theory through Applications. *The American Statistician*, 53, 370-375.

Richards L G, Gorman M, Scherer W T and Landel R D (1995) Promoting Active Learning with Cases and Instructional Modules, Journal of Engineering Education Vol. 84 No 4 pp 375-381

Scheaffer, R.L. (2006). Statistics and mathematics: On making a happy marriage. In G. Burrill (Ed.), Thinking and reasoning with data and chance: Sixty-eighth yearbook (pp. 209-211)/ Reston, VA.: National Council of Teachers of Mathematics.

Shapiro, B. P. (1984) An Introduction to Cases, Harvard Business School Case: 9-584-097, Cambridge, MA.

Siegel, A.F. (1997), *Practical Business Statistics*, 3rd ed., Burr Ridge, Ill.: Richard D. Irwin, Inc.

Snee, R.D. (1999). Discussion: Development and Use of Statistical Thinking: A new Era, *International Statistical Review*, 67(3), 255-258. 14.
*Statistics in School Mathematics-Challenges for Teaching and Teacher Education: A Joint*
thinking in school mathematics. In C. Batanero, G. Burrill, & C. Reading (Eds.), *Teaching*

Walker, A., & Leary, H. (2009). A problem based learning meta analysis: Differences across problem types, implementation types, disciplines, and assessment levels, *Interdisciplinary Journal of Problem based Learning,* 3(1). Retrieved March 1, 2011 from docs.lib.purdue.edu/ijpbl/

Walls, M.E. (2000) Case studies for teaching technology: contexts for course content, *Journal of SMET Education,* 1 (1), pp. 33-36.

Weil, S., Oyelere, P., and Rainsbury, E. (2004) The usefulness of case studies in developing core competencies in a professional accounting program: A New Zealand study, *Accounting Education,* 13 (2), pp. 139-169.

Wild, C.J. and Pfannkuch, M. (1999). "Statistical Thinking in Empirical Enquiry", *International Statistical Review,* 67(3), 223-265.

World Health Organization (2003). *Situation Updates—Severe Acute Respiratory Syndrome (SARS), Update 49—SARS Case Fatality Ratio, Incubation Period.* Retrieved from http://www.who.int/csr/sars/archive/ 2003_05_07a/en/.

Yu, P. L., Chan, J. S., & Fung, W. K. (2006). Statistical exploration from SARS. *The American Statistician,* 60(1).

# *What Feedback for Teachers?*
## *A Pilot for the Teacher as a Reflective Practitioner*

Elena Mosa, INDIRE, Italy
Silvia Panzavolta, INDIRE, Italy
Francesca Storai, INDIRE, Italy

**Abstract**

"Teachers need feedback", said Bill Gates in a famous TED talk speaking about the technique of using videorecording in the classroom. In fact, the use of video is a powerful tool to analyze behaviours and to reflect on implicit teaching routines in a sort of "self-mirroring" activity, as described by Shön in the reflective practitioner theory (1983).

Within the University course "Multimedia research methods" offered by the on line Italian University IUL, addressing CPD for teachers, trainees were asked to record their typical lesson and to analyze it by using a grid derived from research (the School Effectiveness Approach by B. Creemers e L. Kyriakides 2012 and "Visible Learning" by Hattie, 2009).

After analyzing their videos, teachers would visualize their positioning in a Radar diagram helping them to understand what factors should be improved in order to carry out an effective lesson. Furthermore, teachers were asked to peer review the Radar and the grid of a colleague and to receive a first feedback from her/him. This resulted in a very powerful exercise to improve and better plan an effective classroom lesson.

In the second part of the course, the teachers worked in small groups, according to the cooperative learning model, with the task of producing a toolkit, giving operational tips and examples derived from the videorecordings, on how to perform a good lesson.

The paper provides a detailed description of the methodology employed, the corresponding tools and the analysis of the main results coming from the pilot.

**Introduction**

This contribution is the result of a research and experimentation activity carried out during the study course "Methods and techniques of educational interactions" promoted by IULine, Telecommunication University born from the consortium between the University of Florence and Indire, Research Institute that has been operating for 90 years in support of innovation processes with regards to the Italian school.

The course "Research methods in the multimedia sector" provided the ideal context to work with a group of teachers mainly coming from primary schools, that took up the challenge to use the videorecording method in class, to analyse the lecture, afterwards.

The course lasted four months, for a total of 10 university formative credits, and was divided in two modules, which videorecording goals, methods and tools were shared in class. The teachers enrolled in the course were 23.

The opportunity to "review" their behaviour and the students' activity from an external perspective offers many reflection and analysis opportunities, aimed at reviewing ineffective teaching methods and boost functional ones. The goal of the proposed activity was to provide a method and some tools that stimulate reflection, based on reflective practitioner that Schön (1983) described as the subject who does not completely rely on the "automatic pilot" of teaching routines, filled with tacit knowledge and often subdued by the mastery of contents and reassurance dictated by practice. The reflective practitioner is the one who triggers these mechanisms and reflects (reflection in the action), he brings out the implicit, challenges it and leverages on doubt as research engine.

The theme of self-evaluation and evaluation is still of interest nowadays in modern society, where organizations, especially public ones, must report their operation (*accountability*) in terms of efficiency and effectiveness. The theme of *accountability* becomes even more important at school where, in order to attain objectives, the processes implemented by the school community must be further controlled. The National Indications for the curriculum of Kindergarten and the First Cycle of Education[1] (2012) highly underscore this need: "*(…) the single school institutions also have the responsibility of self-evaluation, which has the function to introduce reflective methods on the entire organisation of the educational and teaching offer of the school, to develop effectiveness also through social accountability data or data gathered from external evaluations*".

To confirm the indications contained in the document, the recent Reform of the Italian School ("La Buona Scuola", Law 13/07/2015 no. 107 "Reform of the national education and teaching system and delegation for re-organizing applicable legislative provisions") re-asserts the role of each single School in relation to the improvement of educational and school success of students and organisational and teaching processes, through self-evaluation, evaluation and accountability systems.

Therefore, if it is clear why research at school is required, it may not be clear how to make it.

---

[1] It is a document elaborated by the Italian Ministry of Education that in addition to provide indications concerning the contents of the curriculum, places the school Institution within a research scenario.

**Reference theoretical picture**

The reflection that led to the choice of the approach and inspired the conception of tools, finds its roots in the need, which is no longer debated, to switch from a school model based on a transmission paradigm, to a paradigm more oriented to the co-construction of knowledge (constructivism or constructionism).

Based on these preambles, the first activities consisted in analysing the Lesson Study method and then analysing the studies and researches concerning School Improvement.

The **Lesson Study** (LS) is a method for the professional development of newly hired teachers and staff, which is frequently adopted in Japan. The system, successfully implemented for many years, is mainly adopted by primary schools with the aim to render an efficient service. The teachers work in teams and identify together potential improvement goals or processes to analyse that lead the review and observation work of their teachings. In this case, the analysis does not necessarily take place with the use of videorecording, but it can be also carried out through direct observation between teachers of the same school or colleagues of other schools or universities.

Even if the LS mainly focuses on the relations established within a classroom, the aim always consists in improving the teaching methods of teachers, in order to achieve a positive spin-off on the students' results.

The LS cycle foresees in fact at least 4 phases:

1. *Research and programming*
2. *Implementation and planning*
3. *Execution of the lecture*
4. *Reflection and improvement*

The method is organized around various work phases that begin by identifying the team (3/6 teachers in average) and goals *(Research and programming)* for which the research is executed (e.g. specific skill that must be promoted/ stimulated in students) and shared planning of lectures and relative observation and data collection criteria *(Implementation and planning)*. Afterwards, there is the actual observation phase, during which a team member carries out a lecture *(Execution of the lecture)* and the others observe according to shared criteria. At the end of this phase, the teachers analyse the collected data, compare the results of the observation and formulate hypothesis and strategies to improve/ boost the teaching methods *(Reflection and improvement)*.

This method is becoming increasingly widespread also in the United States (sector K-12) and numerous European countries.

With regards to the branch of research concerning **School Improvement,** explicit reference was made to the works carried out by B. Creemers and L. Kyriakides (2005, 2006, 2012) inspired by the Educational Effectiveness Research (EER). Starting from these theoretical premises, based on empiric research, researchers felt the need to place teaching practices in a larger context, going beyond learning results and analysing in-depth, the processes that lead to improvement.

The reference model is the Dynamic Approaches to School Improvement (DASI) which describes the improvement activities on four levels (Creemers and Kyriakides, 2011): students, class, school, context/ system.

Starting from these preambles, Creemers and Kyriakides proposed a dynamic and multi-level analysis model, based on five dimensions ("frequency", "focus", "stage", "quality", "differentiation"), and eight factors ("orientation", "structuring", "modelling", "questioning", "application", "management of time", "classroom as a learning environment") in relation to which, it is necessary to identify any relations or intersections.

The choice made in this research consisted in grouping up the factors identified by DASI from eight to six, since this review allowed locating said factors in relation to the Italian school system. An additional review was made in view of the elements that stood out as efficacy indicators in class teachings by Hattie (2009), who provided a relevant range of factors with an "effect size" such to hypothesise a key role in pursuing teaching efficiency and learning results. These factors can be linked to six macro-categories: students, family, school, curriculum, teachers and teaching strategies.

The implementation of factors and contextualization of sizes will be explained more in details in the next paragraph.
The synthesis of the aforementioned works led to the creation of an evaluation Grid (re-adapted by the teacher-researchers and built around six of the eight indicators of the DASI model) and a "Radar", a graphic representation executed thanks to the specific use of a calculation sheet, that shows the results of the analysis (both will be explained later on in details).

The Radar also refers to a known theoretical approach in quality models (TQM) and in particular, derived from the EFQM model. By recalling that Radar is also acronym of *Results*, *Approach*, *Deployment*, *Assessment*, *Review,* we understand how important it was to propose it for purposes of the teaching activity. The Radar allowed the teachers attending the course to immediately and easily identify the points of strength and weakness of their performance. Once the self-evaluation has been carried out, the teacher attending the course was invited to describe, through an individual Improvement plan (Teacher Improvement Plan), a series of actions that would have been taken as guidelines to improve the critical aspects identified from observation and visualized through the Radar. This tool, which derives from a larger study carried out by the teachers-researchers on the Improvement Plan of the school, which theoretical approach is inspired to the aforementioned theories of School Improvement and quality models (TQM), is still scarcely diffused in the teaching practice. Due to the limited time available for the experiment, it was not possible to analyse this theme in depth, which was instead extremely appreciated by the teachers attending the course.

This experience, within the limits of the narrow target that was used for the experiment, falls within a research-action work, which results are described in this contribution.

## Methodology and instruments

Teaching implied the use of different tools, with the goal to help the teacher in the proposed activities.
The tools are: Grid for self-analysis, the program to build and visualize the Radar (Radar builder) and the Teacher Improvement Plan (TIP).

**Phase 1:** the first module implied the recording of the teacher's lecture. The advantages in using the video were multiple: as reflection and metacognition tool, since it allowed the teacher to observe his/her activity within a daily context and offered the possibility to analyse the various sections of the lecture. It also offered the opportunity, which constituted an added value, to compare the results with those of other teachers, for a more exhaustive and shared reflection. The teachers attending the course were given materials and lecture notes (warm-up) on the teaching methodology. Afterwards, it was requested to videorecord a "typical" lecture, possibly till the end. The subsequent analysis work was not disclosed intentionally, in order not to influence the choice of the lecture to record. After a first moment of surprise and perplexity, which was overcome with the establishment of an atmosphere of mutual inter-dependence and clarifications on the purposes of the recording (which purpose was not aimed at evaluation, but to provide useful suggestions for the analysis), each teacher recorded the lecture in class. An alternative plan was offered to those teachers that were not able to record their lecture for different reasons, meaning the choice of a lecture that the teachers were able to find online, who however, had to justify the choice.

*The protocol*

**Phase 1: preparation of the recordings – Step for the teacher**

1. Make sure that all the necessary permits are gathered for the activity that will be performed (parents' waivers, authorisations of the Head of School, etc.)
2. Inform the students and families that the lecture will be recorded for professional
   training purposes
3. Prepare the recording setting in class
4. Position the video camera so that all the environment where the lecture is given, is visible
5. Do a test to put the class at ease and evaluate if the audio is clear

**Phase 2:** the video recording phase implied the execution of a typical lecture (of at least 45 minutes) in order to have a clear perception of the dynamics and activities foreseen by the teacher. The recording did not require a professional quality, however it was important that the audio was clear and therefore it could be used for subsequent analysis. The video had to be saved and shared on the dedicated platform or linked, using a videosharing platform (also in private mode for privacy reasons).

*The protocol*

> **Phase 2: video recording – Step for the teacher**
> 1. Carry out the lecture as usual
> 2. Choose a typical lecture of at least 45 minutes
> 3. Begin recording also with a mobile device
> 4. Save the film for subsequent analysis

**Phase 3:** once the lecture was recorded, the teacher was asked to use self-analysis and reflection tools of their own lectures, developed by the teachers-researchers of the course, according to the foreseen indicators. Once this activity was performed, which was also foreseeing the attribution of a score, the teacher attending the course was invited to input the results in the Radar Builder, therefore the points of strength and weakness could be immediately visualized.

The last activity, which ended the first module, introduced a sharing, comparison and review work of the professional performance of each individual. As previously described, the proposed Grid for self-analysis is inspired to the indicators derived from DASI dynamic model (Creemers - Kyriakides 2012) and to Hattie's work (2009). Compared to the DASI model, which describes improvement interventions on four levels (students, class, school, context/ system), this teaching was based only on the level concerning the class, according to which the good outcome of students' performances is associated to certain factors that can be observed in class. The model's emphasis focuses not so much on a specific scheme, but on the integration of certain factors that determine efficacy.

The Grid's indicators are presented below:

1. *Organisation and structure of the lecture:* structuring of the lecture in terms of methodological-teaching components, form of message, relations with contents already dealt with, and with phenomena linked to the student's personal life. Description provided by the teacher on the reasons why a certain content is learnt.
2. *Problematization:* behaviour of the teacher aimed at the problematization of contents, posing questions, answering students' doubts and favouring/ promoting discussion on a new content.
3. *Examples and application:* opportunities in terms of: modelling (the teacher
provides behavioural models, cognitive, emotional and relational strategies that the students can follow and copy); application (the teacher foresees exercises, experiments, etc., ensuring the processing of new contents in an active way, by students).
4. *Time management:* management of the activities, avoiding waste of time
by the teacher and organizing the school-time at best, as well as the time for studying at home.

5. *Learning environment:* the class is perceived as a learning environment, profitable in terms of learning and socialization.

6. *Evaluation and metacognition:* presence of evaluation, self-evaluation elements, evaluation among colleagues and description/ sharing of associated criteria. Attention to metacognitive aspects.

Considering the importance of ICT in school, the contents proposed in the sheet were also integrated with the information that stands out from researches, on evidences concerning technologies. In fact, according to the theory of Creemers and Kyriakides, each indicator is then measured according to the *focus* (the consistency level of the objectives associated to the indicator), *stage* (the temporal dimension of the indicator that responds to question <<when does it occur, in which specific moment?>>), *quality* (the qualitative scale of the indicator, gradually modulated, for example in a scale of "low, medium, high" type), *differentiation* (the adaptation level of the indicator according to the characteristics of the single student). The Grid implied, in addition to the four levels, also the virtuous use of ICT.

Each indicator, in addition to be described, was detailed by sub-indicators that delimit the topic in order to restrict the sphere, and by some guiding questions that led the teacher attending the course in the reflective review of his/her lecture. This allowed the teachers to observe the activity carried out through a general picture, also thanks to the use of the RadarBuilder. The logic underlying the RADAR is in fact of sequential type and responds to a self-evaluative reflection. Therefore, it is possible to identify compared to the various ones analysed, the most consistent areas and the weakest ones, determining a virtuous improvement cycle aimed at triggering a strategic change of a teacher's work. At this point, after performing a self-analysis and visualizing it through the obtained figure, the teacher attending the course was asked to indicate in the TIP, which actions she/he was considering to take in order to improve his/her performance. The format provided to the teachers attending the course was intentionally left blank, so that each of them, independently, was able to decide what to write, whether to introduce innovations and changes in the lecture or consolidate the activity carried out.

*The protocol*

**Phase 3: analysis of the video – Step for the teacher**

 1. Watch the recording at least once in full
 2. Watch the recording, paying attention to attribute a score to the indicators according to the Grid
 3. Input the values that you attributed to yourself, in the *RadarBuilder* tool
 4. Build your Radar
 5. Elaborate the Teacher Improvement Plan (TIP)

**Phase 4:** in switching from the individual phase to the collaborative phase in small group, an optional activity was foreseen, that of *peer review* in couples, where the students could review the performance analysis of another teacher attending the course.

This activity had two main objectives:
1. provide to the teacher attending the course, an external reading of his/her performance that could have been compared to that of another teacher;
2. train the teacher attending the course to the analysis of the performance with greater detachment: when we have to evaluate the "quality" of an activity carried out by us, we are more lenient (as described further on).
In the *peer review*, each couple had the task to see, through the same self-analysis indicators, the performance of the other teacher attending the course, allowing a more objective and detached reading.

The activity allowed the teacher to experiment an innovative dimension, compared to the character according to which lectures are generally held: the doors of the classroom opened up to welcome external observers, and in this case, we are not talking about expert consultants, but colleagues.
As in the LS (that in reality it takes place live, with colleagues that enter the classroom), this teaching also offers the opportunity to compare the activity performed and provide to a colleague, the detailed and accurate observation of what took place in class, in its natural authenticity, boosted however by the use of the video.
The activity led to a comparison between two teachers attending the course, that "observed" each other, therefore it was based on a much higher collaboration level that allowed reaching the last step of the module, consisting in elaborating *Guidelines* for preparing effective lectures.

*The protocol*

---

**Phase 4: peer review – Step for the teacher**
1. Exchange your video with that of another teacher
2. Analyse the video of your colleague with the same indicator scheme
3. Input the assigned values on the specific program (RadarBuilder)
4. Build the Radar of your colleague
5. Once you have the analysis of your colleague, compare it with yours

The activity could be repeated with other colleagues, thus obtaining a mixed analysis.

---

**Phase 5:** this phase introduced the second module, featuring as objectives, contents and relations with colleagues. In terms of content, the students, grouped up in small groups with defined roles, were asked to elaborate *Guidelines* for preparing effective lectures, as mentioned in the literature in the preamble, and evidences that stood out on personal practices and those of other colleagues. Specific roles and tasks were foreseen for each group (team leader, editor, editor-in-chief, surfer, and equal evaluator). At relational level, it stood out how the positive inter-dependence in the small group was a shared objective of the course that, since it was entirely held

online, it required greater emotional and motivational "incentives" compared to homework in class.

*The protocol*

<table>
<tr><td>

**Phase 5: building the community – Step for the teacher**

Reflect on the points of strength and weakness, using the Radar
 Discuss the work carried out in the small group

Sharing and discussion of videos and other analysis tools are boosted with the use of an online environment dedicated to build a professional development community.

</td></tr>
</table>

**Phase 6:** In this phase, which concludes the course, it was requested to re-formulate the contents expressed by sub-groups in a single product that could be diffused outside. The target consisted of other teachers, also not attending the course, to whom simple and clear suggestions had to be given with regards on what to do, in order to improve learning/ teaching processes (with or without ICT). A not too technical informing style was requested, with examples of effective or ineffective behaviours in order to orient more structured and aware performances.
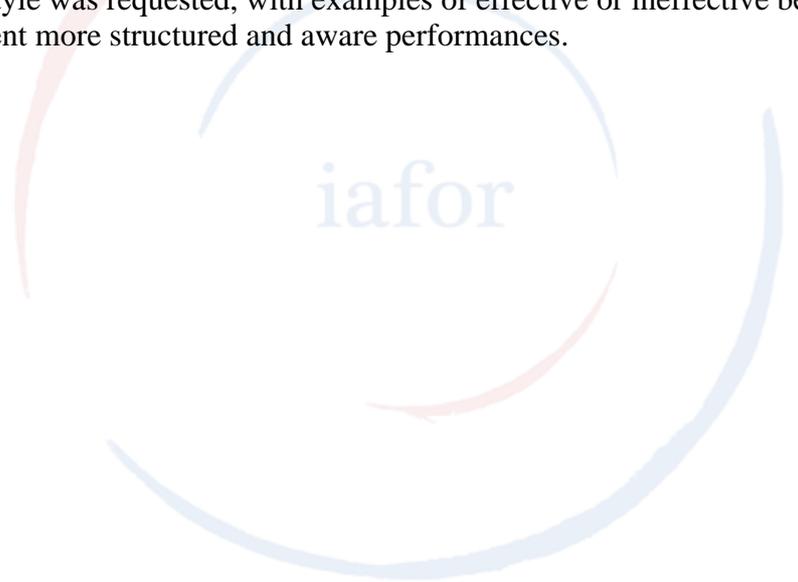
**Analysis of data**

*Self-analysis of videos*
Only the data that stood out from the videorecordings took by the teachers attending the course (n=11) was taken in consideration for the analysis, therefore excluding the works of those teachers that chose a video online.
The activity was experimental and similar to a research-action process, the teachers-researchers subjected the protocol and tools to review by the same teachers attending the course.

The research was focused on two aspects:

1. *Socialize the reflections generated by the activity carried out.* The following questions were posed: was it useful to carry out this activity? If yes, which elements of knowledge it provided? Which kind of awareness it arose? Did you have more surprises or more confirmations? Which ones? Which aspects of the single lecture ("microcosm") are re-proposed in your usual way to hold lectures, in your teaching process ("macrocosm")? And so on.

2. *Provide a feedback on the tools used in the activity* (Grid + Radar + TIP). Stimulating questions were posed, such as: are the proposed tools effective together? In this order? Is any tool missing? Can this kit be re-proposed to others? In different contexts? Doesn't the Grid feature significant elements? Etc. Some examples are significant and we thought interesting to transcribe some parts.

*"Yes, it was useful to carry out this activity, because it helped me identifying those attitudes/ behaviours that are part of my daily routine, but they require improvement and there is the risk that the awareness and need of improvement are often overlooked, overwhelmed by consolidated practice; at the same time, this activity encouraged me with regards to the points of strength that stood out".* Or even: *"I found the videorecording experience extremely helpful at professional and also personal level. Seeing myself in the lecture, has almost mitigated the sense of anxiety I had before recording, under many aspects, I appreciated the video, I thought that while I was giving the lecture, sometimes I was forgetting I was being recorded, I liked the proposed work, in terms of content and the context of this "microcosm"/ lecture, therefore a meaningful activity, where the students were perfectly aware of the references. I would like to propose it to my supervisor colleagues, as an "experimental" trial for students that carry out their apprenticeship in class. An enriching experience also at personal level: "being true" with yourself, an exercise that I appreciated!".*

All the teachers attending the course found the proposed activity extremely useful, also providing interesting suggestions on how to improve the observation and analysis protocol. Moreover, one of the analysis that can be carried out, concerns the cross-reading of all Radars of the teachers attending the course, to observe the trends. The following graph contains this analysis (fig. 1).
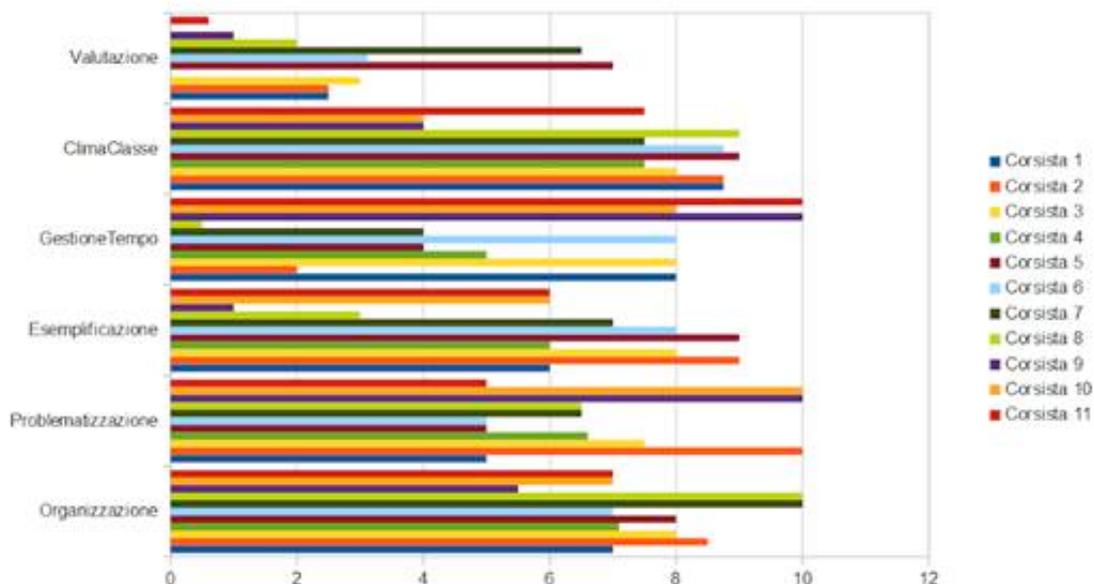
Fig. 1: comparative analysis of the individual self-analysis of the teachers attending the course

By carrying out an average of values of each teacher attending the course based on the various indicators, it is possible to obtain a graph that shows that the most critical indicator is the one concerning "Evaluation/ metacognition", while a strong indicator is that concerning the "Organization and structure of the lecture", always object of greater attention, perhaps for a consolidated tradition of teaching planning. Attention to "Problematization", therefore to the implementation of lab processes (problem solving, problem posing, application of learnt knowledge, teaching workshops, etc.) is good in average, as well as the classroom atmosphere. The "example and application" level needs improvement (fig. 2).
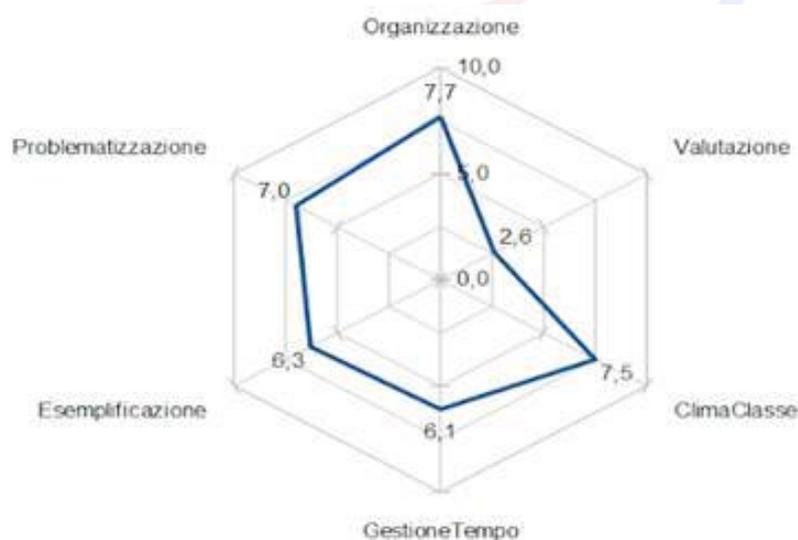


Fig. 2: visual representation of the trends in relation to each single indicator

## 2. Peer review

Some interesting considerations stood out from a comparison carried out on the Radars of the four couples of teachers attending the course that decided to execute the activity in peer review[2].

In fact, it is possible to identify a general trend in assigning scores, according to which the teacher of the lecture (teacher A) is in average more generous with himself/herself, compared to the external observer (teacher B).

Two Radars are compared below as an example.

| Indicator | Score Teacher A | Score Teacher B |
|---|---|---|
| Organisation and structure of the lecture | 6 | 4 |
| Problematization | 6 | 5 |
| Examples and application | 9 | 6 |
| Time management | 1 | 4 |
| The class as learning environment | 7 | 6 |
| Evaluation and metacognition | 7,5 | 1,5 |

The visual representation of the two overlapped Radars is shown below:
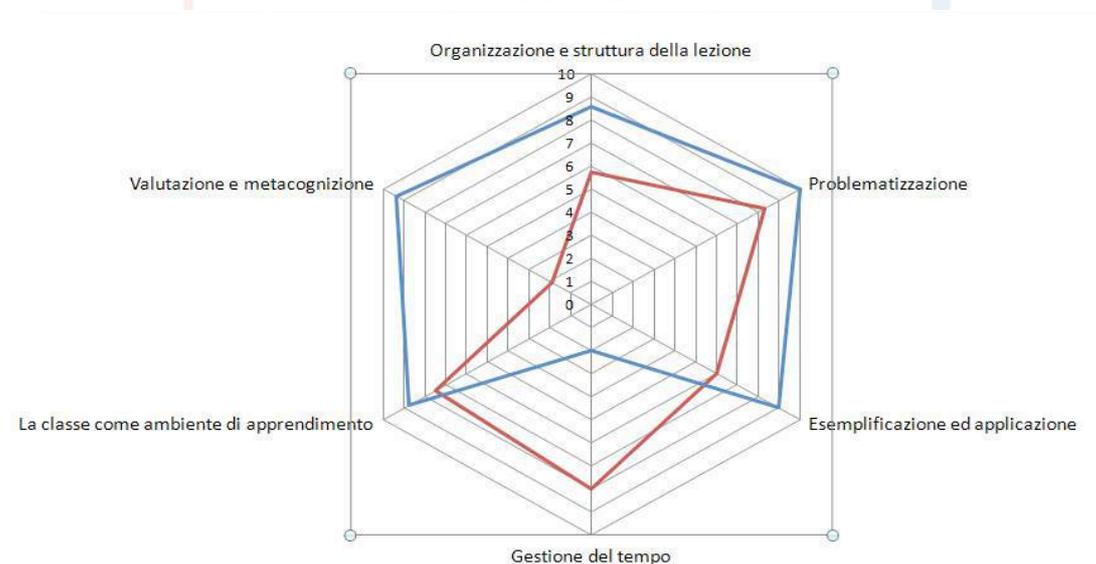


Fig. 3: visual overlapping of the radar of a couple of the peer review concerning the video of student A

As it can be clearly inferred from comparing the data and relative Radars, a perception disagreement stands out that mainly shows in indicators "time management" (positively evaluated by B and negatively by A) and "evaluation and metacognition" (positively evaluated by A and negatively by B).

---

[2]We indicate as teacher A, the teacher holding the lecture and carrying out his/her own self-analysis; we indicate teacher B, the teacher that offers a critical review of the work of the colleague from an external point of view.

In our opinion, this result can be ascribed to the series of information and data of the context relative to the teacher, result of routine elements which are not always expressed, as it can be inferred in case of the evaluation parameter.

From a separate analysis of data that stood out from the peer review, we can also determine that the most significant inconsistency is registered with regards to criterion "Evaluation and metacognition" (average value: -1.187), while the most consistent level is the "Organization and structure of the lecture" (average values: 0). The former, as previously seen, is the factor that stood out as the weakest also in individual analysis, while the second represents a "strong" theme in the teacher's culture, traditionally linked to the planning of the lecture.

The pilot experience also shows the need to expand the number of colleagues that act as teacher B, in order to do an average of the results and reduce the perceptive variance margin.

Moreover, we also believe that thanks to the identified differences, the potential of the peer review stands out in favouring a reflective attitude completed by multiple perspectives.

## Conclusions and future developments

From the feedback received in the experiment carried out during IUL teaching, a first positive result can be inferred. Some interesting inputs coming from the teachers attending the course provide reviews and adaptations of the tools used, especially with regards to the two orientations described below.

First of all, the object of analysis should be oriented towards a cycle of lectures linked to cover a curriculum topic or didactic unit, rather than a single lecture. The reasons for the above, consists in the fact that the identification of certain Grid indicators may depend on the specific character of the subject which is not necessarily entirely covered in a single lecture (e.g.: in a didactic unit on Egyptian civilization, consisting of three lectures, the teacher could introduce some aspects of the six indicators inconsistently).

Secondly, the presence or absence of some Grid indicators, as well as their weight in relation to the assigned score, could require an adaptation with regards to different school levels.

Moreover, this research will be further implemented in the future with the purpose to plan and develop a software able to boost the skills of the RadarBuilder.

This software should allow the management of a wide range of data that will stand out from the videorecordings of the single teacher, from a diachronic view within the single class, and also from the cross-review of his/her performance in different classrooms. The acquisition of such extent of information constitutes the premises to measure, analyse and re-elaborate data on the teacher's activity within the reference context in order to understand and improve the dynamics and professional routines (Teaching Analytics and Data-driven Improvement).

In conclusion, an additional goal to pursue will consist in building a teacher community to favour an exchange among colleagues and a comparison with a larger number of subjects (e.g. other researches) that focus on the improvement of performances through classroom observation methods with the support of videos.

## References

Antoniou, P. & Kyriakides, L. (2011). The impact of a dynamic approach to professional development on teacher instruction and student learning: results from an experimental study. School Effectiveness and School Improvement.

Creemers, B.P.M. & Kyriakides, L. (2006) Critical analysis of the current approaches to modeling educational effectiveness: the importance of establishing a dynamic model. School Effectiveness and School Improvement, Vol. 17.

Creemers, B.P.M., & Kyriakides, L. (2012). Using Educational Effectiveness Research to Improve the Quality of Teaching Practice. In: C. Day (Editor), The Routledge International Handbook of Teacher and School Development. London: Routledge.

Gates, B. (2013). Teachers need real feedback. *TED Talks Education*. Retrieved from: https://www.ted.com/talks/bill_gates_teachers_need_real_feedback

Hattie, J. A. C. (2009). *Visible Learning: A Synthesis of over 800 Meta-analyses Relating to Achievement.* London - New York: Routeledge.

Legge 13/07/2015 n. 107 (2015). *Riforma del sistema nazionale di istruzione e formazione e delega per il riordino delle disposizioni legislative vigente* [Law]. Retrieved from http://tinyurl.com/py5eflg

Maltinti, C. (2014). Il Lesson Study giapponese: un efficace modello cross-cultural. *Form@re, Open journal per la formazione in rete, 14, 87-97*. Retrieved from: http://dx.doi.org/10.13128/formare-15143

Mantovani, S. (1998). *La ricerca sul campo in educazione.* Milano: Mondadori

Ministero dell'Istruzione, dell'Università e della Ricerca (2012). *Le Indicazioni Nazionali per il Curricolo della Scuola dell'Infanzia e del Primo Ciclo d'Istruzione*. Retrieved from:  http://tinyurl.com/mwogy6d

Mosa, E., & Panzavolta, S., & Storai, F. (2015). Insegnanti allo specchio. Metodi di indagine per il professionista riflessivo. *Scuola Italiana Moderna, 8,* 51-58

Picci, P. (2012). Video annotazione per la formazione degli insegnanti. I risultati di due ricerche empiriche in Italia. *Form@re, Open journal per la formazione in rete,* 79. Retrieved from: http://tinyurl.com/nwzvevc

Reezigt, G.J. & Creemers B.P.M. (2005). A comprehensive framework for effective school improvement. School Effectiveness and School Improvement.

*Riforma del sistema nazionale di istruzione e formazione e delega per il riordino delle disposizioni legislative vigente, Italian Government, (2015)* [Law]. Retrieved from http://tinyurl.com/py5eflg

*Schön, D.A. (1983). The Reflective Practitioner: How professionals think in action.*
London: Temple Smith

Wenger, E. (1998). *Communities of Practice. Learning, Meaning and Identity.*
Oxford: Oxford University Press.

**Author Contacts Information**
Elena Mosa: e.mosa@indire.it
Silvia Panzavolta: s.panzavolta@indire.it
Francesca Storai: f.storai@indire.it

# *Learning Strategies Cultivating Contemplative Mind in Thai Teacher Education*

Amornrat Wattanatorn, Naresuan University, Thailand

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

The mediated learning strategies fostering the achievement of improving cognitive and academic performance while developing students' whole person is not only benefit for the student's self but for society. Thus the purposes of the study were to find out the methods and the techniques used to raise student's inner changes and the positive outer results of those changes. The new consciousness leading to 'Professional Qualified Teacher', the identity of Naresuan Teacher Education was also accordingly expected to be found in the study. Seventy-five students involved in the study. It was 15- week subject course taking 45 hours in class and double more hours outside class. Qualitative methods have been used for data collection. During the practices, the threefold namely; personal, academic and professional have been explored and thus a shift of consciousness in students has been found. A range of designed activities by the author with the modification of students; 5-minute mindfulness, personal journal writing, role-playing with ethical drama, story-telling with active listening, individual nature learning, class reflection, self-improved personality program social-media for learning, 25-minute group meditation practice, Live Game Show on stage, group-work service project , were presented in the study together with student excerpts from written reflection promoting student personal and professional growth. This implied the integrative design on contemplative practices based on natural human capacity of knowing in a subject course could enable students both learning content and professional spirit successfully.

Keywords: teacher education, qualified teacher, contemplative education, Thai educational context

iafor

The International Academic Forum
www.iafor.org

**Introduction**

In times past, education was primarily focused on learning the important content for each subject area, then assessed the content knowledge with quizzes and tests as learning result. But when exploring the prospects for future jobs and careers in the 21st century, learning for life provides much more sound insight into education. For this reason, shifting learning to a new balance of what we learn and how we learn is needed for the new generation.

This seems to be the responsibility for the teacher who is the key person in education to work with. In teacher education, student teachers are also expected to learn to know how student learns. This perhaps good to begin at the beginning, with the definition of 'learning' for their future students. To be a qualified professional teacher, student teachers need to be involved in the process of teacher profession preparation at most earliest possible in their education. While the institution itself has to be aware of taking this as its major role in producing qualified teacher to serve society. Thus students'self and society will be exercised on their way of learning lives since in their teacher education. With the blending of content knowledge for student major subject and the content of pedagogy, it would have to be arranged to promote student 's learning achieving their personal and professional growth. Apart from this, the practices in essential learning skills which are being claimed to help ensure everyone success, have to be considered to do since student's learning life (Trilling, 2005).

Coupled with the study of Hart (2005), he stated that contemplation of higher education is being explored as a new means of enhancing liberal education. Contemplative pedagogy facilitates the achievement of traditional educational goals improving cognitive and academic performance. In his study, contemplative practices also fostered the development of the whole person, increasing capacities such as creativity, empathy, compassion, interpersonal skills and self-awareness.

Accordingly, 'Professional Qualified Teacher' becomes the setup identity for Naresuan student-teacher in 2012. 'Contemplative Education' has therefore been adopted to use to develop students in the missions of student activities and of teaching and learning at undergraduate level at Faculty of Education Naresuan University.

**Contemplative Pedagogy**

Sarath (2003) confirmed that contemplative practices are systematic method of invoking heightened status of consciousness or awareness. This can be drawn contemplative practices in that way involved learning infused with the experiences of awareness insight and compassion.

Hart (2004) also mentioned in his Common Seminar entitled "Innerspace: Explorations of Meditation Practice for Self and Society " that the course explores the use of meditation for both personal and professional development which were led by professors in various professions. At the conclusion of that course , students would complete an individual project that reflected the learning they had gained during the semester about meditation 's implementations for self and society.

Mackler et al., (2008) confirmed that contemplative practices are essential tools in the process of education in terms of teacher preparation to become the best teacher, student and humanbeing that one can be. It is not just about the content of the subject

and the teaching methods and strategies, but also about people with whom we are working and the academic component.

Gilbert (2004) indicated that context-based learning is a pedagogical methodology that means both the social context of learning environment and the real , concrete context. Thus knowledge has to be meaningful introduced and thoroughly learned and reflected based on learners' acquired process and experience. Therefore students should be taught with meaningful concepts and knowledge that they can apply to their daily life and experience. Educators believe that students need to be fully and genuinely engaged in learning by experience. An important elements of context-based learning environment is active learning. The students are required to have a sense of ownership of the subject and are responsible for their own learning. The combination of self-directed learning and the use of contexts consistent with the constructivist view of learning is necessary for learning. Thus, students will learn best if they try to make sense of the content area on their own with the teacher as a guide to help them along the way. The teacher plays facilitator to provide assistance to the students when they find the best ways to construct the meaning or knowledge on their own in the real context.

Jonassen (2008) noted that constructivism should be more benefit for students relating context-based learning. The learning process at place when students are involved in the social interactions is required. The following three factors are expected to be used to achieve effective learning were; co-operative learning, communicative competences and motivation. Project-based learning with the method of self-directed learning would able to lead the meaningful connection between the central concepts and principles of the topic. Practices will be recommended to be the best responding to that learning where students could define their own project with guidance of teacher.

Also in Wattanatorn's study (2012), the use of contemplative designed activities integrated in learning plan and learning process together with the use of self-directed learning method and teacher's role as facilitator, students became autonomous critical thinker. A shift of consciousness ; more self-aware, more self-learning and also more conscious of social conditions in Sufficiency-Economy Philosophy (SEP)had been found in that study. During the process of individual and in group learnings, main content of learning course was integrated in that learning and transmitted to students.

The all above-mentioned strongly supported for the intellectual change, learning with the value of students who are human being. Inner change leading to a shift of consciousness to be a professional teacher will be definitely brought about while visible outer changes could be met during the learning course.

**Methodology**
Purpose of the study: To reveal the methods and the techniques used to raise student's inner changes and the positive outer changes together with its results.

Target group: The purposive sampling group had been selected based on the course enrollment to study. The number was 75 students studying in the first year at undergraduate level at Faculty of Education Naresuan University, Thailand who

enrolled in the subject course entitled, ' Being a Professional Teacher' in the first semester of 2014 with the author.

Data Collection**:** Data was collected in the process of teaching and learning throughout the subject course during the first semester of 2014 in 2 separate classes; the ones were majoring in Physics and the other majoring in Thai Language. Each class was enrolled by approximately 35-40 students. The subject of 'Being a Professional Teacher' is 1 of 13 required subjects that all the students have to enroll for their bachelor degree in Education. It was 15- week subject course taking 45 hours at each 3-hour instruction class and double more hours outside class depending on the study work designed by students themselves.

The pre-existing course description was used to be the framework of learning content units. They were planned for teaching and learning within 15 weeks together with actual learning being truly present and time. Course-planning timeline together with learning material ,activities and experiences and also measurement and evaluation were presented in form of, "course syllabus".

For meaningful learning, contemplative practices were allowed to be integrated with learning content units for enhancing students'teacher potentiality. Ten major designed activities and experiences were scheduled for student's learning practices both in-class learning with teacher and independent learning practices outside class. These contemplative activities for practicing were ; (1) 5-minute mindfulness, (2) personal journal writing, (3) role-playing with ethical drama, (4)story-telling with active listening, (5) individual nature learning, (6) class reflection, (7) self-improved personality program 8) social-media for learning,(9)Live Game Show on stage, (10)group-work service project.

The followings are the explanation of contemplative practices used for encouraging student's learnings;

(1) **5-minute mindfulness**: used as a check-in of class learning before getting into the main activities of the 3-hour instruction. There were various types of check- in such as sitting in silence, listening to alpha wave music, listening to article reading, religious praying etc.

(2) **personal journal writing**: used for student's reflection on teaching and learning involved on that day. Student can initiate his own design of presenting knowledge, feelings, learnings, thinking…etc or even what they want to feed back to the teacher on personal notebook.

(3) **role-playing with ethical drama**: used for presenting some cases in (risk) ethical issues. Let students share and express comprehension on human value and way to do good at all levels.

(4) **story-telling with active listening:** used for training to be a good listener. Not to interrupt when others tell the story and also attend closely to the presented detail of others presented. No criticism / no judgement has been made against the story.

(5) **individual nature learning**: used as learning initiative to promote the importance of the natural environment in the daily experience or in the nearby surroundings. Trying to pick up and then construct the relevance of the discovered fresh knowledge.

(6) **class reflection**: used for gaining student 's feeling, thinking, learning or whatever students would like to present to the class when finishing activity. This is

an individual talk. A word (or a few words), a phrase or a sentence could be made at the end of the class.

(7) **self-improved personality program** ; the use of self-improvement program by individual student within in specific time. A schedule of activities has been set up and then work within 20-30- day program. It had to be written up as a operating plan.

(8) **social-media for learning**: used for self-learning with the video clip / the written song /radio program / the book and etc. any form of mass media. Students had to select any of these to propose in class to let friends learn more on teacher profession. How and why to select the issue have to be drawn out for others to learn.

(9) **Live Game Show on Stage**: used for training how to perform themselves in public. Students had to learn from media what were the process of what to organize to perform in public for edutainment. Assignment become more authentic and more meaningful and more fun to students

(10) **group-work service project**: used as group-work volunteer project. It's a outdoor project that students have freedom to select the partners, the topic, the place, how big or small project but work for the public not for self or group. Performance of task of the real –world situation.

Apart from those designed activities, '**teacher as facilitator'** was considered to be used as the main role of the teacher. As a facilitator, teacher put students to become the participant of their own learning. Thus more than 70% of what students learned both in class and outside class derived from the jobs and through students' experiences. Apart from this, teacher tried to bring out the collective experiences of the classroom and shared learning experiences. Discussion was associated to learning subject content which was indicated in course syllabus.
Two types of learning were arranged as follows;

**In-class learning:** Out of 10 activities, 7 were practiced in class with teacher ; (1) 5-minute mindfulness, (2) role-playing with ethical drama, (3) story-telling with active listening, (4) individual nature learning, (5) class reflection, (6) social-media for learning and (7) Live Game Show on stage. Instead of lecture, designed activities integrated with the subject content provided by the teacher passed through students both inside and outside class. Through learning objectives, learning process, learning method, learning materials, and evaluation, teacher transmitted meaningful and active learning in order to have students change learning behaviors.

**Independent learning**: 3 activities were conducted outside class; (1) personal journal writing, (2) self-improved personality program and (3 ) group-work service project. 'Self-directed learning' had been used for students' learning. Students initiated their own learning topics. With or without the supports of teacher, students would further search for learning needs and then conducted their own study accordingly to achieve learning goal. Learning resources from persons, materials and sites were selected and promoted for student appropriate learning strategies and evaluation.

**Finding and Discussion**
Based on the teaching and learning process focused not only on the subject content but also the understandings of students' selves and allow them to grow up with academic and professional change during learning with the teacher. These could raise them with the new consciousness during contemplative practices on expressing human value within self combined with the impact of others and society. Through a

range of activities and process, students ' new perspectives of learning were presented in different way far from their former ones.

## 1. A range of 10 activities designed by the teacher with the modification of students

It's indicated in the study, there were; (1) 5-minute mindfulness, (2) role-playing with ethical drama, (3) story-telling with active listening, (4) individual nature learning, (5) class reflection, (6) social-media for learning and (7) Live Game Show on stage (8) personal journal writing, (9) self-improved personality program and (10 ) group-work service project

Together with these designed activities, 1) learning process and 2) learning plan had been used to achieve learning outcomes;

1) **learning process**, the author used both in class learning process and independent learning process outside the class.

*1.1 In-class learning* The three main steps of3-hour instruction in class were arranged as follows;

**Step 1 Check-in**: (5-10 minutes) It's used for opening students' learning space. The activity of '5-minute mindfulness' in different types of learning usually had been used at this step for start a class.

**Step 2 Learning subject content** (120-180 minutes )Students have to be involved in learning with the 3 sub-steps; 1) analysis of the content knowledge with learning materials

2) individual reflection with words / map drawing / writing and 3) conclusion of learning content with mind mapping or paragraph writhing with students' own thinking.

A range of activities like; role-playing with ethical drama, story-telling with active listening, individual nature learning, social-media for learning, Live Game Show on stage, class reflection, would be selected in association with the subject content and then be put in a learning process at this step. Normally this step closes up with randomly pick up students for individual reflection.

**Step 3 Check out**: (5-10 minutes): It's the time of class learning reflection on learning in that 3-hour class. Students use word(s), a phrase or a short sentence that they perceived. It might befeeling, thinking or belief from that learning class either related to the content or not. They were not allowed to judge those reflection right and wrong.

*1.2. Independent learning outside classroom*

Self-directed learning employed to be used with the three activities ; personal journal writing, self-improved personality program for individual study and group-work service project for group study. Time used for these three activities depending on what and how the students designed in their studying. These were types of action learning that students had to explore and conduct their own learning with or without consulting teacher. At the end of their study works, learning results had to be made and shared to the class both oral and written reports.

2) **Learning plan** for managing the achievement of class learning was composed of; lesson learning procedure, learning activities, learning materials and resources, and evaluation. Follows were the brief descriptions;

1. **Lesson learning procedure**: With the three steps of Check-in, Learning the Subject Content and Check-out which are already stated in learning process.
2. **Learning activities**: Ten designed activities both in and outside classroom as already stated.
3. **Learning material and resources:** These were provided by 1) teacher; e.g. TV Program, Youtube Clip video, Newspaper / Journal article, Music, Stories, Books and by 2) students ; e.g. personal journal, action learning plans.
4. **Evaluations:** both oral and paper evaluationsby means of ; 1) Self-evaluation; AAR, reflection in action, 2) Peer – evaluation within working group observation, class observation 3) Teacher-evaluation ; Cognitive Knowledge Test , observation in learning participation, given assigned tasks.

2. **Learning outcomes showing the positive perception about learning.**
With contemplative practices, students' perspectives on learning had been transformed to be more positive in learning. Student's inner and outer changes had been found in three aspects; personal, academic and professional. The followings selected spoken and written excerpts from students' self reflection during participating in the course revealed what and how they learned.
*Personal changes;*

*self-peace*
- *I feel peaceful, leave out the disturbance, observe and correct things with my inner.*

*self-realization*
- *One thing that I could learn and think by my own is the importance of the 'breath'.*
- *Work slower than normal. Realized of what I'm doing. This makes me do more of progressive thinking. I learned that all things could be linked among themselves.*
- *Nature gives many things to us. We ourselves have to reflect them out to be our own life lessons.*
-

*mindfulness / relaxed mind*
- *I could perceive with my heart, the heart of mindfulness, thinking with mind.*
- *Listening to music and realizing of the breath I have. Sometimes I forgot myself but sometimes I possess the wonderful mindfulness. It's a type of alternatively occurrence. The meditation helps me to have a relaxed mind and mindful.*

*self-effort*
- *The success does not easily achieve. When I work with my intention attentively during the course. I'll then be successful.*

*self-improved*
- *I feel different from ever. I dare to express my thought and also am willing to learn from each of my friends ' thoughts.*
- *Under the respectfulness of one another, I improve my own learning from my surrounding friends who possess the observation and prediction skills.*
- *Have a chance to be trained to be more bright and smart and also assertiveness in face and postures when come out on the stage.*

*self-inspired*
- *Inspires me to change myself. From the one who ate a lot that day becomes eat less and todays get more exercises. I got rid of 4 kilograms within 20 days and feel I have good health.*

*actively listen to others*
- *I know how to listen to others, listen attentively with critical thinking, realize that listening gain more than speaking.*

*respect others*
- *Whatever good or bad I learned from friends, it could provide me with the good thought*
- *Some were excellent thoughts but I neither realized nor met the point. I want to be able to gain different new thoughts like friends.*

*Academic Changes*
- *Mind mapping drawings trains me to be more systematic thinking, be able to link among fractions into a whole.*
- *I choose to improve my sit and stand posture. Firstly, I have to find out how to solve the problem with myself in the website before the practice.*
- *Concentrate more on what I studied as after finishing class, I have to jot what I learned on my journal note. This is for my learning revision.*
- *I could select on what design I want to do in my journal writing with writing, drawing, mapping of what I gained from the class to make the learning content more understandable.*
- *This lets me able to plan and think more systematically. With the freedom of recording, I think I could memorize more of the learning content knowledge.*

*Professional changes*
- *Learning to share stories with friends in class. I also had a chance to tell my teacher's story too. It made me better love and respect in teacher profession.*
- *Though it seems a tiny thing teacher had done with his student e.g. trying to understand students, giving love and compassion to student , this could let him become a good teacher.*
- *The white flower could be compared with teacher who takes responsibility with his own body, verbal words and also mind. As being students's role model, teachers have to behave as a good model without any excuse.*
- *You can find anything outside the classroom linked to teaching and being a good teacher. Watching nature, walk into the nature and then use it to be learned.*
- *Communication with this song makes me gain creative and systematic thinking. It makes me feel proud of going to be a teacher.*
- *Though during working together we have got many problems, but when we finish the project we learned to be good friends. The project taught me to learn to know how to 'give' better than 'take'. Before I was always happy when I was a receiver but I found later when I was a give, I feel much happier.*
- *Even though we were volunteers to work for people in some area, I have to ask for a permission from the land owner before getting to work.*

From the findings, it was found that a range of activities which led students create

the new way of thinking, influenced their mind and brought them about the willing to create some room for their own growth. This let their new consciousness on learning been shifted. With the well-organized of activities infused in interactive learning plan and learning process, students felt satisfied with the learning in the subject course. The positive knowledge and experiences had been raised when students involved in and outside class learning. What and how students would gain from teaching and learning allowed them to develop their own potential in personal, academic and also professional perspectives. Contemplative practices from teaching and learning that provided students the chance of reflecting on what and how they learn in different sense perception. Meaningful learning with the value of human being had then been raised up. Thus the value of self and society had been gradually developed and strongly discovered by students themselves especially at the end of learning course.

How to organize and to arrange the subject course with contemplative practices appeared to be overloaded by teachers when comparing to lecturing in class with power points. Teacher had to spend lots of time and efforts on integration of contemplative practices into the course content indicated in course description. Through lesson planning, teacher arranged with the draft elements of lesson plan; overview, objectives, content, material and resources and evaluation. Thus, in teaching and learning not only subject content that teacher had to work with. The adoption of habits and practices in the line of contemplative learning approach focusing in real life situation in the actual time and place had also to be considered for the provided activities. Authentic learning and assessment had to be placed in that learning. Hence, the attempt to equip students with contemplative practices achieving contemplative mind had to be arranged with the strong efforts.

The presented learning outcomes revealed from the students' oral and individual written journal let us learn to know the shift of students' consciousness. Positive thinking when participating in course activities both in and outside class allow students learn not only course content but also learn to know their selves and how to do quality learning. The well-designed activities with contemplative approach became meaningful learning for a shift of consciousness.

It is important to acknowledge that effective teaching and learning for the 21$^{st}$ century had to provide students with 1) Free from the constraint of learning but create possibility for learning own production on constructing of knowledge 2) More control of own learning process 3) Leading them more self learning as an autonomous learner. In term of activity-based learning, student centered, real life setting, authentic assessment , compassion and love, ethics in life learning have been learnt by students themselves with the more control of their own learning process were the concept of effective teaching and learning needed in teacher education preparation.

**Conclusion**

The application of contemplative education in teacher education focusing on integrating students' own experience into subject content. Students are being taught in order to deepen their understanding subject content integrated with contemplative practice in order to raise their new consciousness of learning. Then, both what they need to learn and how they learn to be successful learners as a qualified teacher could be successfully achieved. Contemplative practices, the more innovative approach to learning are supposed to be more crucial for the learners to achieve learning and living lives. Thus positive attitude is required to expand and deepen the earlier teaching and learning could have been more suited and taught in most institutions of teachers today. The blending of content and pedagogy into the understanding of how particular topics, problems or issues need to be organized and adapted to interests and abilities of learners. Then the differentiation of teaching and learning tailored to individual and collective learner(s) will be managed. Through this process, assignments become more authentic and more meaningful to students.

**Recommendation for adoption**

1. The key success of arranging Contemplative Education in subject learning is to let students participate in teaching and learning independently. Then let them choose what and how to learn with the given activities themselves.

2. It's no need to do any orientation of the new method of teaching and learning using contemplative practices to the students. When students gradually learn from the given activities themselves, they will be motivated and participated in the activities with active learning.

3. Authentic tasks based on students' own life/experiences allowed them to involve and learn meaningfully.

4. The instructional design will make up to gain more efficient and effective learning when knowledge and procedures of that learning could master learning process to achieve contemplative learning goal.

**References**

Fullan, M. (1994). *The new meaning of educational change* (3[rd]Ed.). London: Continuum Press.

Gilbert,J.(2006). *On the nature of context in chemical education*. International Journal of Science Education, 28, 957-976.

Hart, T. (2004).*Opening the Contemplative Mind in the Classroom*, Journal of Transformative Education Vol.2 No.1, January 2004. pp 28-46.

Jonassen, D., et al. (2008).*Meaningful Learning with Technology,* 3[rd]edn, Pearson Education, Upper Saddle River, New Jersey, pp. 1-12.

Mackler , J., Aguila, A.P., and Serena, K.C. (2008). *What is comtemplative education and what are some ways to introduce it into higher education in Mexico?*

MemoriasDel IV Foro National de EstudiosenLenguas, 261-279.

Trilling, B. (2005). *New Learning Theory Bernie Trilling 2005 Toward Learning Societies and the Global Challenges learning with ICT.*

Wattanatorn, A.(2009).*New Consciousness Creation with Contemplative Education.*In Journal of Education Naresuan University. Vol 11 (3) September-December p.151-160.

Wattanatorn, A.(2010). *Power of Self-Learning with Contemlative Education.* In Faculty of Education, Naresuan University (2009) (Eds.) Telling Stories from Contemplative Education (pp. 9-15) Phitsanulok: Faculty of Education.

Wattanatorn, A (2012). *Transformative Learning to Promote Sufficiency-Economy Philosophy in Practice for Thai student -Teachers at Naresuan University* in Journal of Teaching and Learning ISSN: 2156-6266: Volumn 01 Number 05 (2012).

Contact email: amornratw@nu.ac.th

# The Impact of National Preschool-Grade 12 Educational Reforms on the Preparation of the Future Educator Workforce in the USA

Karen A. Verbeke, University of Maryland Eastern Shore, USA
Harry M. Shealey, Jr., University of Maryland Eastern Shore, USA

The European Conference on Education
Official Conference Proceedings 2015

**Abstract**

The USA has been facing several new reform initiatives in education that directly impact the instruction and assessment of elementary and secondary students (P-12). There have not been so many changes at once in recent history. Some are calling this the "perfect storm" in education or an "educational tsunami." Emerging from the recent "Race to the Top" federal initiative, came the creation of the Common Core, a set of college and career ready standards for kindergarten through 12th grade in English language arts/literacy and mathematics, adopted by a majority of the States. These standards were designed to ensure that students graduating from high school are prepared to take credit bearing introductory courses in two- or four-year college programs or enter the workforce.

The implementation of these standards has been controversial and far-reaching. What and how students learn, are taught, and assessed are a few of the ways that P-12 students are affected. Teachers are re-examining the curriculum, instructional strategies and materials, and assessment techniques as well. In addition, these reform efforts have led to changes in the ways in which teachers and administrators are evaluated. Finally, these those involved in preparing the workforce of future educators (i.e., teachers, administrators and other school personnel) have had to review, re-examine, and revise their programs to meet the overall goal of these changes - to improve student performance. This session will examine the ways that educator preparation is addressing these changes with examples of promising practices.

Keywords: educational reform, educator preparation, P-12, United States (U.S.)

iafor

The International Academic Forum
www.iafor.org

**Introduction**

The United States has been faced with numerous educational reforms, most originating at the national level, that have impacted all levels of education from early childhood (i.e., primary – P) through college (i.e., P-20). These reforms have emanated from federal incentives (e.g., Race to the Top) and national professional organizations (e.g., National Governors Association and Council of Chief State School Officers led the development of the Common Core Standards). The implementation of these reforms has impacted all aspects of the educational enterprise including: curriculum standards, instruction, assessment of students, evaluation of teachers and administrators, and the preparation of current and future educators.
In addition to being widespread, the effect has been immediate. Implementation of most of these reforms has been immediate. Because of the speedy implementation, there has been little time allowed for a pilot or trial phase and now there has been "pushback" from parents, teachers, and administrators that has finally resulted in policymakers easing up on the timelines and requirements.

**Literature Review**

**Types of Reforms**

One of the major federal initiatives that has provided direction and support for these reforms has been the Race to the Top program. Created by the U. S. Department of Education (2014), four billion dollars was provided to the states for competitive grants to address educational reforms in several areas: adopting standards and assessments that would prepare students to succeed in college and the workplace and compete in the global economy; building data systems that would measure student growth and inform teachers and principals/school administrators about how they could improve instruction; recruiting, rewarding, and retaining teachers and principals especially in schools that are in most need; and turning around the lowest achieving schools.

Race to the Top was the impetus for the creation of several initiatives which have driven the agenda for P-20 public education in the U.S. Emanating from the need to better prepare the P-12 students to be college and career ready and more competitive in a global workforce, the National Governors Association and Council of Chief State School Officers directed the development of the Common Core Standards, which have been adopted by 44 of the 50 states. These standards were developed with support from numerous educators, policymakers, and business leaders across the U.S. Scholarly research was the foundation for their development along with other critical criteria to include critical content and higher order thinking skills, consistency across the states, alignment with best indicators of college and career success, improvement based upon standards of top-performing nations and current state standards, and evidence-based outcomes. Several additional reforms in the form of policies and implementation tools have also been developed to support the new standards. These include curriculum and instructional tools and teaching materials, comprehensive assessment systems that replace the current state assessment systems and that can provide specific annual feedback about students and teachers, and a more extensive use of technology in instruction and assessment (Common Core State Standards Initiative, 2015).

The call for a much more comprehensive assessment resulted in the evolution of two state-led consortia that began to provide annual assessment data to schools in the 2014-2015 academic year. These included the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (Smarter Balanced). In 2014-2015 PARCC has 11 states and the District of Columbia (it originally had 23 states in 2010) in its consortium and Smarter Balanced has 18 states (it had 31 states). (Note: The 2010 total exceeds 50 as territories were included in the count.) The downward trend in assessment consortia participation is worth attention later in this paper.

These consortia were charged with creating the common assessments to be used by states in measuring annual student performance and eventually college and career readiness. These results will also be used to evaluate the effectiveness of teachers and school principals and will become of an annual evaluation for these educators. Eventually the plan is to identify the institutions where individual teachers were trained (i.e., where they received the training to earn eligibility for teacher certification) and ultimately use these results to evaluate teacher training institutions in the U.S. Thus, if a student performs very well on the annual assessment, this assessment would provide a higher evaluation for his/her teacher, and ultimately the institution where the teacher received training would be given a high evaluation as well. Note that the intent is that student tests scores would only become part of a teacher's annual evaluation, usually no more than 50%, depending on the state where employed.

The continued impact of these initiatives has effected the evaluation and accreditation of current educator preparation programs. Much change has been and continues to be made by states in terms of the ways that they approve and sanction colleges, universities, and other entities (e.g., school systems, alternate organizations such as Teach for America) which provide teacher training that leads to licensure eligibility. The Common Core and all of its reform initiatives have become incorporated into these programs and thus create additional challenges to these organizations.

All of these related initiatives have implications for the extensive use of technology. Each aspect is dependent upon and requires access to longitudinal data systems, a sophisticated technology infrastructure within schools and school systems and individual classrooms. Both instruction and assessments will be heavily reliant on the use of technology. This has increased the demands for access, training, and sustainability.

Each component of these national reforms are interdependent and require ongoing planning, monitoring, and support, including adequate financial resources and qualified personnel. The stakes are high for states, their school districts, educator training institutions, faculty, administrators, and students.

**Impact on P-12 Schools**

Elementary and secondary schools (P-12) have undergoing swift and substantive changes over the past five years. With an emphasis on a better prepared citizenry, students, teachers, administrators, and parents have had to consider education as a

lifelong experience with serious, focused goals after high school graduation that will internationally competitive and prepared to function in a global economy. Students will need to show readiness for both college and career.

The new standards focus on both content and skills in English language arts and mathematics includes literacy and critical thinking and problem solving in other disciplines. A shift in literacy has engaged readers in more applied passages, with less emphasis on literature and more emphasis on literacy in multiple disciplines. Mathematics still requires a strong foundation but with more emphasis on preparing students to apply more demanding concepts and procedures in real world challenges. Teachers are building more lessons that enable students to demonstrate procedural fluency, conceptual understanding and problem solving (Rothman, R. (2013).

Emerging from the more interdisciplinary approach has been more emphasis on "STEM" programs (Science, Technology, Engineering, Mathematics). Resources abound for STEM program development, enhanced curriculum integration, and educator training with the intent of preparing a more skilled workforce to address current and future needs in the U.S. Collaborations and partnerships between business, industry, and educational organizations are encouraged and part of many external funding opportunities (Education and Human Resources STEM Workforce Development Subcommittee. (2014).

The nature of instruction has been changed as a result of the new standards. Many teachers have had to change their approach to teaching. With more rigorous assessments, teachers have had to incorporate higher level thinking skills and writing components in their assignments, both tasks to which the current generation of students has shown resistance (Meador, 2014).

Since there is more emphasis on interdisciplinary work, there has been a shift in working collaboratively among teachers. Special education teachers (i.e., those working with students with disabilities or special gifts and talents) have already led the charge through co-teaching which has been widely adapted in many elementary and secondary schools across the U.S. It is from the field of special education that one of the most widely used, newer instructional approaches has been implemented – the Universal Design for Learning (UDL). The UDL has broad implications for both instruction and assessment as it provides a framework to address the individual needs of the learner. It outlines multiple approaches for creating instructional goals, methods, materials, and assessments that work for everyone as it contains flexible approaches that can be customized and adjusted for the unique needs of the learner. Assessments are also using UDL as the framework by which all learners can be accommodated. The framework provides learners with multiple means of representation (e.g., ways to perceive; options for language, mathematical expressions, and symbols; options for comprehension); multiple means of action and expression (e.g., options for physical action; options for expression and communication; options for executive functions); and multiple means of engagement (e.g., options for recruiting interest; options for sustaining effort and persistence; options for self-regulation) with the goal being to create learners who are resourceful and knowledgeable, strategic and goal-directed, and purposeful and motivated (Center for Applied Special Technology (2011).

The changing nature of the assessments has also impacted what goes on in schools. Highly dependent on a strong technology infrastructure, teachers need their schools to have the required band width, technology tools, and other resources to be able to fully engage their students in both instruction and the required assessments. In addition to access to the technology tools and resources, there must be adequate support for professional development and training for teachers, educators, and ultimately students. Finally, ongoing support, oversight, and maintenance are required to sustain the level of technology required.

Although assessments are both formative and summative in nature, they too require instruction as the format is new to many students and teachers as well. There is also concern about the amount of time required for these assessments (Matsuda, 2015). This will likely be a continued challenge as these reforms become more institutionalized. Some states have been implementing the Common Core for five years so there is preliminary assessment data available, which seems to a minimal (i.e., 1 point) increase in fourth grade reading scores and others are finding a slight dip in scores. However, it is too soon to draw any major conclusions. The assessments are too new and too varied. Another challenge facing U.S. educators is that states have multiple versions of these assessments: those created by PARCC, Smarter Balanced, and individual states. Thus, making comparisons and drawing inferences presents and will continue to present challenges for the psychometricians who must analyze these results (Loveless, 2015).

**Impact on Educator Preparation**

Higher education has had to be responsive to the Common Core Standards in numerous ways. Clearly the standards were developed to prepare students to be college and career ready. Historically many students entering college required remedial courses in reading and math. The results of the national response to having higher standards and evidence of readiness for credit-bearing college courses will soon become known.

The increasingly high costs of a college education in the U.S. have created an additional sense of urgency and support for elevating the standards of those entering college. With tuition being spent on non-credit remedial courses, there is more attention being paid to ensuring that students are better prepared, have a clearly outlined college curricular program, and ongoing monitoring to support success and a timely completion. One desired outcome is to have higher student retention rates from students who are more prepared for the rigors of college, thus reducing the need for remedial courses at colleges and universities (Shumski, 2013). There is also much national energy focused on providing free or low-cost tuition at community colleges to reduce the overall costs of a college education (Education Commission of the States, 2015).

These reforms have had and will continue to have an impact on the current and future workforce of educators in the U.S. Future teachers will need to be adequately prepared with the tools necessary to teach the Common Core Standards. This includes a deep understanding of the content in their preparation area, knowledge and skills in instruction of the content and procedures for the multiple assessments, including extensive knowledge of the Universal Design for Learning, and critical

analysis skills that will be helpful in drawing inferences and using student performance results to make data driven decisions for future instruction. Future educators, including teachers, administrators, and school counselors, will need to have deep content knowledge, high level skills in the use of technology, and new skills in data literacy. They must be prepared to keep their focus on student performance, for it is that outcome that is becoming a major part of their annual evaluations. These challenges are coming at a time when enrollments in educator preparation are dropping and educator preparation accreditation standards are being elevated (Freedberg, 2014).

**Conclusion**

The implementation of these reforms continues in the U.S. Preliminary results of the assessments are inconclusive as the full implementation has just begun. There has been some resistance to the movement. The Common Core is already a major topic of discussion by the 2016 presidential candidates, with some strongly opposing the movement as being "too intrusive" on the part of the federal government. Others embrace it as a means to elevate the aspirations of our future workforce. Some states have already withdrawn from the assessment consortia, opting to create their own versions of summative assessments. Many of the concerns of state leaders, parents, and teachers center on the timelines for implementation. To many this has felt like a "tsunami," characterized by a series of waves, some more tumultuous than others, and resulting in many dramatic changes.

Parents have had to adapt to the new standards in many ways, often creating a steep learning curve. Many have supported the new initiatives, but others have shown their concerns, in particular, about the new assessments by "pulling out their children from the states' standardized tests. Some states (e.g., Delaware) are now eliminating that option and are requiring that all students take the tests (Education Commission of the States, 2015).

Teachers and principals also have reservations about the use of the new assessments, with many finding concern about the use of their students' test scores and results of the student learning outcomes (SLOs) as a major component (i.e., up to 50%) of their annual performance evaluations. Many of the SLOs lack technical integrity (i.e., validity and reliability) and are therefore questionable indicators of teacher competence. Other challenges include having a reasonable amount of time for the assessments, adequate instructional materials aligned with the Standards, and access to technology. The training of new educators who are skilled in the content, skills, and dispositions essential to implementing the standards, curriculum, and assessments will require time and resources. It will also require the will and commitment of those involved to work collaboratively with a vision that focuses on improved student learning as a collective goal for all. It will take several years to get a clearer picture of the overall impact of these important reforms, but hopefully will result in better instruction, improved performance, and college and career ready students.

**References**

Center for Applied Special Technology (2011). Universal design for learning guidelines. Retrieved from http://www.cast.org

Common Core State Standards Initiative (2015).  Frequently asked questions. Retrieved  from http://www.corestandards.org/wp-content/uploads/FAQs.pdf

Education Commission of the States (2015). Retrieved from http://www.ecs.org/html/newsMedia/e-Clips.asp

Education and Human Resources STEM Workforce Development Subcommittee. (2014). Future directions for EHR's investments.  Retrieved from www.nsf.gov/attachments/130035/public/6.EHR-STEM-Workforce.pptx

Freedberg, L. (2014).  Impact of teacher preparation rules unclear.  *EdSource.* Retrieved from http://edsource.org/2014impact-of-draft-teacher-preparation-regulations-unclear/70561

Loveless, T. (2015).  How well are American students learning? *The 2015 Brown Center Report on American Education, 3(4); 1-30.*  Retrieved from http://www.brookings.edu/~/media/research/files/reports/2015/03/bcr/2015-brown-center-report_final.pdf

Matsuda, M. (2015). Going beyond testing to prepare students for college and career.  *EdSource.*   Retrieved from http://edsource.org/2015/going-beyond-testing-to-prepare-students-for-college-and-careers/79782#.VWhqWrdFDIU

Meador, D. (2014).  Impact of the common core standards.  Retrieved from http://teaching.about.com/od/assess/a/Common-Core-Standards.htm

Rothman, R. (2013).  How the common core state standards can change classroom practice.  Retrieved from   http://all4ed.org/how-the-common-core-state-standards-can-change-classroom-practice/

Shumski, D. (2013).  5 ways common core could impact higher ed.  *Education Dive.* Retrieved from  http://www.educationdive.com/news/5-ways-common-core-could-impact-higher-ed/162896/

U.S. Department of Education (2014).  Race to the top program description. Retrieved from http://www2.ed.gov/programs/racetothetop/index.html

**Contact email:**  kaverbeke@comcast.net; hshealey@comcast.net

# CEFR-J Based Survey for Japanese University Students

Masanori Tokeshi, Meio University, Japan
Lianli Gao, Academy of Chinese Medicine Sciences, China

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

This study attempts to empirically examine self-ratings of Can-Do descriptors of the CEFR-J (Tono, 2012), which was modified from the CEFR (Council of Europe, 2001). The study mainly focuses on the relationship between the English proficiency test (EIKEN) scores and self-ratings and reliability of self-ratings between five skill categories. Three hundred eighty-nine freshmen at one Japanese university answered a web-questionnaire (110 questions in five skill categories) based on the CEFR-J Can-Do descriptors. The results show contradictory evidence. According to an in-depth investigation of individual raw data, the results indicate a variation of responses with little relation to English proficiency test scores. A statistical analysis (Pearson's R) also supported this evidence. However, the results also indicate that the internal reliability of self-ratings between the five skill categories is high, according to Cronbach's alpha value (0.872), when the data were compared in the group. To interpret this contradictory evidence, it may be inferred that CEFR-J is effective to evaluate general proficiency skill levels of overall English programs, but not very helpful to measure individual English learning.

Keywords: CEFR, assessment, curriculum, higher education, Japan

iafor
The International Academic Forum
www.iafor.org

# The background to Japanese university English education

The Japanese Ministry of Education proposed the English education reform (2014) by urging all levels of schools to strengthen English education, especially in order to make rapid preparations for the Tokyo Olympic Games in 2020.  The strong rationale for implementing the English education reform is partly due to the fact that the average score (70 points) of Japanese examinees in TOEFL iBT ranked 25th out of 30 Asian countries, whereas rival neighboring area/countries' examinees gained much higher average scores, respectively '77' for China, '85' for Republic of Korea (South Korea) and '79' for Taiwan (ETS, 2014).

It is essential for Japanese universities to set English proficiency standards which enable students to equally compete with those around the world.  However, "we have not had any agreed attainment targets in language teaching so far. Nor do we have any consensus as to how to attain those targets or how to assess the attainment" (Negishi, Takada, & Tono, 2012, p.136) at university level schools in Japan.   That's partly because there is no core university English curriculum specified by the Ministry of Education.  Currently, TOEIC, Test in Practical English Proficiency (hereafter, EIKEN test) or GTEC (Global Test of English Communication) have often been used to assess English proficiency of university students.  These three tests assess mainly listening and reading, although they have been developing new types of tests measuring four skills.   TOEFL iBT comprehensively measures four skills and is taken in the largest number of countries (roughly 130 countries) and adopted in educational institutions (roughly 9,000) in the world, which makes it the strongest candidate for test takers, institutions and teachers worldwide to compare English scores across country/area.   However, there are practicality problems such as expensive testing fee, availability of testing centers and trained raters (Tokeshi, 2013).  Therefore, it is hard to claim that any specific major commercial English test can be exclusively used by all university teachers in Japan to confirm attainment in English proficiency of their students. As globalization spreads rapidly, it is extremely important for not only university educators, but also students to understand whether English proficiency of students gained through English curricula or self-learning is high enough to be able to compete with students from other countries.   If English proficiency of our students is not equal to or lower than that of students from other countries, it is also important to know what type of teaching and learning should be included in the English curriculum.   More appropriate information is needed to communicate about English proficiency of our students among educators, students and stake-holders.

The Common European Framework of Reference for Languages (hereafter, CEFR) (Council of Europe, 2001) seems the most promising English education toolkit (North, 2014) and it has become the international standard for language teaching and learning (North, Ortega, & Sheehan, 2010).   Figueras (2012) states the CEFR would be the

most relevant and controversial document in language teaching, learning and assessment fields in the twenty-first century. Alderson (2007) claims that despite criticism from some researchers, "nobody engaged in language education in Europe can ignore the existence of the CEFR"(p.660).

The CEFF-J (Tono et al, 2012), which this study attempts to validate, is the Japanese version of the CEFR and it includes twelve levels of English proficiency specifications designed by two research groups of the Ministry of Education Grant-in Aid projects over eight years (from 2004 to 2011), which will be discussed in detail subsequently. It is designed to be the most tailored to the Japanese context (Negishi, Takada, & Tono, 2012).

The CEFR-J still remains to be empirically examined before being adopted in any university or other level of schools in Japan. Despite longitudinal and elaborate research projects, few studies (e.g., Runnel, 2013; Runnel, 2014) at university level have been conducted to examine the CEFR-J. "In fact, little research on the relationship between ability, self-assessment, and CEFR-aligned task performance for Japanese learners has been carried out" (Runnels, 2014, p.86).

It is urgently needed to validate the CEFR-J before being incorporated in the curriculum development, teaching and learning for university English education.

This study conducted a web-questionnaire for M University freshmen (N: 389) using 110 Can-Do statements adopted from the CEFR-J and seeks to examine the following research questions.

(1) Is there a relationship between self-ratings of Can-Do descriptors of five skill categories?

(2) Is there a correlation between EIKEN English Proficiency test scores and CEFR-J self-rating results?

(3) What implications for university English programs learned from the study?

## 2.0 Literature Review

### 2.1 The CEFR

The Council of Europe published the CEFR; Common European Framework of Reference for Languages (2001) after 30 year's research in Europe. Its publication dates back to communication/function related research by van-Ek (1975) and Wilkins (1976) in the 1970s and major features are based on earlier Threshold-series publications; "Threshold" (van Ek & Trim, 2001b), "Waystage" (van Ek & Trim, 2001a) and "Vantage" (van Ek & Trim, 2001c) published by the Council of Europe. The CEFR was developed based on two projects, DIALANG in 1996 (available in Council of Europe, 2001, p. 226-243) and the ALTE 'can-do' project (ALTE, 2002). Its principles reflect 'plurilingualism' and 'pluriculturalism' in the European context. The CEFR provides six levels (A1 to C2) of illustrative descriptors in five skill categories in which speaking is divided into spoken interaction and spoken production, in addition to listening, reading, and writing. It includes four domains of language use; public, personal, educational, and professional, for each of which locations, institutions, persons, objects, events, operations and texts are specified (Council of Europe, 2001, pp. 48-49).

The CEFR has some salient features of its strengths. The CEFR can be helpful as it helps to understand what is assessed, how performance is interpreted and how comparison across different tests and examinations can be made (Council of Europe, 2001). It is an action/outcome-oriented approach and a learner's language performance is calibrated against its standards. The Framework provides a self-assessment grip (Council of Europe, 2001, p.26) with a form of Can-Do statements in which a learner judges his/her own language ability as to what he/she 'can do' in a foreign language. Its focus is on communication and learner/user rather than on linguistic competence . It was developed to provide "a common basis for the explicit descriptions of objectives, content and methods" (Council of Europe, 2001, p.1) and expected to help develop course curricula, textbooks, and examinations.

Despite widespread use worldwide, researchers criticize some limitations of the CEFR. There is a mismatch between the influence of the CEFR and its adoption into curricula, pedagogy and assessment (Figueras, 2012).

One strong claim is its adoption for testing. Some testing researchers (Weir, 2005; Alderson, 2007; Little, 2010) are critical of its theoretical underpinnings for testing so that they strongly ask for empirical validation of it. "It is not surprising that a number of studies have experienced difficulty in attempting to use the CEFR for test development and comparative purposes" (Weir, 2005).

Jones's study (2002) is fairly relevant to this current study. Jones compared 'Can Do' self-ratings (questionnaire) with Cambridge examinations (KET, PET, FCE, CAE, CPE). The results showed that there was a great variation of perceptions on personal own language ability at the individual level. Interestingly, lower level of respondents tended to rate themselves too generously (higher than actual ability) and high level of respondents tended to rate themselves more modestly (lower than actual ability). He concluded that "people tend to understand 'can-do' differently" (p.33), depending on personal background such as age, first language and proficiency level. He assumed that "the problem is probably a particular feature of the present data, based on self-report" (p.33). Little (2010, pp.159-160) also points out concerns about self-assessment; 1) learners do not know how to assess themselves; 2) there is a danger that they will overestimate their proficiency; and 3) they may be tempted to cheat by including in their ELPs (hereafter, European Language Portfolio) material that is not their own.

Another issue related to this study is empirical validation of the CEFR. North (2014) claims that CEFR descriptors are scaled based on teacher's perceptions of the second language proficiency of learners. The descriptors have not emerged from in-depth, large-scale longitudinal studies of the actual process of second language acquisition over time (p.23). In line with issue of empirical validation, Hulstijin (2007) claims that qualitative and quantitative dimensions of language proficiency in the CEFR should be sufficiently validated by empirical studies (2007).

## 2.2 CEFR-J projects

Carrying over the previous project led by Koike (2004-2007), a new Grant-in Aid Scientific Research led by Tono (2008-2011) published 12 levels of the CEFR-J Version 1 (2012) to publicize the final result of the project. Research on the implementation of the CEFR-J began in 2008 at the Tokyo University of Foreign Studies. The project was carried out by a group of 18 researchers engaged in English education.

The CEFR-J projects were chronologically completed with the following six stages.

STAGE 1 (Y2006); A Can Do questionnaire was developed from DIALANG self-assessment statements (Council of Europe, 2001). It was translated into Japanese and the questionnaire was given to 360 Japanese university students (can or cannot dichotomy questions). Seven hundred twenty-seven Japanese upper secondary school and university students were investigated by using the same Can-Do

descriptors accompanied by examples with four scales of answers. The results confirmed that the CEFR could be adapted to Japanese learners of English.

STAGE 2 (Y2004-2007); Various research was conducted to investigate English proficiency of the participants for different school levels of students (354 elementary schools, 150 junior & senior high schools) and for 7,354 business persons. Following the results, it was concluded that over 80% of English language learners in Japan fell within the A1 & A2 levels of the CEFR (also known as the Basic User level).

STAGE 3 (Y2008); Accordingly, the original six levels of the CEFR were divided into 12 levels for the Japanese version of the CEFR (CEFR-J alpha version). The alpha version of the CEFR-J was designed by considering ELP, Can-Do descriptors, GTEC tests, Super English Language-high schools, EIKEN tests. The special features of the CEFR-J are as follows (Negishi, Takada & Tono, 2012, p.143); 1) Add Pre-A1, 2) Divide A1 into three levels: A1.1, A1.2, A1.3, 3) Divide A2 into two levels: A2.1, A2.2., 4) Divide B1 into two levels: B1.1, B1.2., 5) Divide B2 into two levels: B2.1., B2.2., 6) No change for C1 and C2.

STAGE 4 (Y2009); After receiving some advice from a CEFR specialist, Dr. Anthony Green, productive skills were broken down into (1) performance, (2) criteria, and (3) condition, while those for receptive skills were broken into (1) task, (2) text, and (3) condition. Furthermore, the descriptors of the alpha version were sorted by 206 English teachers to ensure the appropriate order of difficulty and then were reordered according to the teacher survey. The orders were changed only when over 70% of the participating teachers agreed with the order of the descriptors. Thus, the CEFR-J alpha version was modified and the beta version of the CEFR-J was finalized.

STAGE 5 (Y2010-2011); To validate the beta version, 1,685 junior high school students, 2,538 senior high school students and 1,245 university students answered the questionnaire with four answer choices as to the degree with which they could do about all the descriptors in the questionnaire. To solve the problems identified in the statistical analysis of the beta version, the descriptor statements were modified and the order was changed again. Also, the project group implemented performance tests based on the descriptors for five skill categories in order to analyze the relationship between their self-assessment and their actual performance (Negishi, Takada & Tono, 2012, p.145).

STAGE 6 (2012-2013), Completing the validation processes, the CEFR-J Version 1 was released in March, 2012 (http://www.cefr-j.org/download.html) and the "CEFR-J Guidebook" was published in 2013.

Following publication of the CEFR-J, little empirical research had been done. However, Runnel's study (2014) investigated 590 Japanese university students. Her research results indicate that unfamiliarity and confusing content of can-do statements affected reliability of the hierarchy of the statements and individual differences in a population of the learners affected the results of difficulty of self-rating. The conclusion of her study requested further studies on the CEFR; "the CEFR-J's target users' responses to can-do statements, and content analyses of the can-do statements should be performed to ensure a consistent, common interpretation of the system" (p.86).

## 3. Method
### 3.1 Participants

Four hundred eighty-eight university freshmen at M University in Japan were asked to answer the web-questionnaire and 389 students answered the questionnaire. They were enrolled in 17 freshman English classes from three different departments, taught by 10 teachers in the first semester of 2014, when the questionnaire was given. The classes at that school were divided according to placement test scores before the classes began. M University was a public school and was selected since the freshmen at M University usually gained almost the average score of all examinees in the National Center for Entrance Examination, which the majority of high school students nationwide take in Japan. The students at M University were considered to represent the average English learners in the freshman year at university level in Japan.

The participants were only limited to those who agreed to answer the questionnaire. So, 389 participants from the target population (N: 488) participated in this project. Best efforts were made not to violate the participants' privacy. M University research grant committee gave the researcher permission. The researcher gained permission by email from the CEFR-J project team to download the CEFR-J Version.1 Can-Do descriptors from their homepage.

### 3.2 Reasearch Instruments

This study adopted a self-designed web-questionnaire written in participants' first language.   The questionnaire used Can-Do descriptors available in the homepage of CEFR-J Version 1.1 (http://www.cefr-j.org/download.html ) and included 110 can-do descriptors, respectively 22 questions for five skill categories (listening, reading, spoken interaction, spoken production and writing).   The participants were asked to rate their own English ability for each Can-Do descriptor according to a scale (strongly disagree, moderately disagree, moderately agree, strongly agree).

Example of listening descriptors: Q7 (A1.3 level)
  "I can catch concrete information (e.g. places and times) on familiar topics encountered in everyday life, provided it is delivered in slow and clear speech"

### 3.3 Data collection method

The pilot studies before the main web-questionnaire were conducted twice for 23 junior student taking 'English Teaching Methodology' class taught by the researcher. According to their feedback, the questionnaire was revised and with the help of the researcher's colleague, the web-questionnaire was designed and uploaded on the webpage in late April, 2014.   The researcher asked the freshman English teachers to cooperate on the project.   With their cooperation, between late April, 2014 and late May, 2014, for about a month, the participated students were asked to answer the web-questionnaire out of class with their cellular phone (QR Code) or with computer (URL).

As the research proposal admitted by the university research grant committee indicates, this study used EIKEN English Proficiency test (Type B) which is designed to assess a range of levels from EIKEN Grade 3 and EIKEN Grade 2.   Most of the participants in this study (except five students) took this test for class placement purposes in early April, 2014.

### 3.4 Data analysis method

The web-questionnaire results were collected from the web-page and saved in EXCEL file and invalid participants' responses were excluded (ex., six participants gave the same ratings on all descriptors).   The questionnaire results were compared with the English proficiency test results to check the correlation between them by using SPSS Version 21.   In addition, an in-depth analysis of questionnaire results was conducted to see the relationship between the EIKEN test scores and the participants' self-ratings in the five skill categories.

## 4. Results and analysis

This section mainly discusses the results and its analysis regarding the relationship between the English proficiency test result (EIKEN score) and self-ratings as well as the relationship among Can-Do descriptors in the five skill categories.

First, numbers were substituted for the questionnaire responses to conduct quantitative analysis. In the following graph/tables, substitution for responses is; 'strongly disagree' is '1', 'moderately disagree' is '2', 'moderately agree' is '3', 'strongly agree' is '4'. The average self-rating of each skill category (e.g., listening) for individual respondents was calculated to see the relationship among the self-ratings for five skill categories. For example, the average self-rating of the EIKEN score 1st ranked respondent for 22 listening descriptors is '3.64' (see Table 1 below).

Table 1: CEFR-J levels and questionnaire questions (Qs)

| Level: PreA1 | A1.1 | A1.2 | A1.3 | A2.1 | A2.2 | B1.1 | B1.2 | B2.1 |
|---|---|---|---|---|---|---|---|---|
| B2.2 | C1 | C2 | | | | | | |
| Qs: 1&2 | 3&4 | 5&6 | 7&8 | 9&10 | 11&12 | 13&14 | 15&16 | 17&18 |
| 19&20 | 21 | 22 | | | | | | |

## 4.1 Relationship between self-ratings of CEFR-J descriptors and EIKEN test scores

Person's R (two sides) was utilized to examine the correlation between the English proficiency test, EIKEN scores and self-ratings for the five skill categories. As shown in Table 2, Person's R values for each skill category are low. The results indicate that the correlation between EIKEN test scores and each skill category has a weak relationship, respectively.

Table 2: Correlation between EIKEN scores and self-ratings of five skill categories

| | listening | reading | spoken interaction | spoken production | writing |
|---|---|---|---|---|---|
| Pearson's R | .271 | .292 | .251 | .312 | .292 |

Furthermore, questionnaire raw data of individual respondents were examined to get in-depth analysis of the correlation between EIKEN test scores and self-ratings.

Due to limited paper space, 13 respondents' responses for listening descriptors were selected from every 30th rank (1st, 30th, 60th ...360th) ordered according to EIKEN scores (see Table 3).   This study adopted self-rating '4 (strongly agree)' squared with boldfaced lines in the table as the borderline of achieving the level (estimated 80% of achievement), following the criteria suggested by North (2014, p.103), stating "When a learner met 80% of the descriptors on the checklist for the level concerned, they could be considered to 'be' that level."   When there is no clear cut-off between '4' point and '3' point or other points in the responses or when there is no '4' point, the lowest level of descriptor which has '3' was chosen.   For example, for the 60th respondent, the lowest level of descriptor, Q1 was chosen as the borderline because there is no '4' in the responses (see Table 3).

Table 3: Raw data from Can-Do listening descriptor responses (a sample of every 30th rank according to EIKEN scores): bold-faced squares are borderlines

| Level | Pre A1 | | A1.1 | | A1.2 | | A1.3 | | A2.1 | | A2.2 | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ranking | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
| 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 30 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | **4** | 3 | 3 | 3 | 3 |
| 60 | **3** | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 |
| 90 | **3** | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 120 | 4 | 3 | 4 | 4 | 4 | **4** | 3 | 3 | 3 | 3 | 3 | 3 |
| 150 | **3** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| 180 | **3** | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| 210 | **3** | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| 240 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | **4** |
| 270 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | **4** | 3 | 3 | 3 | 3 |
| 300 | **3** | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |
| 330 | **3** | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 |
| 360 | **3** | 2 | 4 | 3 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 |

(continued)

| Level | B1.1 | | B1.2 | | B2.1 | | B2.2 | | C1 | C2 | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ranking | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 | Q20 | Q21 | Q22 | mean |
| 1 | 4 | 4 | 4 | 4 | **4** | 3 | 3 | 2 | 2 | 2 | 3.64 |
| 30 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3.43 |

| 60  | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2.18 |
| 90  | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2.73 |
| 120 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2.86 |
| 150 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 2.55 |
| 180 | 3 | 3 | 1 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 2.36 |
| 210 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2.29 |
| 240 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3.24 |
| 270 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2.76 |
| 300 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2.36 |
| 330 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.77 |
| 360 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2.18 |

As Table 3 indicates, there is a variation of responses regarding consistency of self-rating levels within individuals and between individuals when EIKEN scores are compared. For example, self-ratings for Can-Do descriptor levels among the respondents are not strongly related to EIKEN test scores. The 1st ranked respondent (highest level sample) chose 'strongly agree (4)' for Q17. The average points for the 1st and 30th ranked respondents are higher (respectively '3.64', '3.43') than other respondents. The average points of the 330th and 360th ranked respondents (lowest samples) are '1.77' and '2.18'. Those four respondents seem to demonstrate self-ratings which were expected from the EIKEN test score ranking. However, the responses of the 30th ranked respondent are not consistent. '4' was chosen for Qs 1-8, then lower point '3' was chosen for Qs 9-15, again, '4' was chosen for Qs Q16-17. Moreover, the 60th ranked respondent tended to choose "moderately agree (3)" or "moderately disagree (2)" for most of the descriptors and the average point is '2.18', which is somewhat lower than those of other respondents. On the other hand, the 240th ranked respondent with EIKEN low score chose 'strongly agree (4)' for Q8 and its average point is '3.24' which is somewhat higher than those of other respondents.

## 4.2 Reliability and relationship of self-ratings for CEFR-J descriptors

To grasp the overall relationship, the line graph in Figure 1 below was created. In the graph, the horizontal axis shows CEFR-J levels corresponding to questions (Qs) . Figure 1 shows that five skill categories form moderately linear association, descending from higher to lower. That is, as the level of each skill category becomes higher, self-ratings indicate less confident perceptions on Can-Do descriptors. For example, responses for A1.1 center closer to around '4' (strongly

agree); responses for B1.1 center around halfway '3' (moderately agree) and '2' (moderately disagree), and responses for C2 is almost halfway between '2' (moderately disagree) and '1' (strongly disagree).

There are slightly extreme average points in the graph below. For example, for listening descriptor Question 2, the average is '2.82' which is lower than those for Questions 3-8. Question 2 descriptor states, "I can recognize the letters of the English alphabet, when they are pronounced." Probably the respondents may have misunderstood that they were asked about knowledge of phonetics. Another extreme average point can be found in reading Q 16, '2.65' which is higher than those of Qs 13, 14 and 15. The descriptor states, "I can understand the plot of longer narratives written in plain English." The respondents may have perceived 'understanding of the narrative (story)' relatively easier, as compared to understanding of texts of internet and reference book (Q15), texts of instruction for games and application (Q14), and texts of newspapers and magazines (Q13). Further in-depth investigation is needed for extreme values in the graph.

Figure 1: Relationship among average self-ratings of five skill categories (N=389)
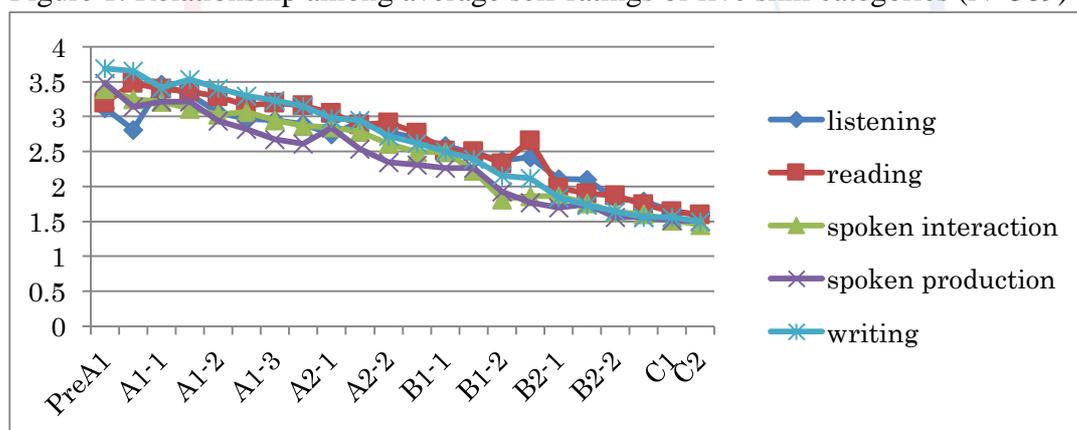


Next, Cronbach's alpha was utilized to examine internal consistency among the self-ratings of the five skill categories. Cronbach's alpha value among them is '0.872', which shows strong internal reliability among the five skill categories. The result suggests that self-ratings among the five skill categories are statistically reliable, when the average self-ratings of individual respondents for each skill category were compared.

To summarize the results above, when in-depth investigation of the self-ratings of the individuals is conducted, the results indicate that individuals' self-ratings are not consistent. Also, the self-ratings are not strongly related to hierarchy of EIKEN scores. There is a variation of self-ratings for CEFR-J Can-Do descriptors, which is

congruent with previous studies by Jones (2002) and Runnels (2014) discussed above. When the individuals in the whole group are statistically analyzed, the relationship between English placement test (EIKEN) scores and the average self-ratings of the CEFR-J Can-Do descriptors is strong.

## 5. Conclusion and implications

This study reviewed literature related to CEFR, the seemingly most controversial language scale framework in the 21st century, and its Japanese version of the CEFR. This study also conducted the empirical validation of the CEFR-J. This section discusses the results of the study and seeks implications for university English programs in Japan.

When in-depth investigation of the self-rating raw data was conducted, the results show contradictory evidence that there is a variation of self-rating responses within individuals and that individual's responses are not necessarily related to English proficiency test (EIKEN) score. The statistical analysis (Pearson's R) examining the relationship between self-ratings and EIKEN scores also supported the evidence that there is not a strong relationship between the two. However, internal reliability of self-ratings between the five skill categories in this study was found to be strong, using statistical analysis (Cronbach's alpha), when average self-ratings were examined in the group. This result shows that self-ratings of CEFR-J Can-Do descriptors between each skill category are fairly trustworthy.

The researcher makes the following assumptions to interpret this contradictory evidence. CEFR-J Can-Do descriptors may be reliable when they are compared in the group. This implies that language educators may be able to use the CEFR-J Can-Do descriptors effectively to evaluate an entire whole English program regarding the outcome of teaching. On the other hand, individuals show variation in responses of CEFR-J Can-Do descriptors. This may imply that CEFR-J is not reliable measurement method for individual language learning.

Due to time constraints, a variation of responses caused by individual difference was not pursued sufficiently. Further qualitative studies need to be conducted to explicate hidden reasons which cause individual variation in self-ratings.

**References**

Alderson, J.C. (2007). The CEFR and the need for more research. *The Modern Language Journal,* 91, 659-663.

ALTE. (2002). *The ALTE CAN DO PROJECT*. Retrieved on March 30, 2015 from (http://www.alte.org/attachments/files/alte_cando.pdf)

Council of Europe. (2001). *The Common European Framework of References for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.

ETS. (2014). *Test and score data summary for TEOFL iBT tests (2013, January-2013 December tests)*. Retrieved on March 14, 2015 from (http://www.ets.org/s/toefl/pdf/94227_unlweb.pdf)

Figueras, N. (2012). The impact of the CEFR. *ELT Journal*, 66 (4), 477-485.

Hulstijn, J.H. (2007). The shaky ground beneath the CEFR: quantitative and quantitative dimensions of language proficiency. *The Modern Language Journal*, 91, 663-667.

Jones, N. (2002). Relating the ALTE framework to the Common European Framework of Reference. *THE ALTE CAN DO PROJECT*. Retrieved on March 27, 2015 from ( http://www.alte.org/attachments/files/alte_cando.pdf )

Little, D. (2010). The European language portfolio and self-assessment: Using "I can" checklists to plan, monitor and evaluate language learning. In Schmidt, G.S.,

Naganuma, N., O'Dwyer, F., Alexander, E. and Kazuni, S. (Eds.) *Can do statements in language education in Japan and beyond –Applications of the CEFR* (pp.157-166). Tokyo: Asahi Press.

Ministry of Education. (2014). *Eigo kyouiku no arikata ni kansuru yushikisha kaigi saishuhoukoku (English education reform working group final report July, 2014)*. Retrieved on March 26, 2015 from (http://www.mext.go.jp/ component/b_menu/shingi/toushin/__icsFiles/afieldfile/2014/08/20/1351000_01.pdf)

Negishi, M., Takada, T. & Tono, Y. (2012). A progress report on the development of the CEFR-J. *Studies in Language Testing* 36: 137-157.

North, B., Ortega, A., & Sheehan, S. (2010). *A core inventory for general English, British Council/EAQUALS*. Retrieved April 20, 2014 from (http://www.teachingenglish.org.uk/article/british-council-eaquals-core-inventory-general-english-0)

North, B. (2014). *The CEFR in practice*. Cambridge: Cambridge University Press.

Runnels, J. (2013). Examining the difficulty pathways of can-do statements from a localized version of the CEFR. *Journal of Applied Research on the English language*, 2(1), 25-32.

Runnels, J. (2014). An Exploratory Reliability and Content Analysis of the CEFR-Japan's A-Level Can-Do statements. *JALT Journal*, Vol.36, No.1, 69-89.

Tokeshi, M. (2013). TOEFL iBT ni okeru speaking sokutei to writing sokutei no jitsuyousei, shinraisei, datousei [Practicality, reliability and validity of speaking and writing in TOEFL iBT]. *Meio University Bulletin*, No.19, 65-76.

Tono, Y. et al. (2012). CEFR-J Ver.1. Retrieved April 10, 2014 from (http://www.cefr-j. org/download.html.)

Tono, Y. (2013). *CEFR-H Guidebook*. Tokyo: Taishukan Publishing co.

van Ek, J.A. & Trim, JLM. (2001a). *Waystage.* Cambridge: Cambridge University Press.

van Ek, J.A. & Trim, JLM. (2001b). *The threshold level*. Cambridge: Cambridge University Press.

van Ek, J.A. & Trim, JLM. (2001c). *Vantage*. Cambridge: Cambridge University Press.

Weir, C.J. (2005). Limitations of the Common European Framework for developing comparative examinations and tests. *Language Testing,* 22 (3), 281-300.

Wilkins, D.A. (1976). *National syllabuses*. Oxford: Oxford University Press.

# Trends and Issues in Technology Education Research in Taiwan: A Co-Word Analysis of 1994-2013 Graduate Theses

Lung-Sheng Lee, National Taiwan Normal University, Taiwan
Yu-Shen Fang, National Taiwan Normal University, Taiwan

**Abstract**
In Taiwan, the Technology Education for 1-12 graders is comprised of two courses--Living Technology (LT) and Information Technology (IT). With its ever-changing feature, Technology Education needs on-going research to support its decisions and actions. The education-related academic programs in universities regularly concern about the development of primary and secondary education. To identify the evolution directions and knowledge orientation of the research topics of theses and dissertations, from LT and IT education graduate programs, will be helpful for clarifying trends and issues in Technology Education of primary and secondary education. Hence, this study used co-word analysis of bibliometrics to analyze the theses and dissertations from all LT and IT education graduate programs in Taiwan and completed in the last decade (2004~2013 academic years). Totally, 884 LT and 992 IT summaries of theses and dissertations in the database--National Digital Library of Theses and Dissertations in Taiwan, served as the subject of this study. The results show: (1) The number of LT's and IT's theses and dissertations significantly declined; (2) LT's research topical focuses have moved to e-learning, while IT's focuses have changed from universal e-learning to game-based e-learning; (3) The connection between research sub-areas and theme in either LT or IT is not well-structured; and (4) The research topics completed are in lack of teacher education and technological/information literacy.

Keywords: technology education, graduate research, co-word analysis, bibliometrics

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Funded by the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA), The Technology for All Americans (TfAA) project defines "technology" as "…human innovation in action…". Technology Education, the study of technology, aims to prepare technological literacy for all.

In the upcoming national curriculum for 1-12 graders in Taiwan, both "Living Technology (LT)" and "Information Technology (IT)" are included in the learning area of "Technology Education". Like other fields, Technology Education needs on-going research to support its decisions and actions. The education-related academic programs in universities continuously concern about the development of primary and secondary education through their theses and dissertations. To identify the evolution directions and knowledge orientation of the research topics of theses and dissertations from the LT and IT education graduate programs will be helpful in clarifying trends and issues in Technology Education of primary and secondary education.

This study aimed to identify the evolution directions and knowledge orientation of the research topics of theses and dissertations from LT and IT education graduate programs. Employing automated content mining tool BICOMB (bibliographic item co-occurrence matrix builder, a bibliographic co-occurrence analysis system), co-word matrix, clustering analysis, strategic diagram and social network analysis were established.

**Method**

If a word (or noun phrase) is used in two or more texts, the word becomes a co-occurrence word (i.e., co-word) between the two or more texts. The more co-words, the texts using the co- words are more similar in topics. Based upon the relationships, co-word analysis is a content analysis technique that uses patterns of co-words in a corpus of texts to identify the relationships between ideas within the subject areas presented in these texts (He, 1999).

This study used co-word analysis of bibliometrics to analyze the evolution directions and knowledge orientation of the research topics of the theses and dissertations from all LT and IT education graduate programs in Taiwan and completed in the last decade (2004~2013 academic years). Totally, 884 LT and 992 IT summaries of dissertations and theses in the database--National Digital Library of Theses and Dissertations in Taiwan, served as the subject of this study.

The data processing procedures of this study are mainly as follows: (1) Filing and coding the keywords on the samples, (2) Checking and modifying some inconsistencies among keywords, (3) Determining the threshold to identifying high-frequency keywords, (4) Dividing the last decade into two phases and building keywords frequency and co-word matrix, (5) Converting the data in the matrix into Spearman's correlation coefficient matrix, and (6) Drawing co-word network maps to explore the internal connection between clusters and nodes as well as structures.

**Results**

Based on the co-word matrix, clustering analysis, strategic coordinate and social network analysis completed for LT and IT, respectively, the results are as follows:

The Evolution Directions and Knowledge Orientation of LT

1. There is a downward trend in the number of theses
   There were 471 theses completed in Phase I (2004~2008 academic year), which include 421 master's theses and 50 doctoral dissertations. There were 413 theses completed in Phase II (2009~2013 academic year), which include 349 master's theses and 64 doctoral dissertations.

2. Multi-disciplinary research topics are presented and diverse academic communities exist
   According to Price (1965), the range, 45-50, was selected to become the threshold to determine the high frequency keywords. As shown in Table 1, the cumulative percentage of high frequency keywords in Phases I and II are 4.97%, 8.57%, respectively. It indicates that the high frequency keywords are made by a handful of cumulative keywords; however, multi-disciplinary research topics are presented and diverse academic communities exist.

Table 1: The frequency of LT keywords

| Frequency | Phase I (2004~2008) | | | Phase II (2009~2013) | | |
|---|---|---|---|---|---|---|
| | Number | Cumulative Frequency | Cumulative % | Number | Cumulative Frequency | Cumulative % |
| 25~29 | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| 20~24 | 0 | 0 | 0.00 | 1 | 1 | 0.09 |
| 15~19 | 2 | 2 | 0.17 | 0 | 1 | 0.18 |
| 10~14 | 6 | 8 | 0.86 | 6 | 7 | 0.82 |
| 5~9 | 40 | 48 | 4.97 | 29 | 36 | 4.10 |
| 4 | 16 | 64 | 10.55 | 13 | 49 | 8.57 |
| 3 | 46 | 110 | 19.88 | 42 | 91 | 16.86 |
| 2 | 108 | 218 | 38.56 | 111 | 202 | 35.28 |
| 1 | 949 | 1,167 | 100.00 | 895 | 1,097 | 100.00 |

3. Research topical focuses have moved to e-learning
   The 48 representative keywords in Phase I can be categorized into the following six clusters: competency development, technology-oriented instruction for human resources, curriculum development, workplace satisfaction, instructional strategies in technology education, and learning factors. The 49 representative keywords in Phase II can be categorized into the following five clusters: instructional models in technology education, career exploration, organizational learning, e-learning and workplace satisfaction. The cluster, e-learning, appears in Phase II. The number of research topics concerning the technology education in primary and secondary education is shrinking, while the number of research topics regarding technology-oriented human resources for the industry is relatively expanded.

   In addition, the degree centrality and density of each cluster are shown in Figure 1. The centrality represents the connection strength among the cluster and other

clusters. The cluster having high centrality tends to be the core cluster in the network of clusters. The density stands for the strength of internal closeness. The cluster having high density tends to have more coherent, more complete and more durable corresponding research topics.

4.  The connection between research sub-areas and theme is not well-structured
    As shown in Figure 2 (left), the empty core and the distance between the clusters indicates that the connection among research topics is weak and core research topics have not appeared yet. As shown in Figure 2 (right), technology-oriented human resources become the research focus and researches regarding Technology Education in primary and secondary education are relatively scattered, weak and marginalized.
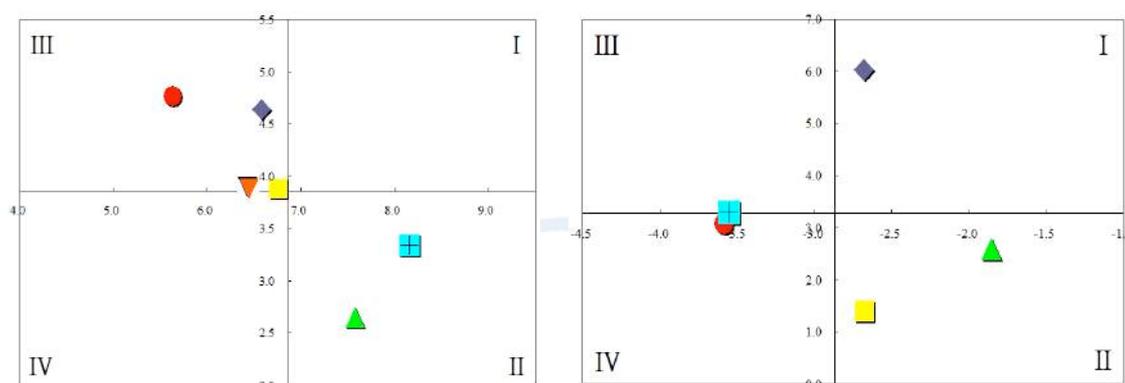


🔴 competency development (5.63, 4.76)
🟨 technology-oriented instruction for human resources (6.76, 3.88)
🔺 curriculum development (7.58, 2.65)
⊞ workplace satisfaction (8.15, 3.34)
🔷 instructional strategies in technology education (6.58, 4.64)
🔻 learning factors (6.50, 3.89)

🔴 instructional models in technology education (-3.58, 3.08)
🟨 career exploration (-2.67, 1.40)
🔺 organizational learning (-1.85, 2.59)
⊞ e-learning (-3.55, 3.30)
🔷 workplace satisfaction (-2.68, 6.02)

Notes: Quadrant I--high centrality, high density; Quadrant II--high centrality, low density; Quadrant III--low centrality, high density; Quadrant IV--low centrality, low density; (centrality, density)

Figure 1: The strategic coordinates of LT clusters in Phases I (left) and II (right)

● competency development
■ technology-oriented instruction for human resources
▲ curriculum development
⊞ workplace satisfaction
◆ instructional strategies in technology Education
▼ learning factors

● instructional models in technology education
■ career exploration
▲ organizational learning
⊞ e-learning
◆ workplace satisfaction
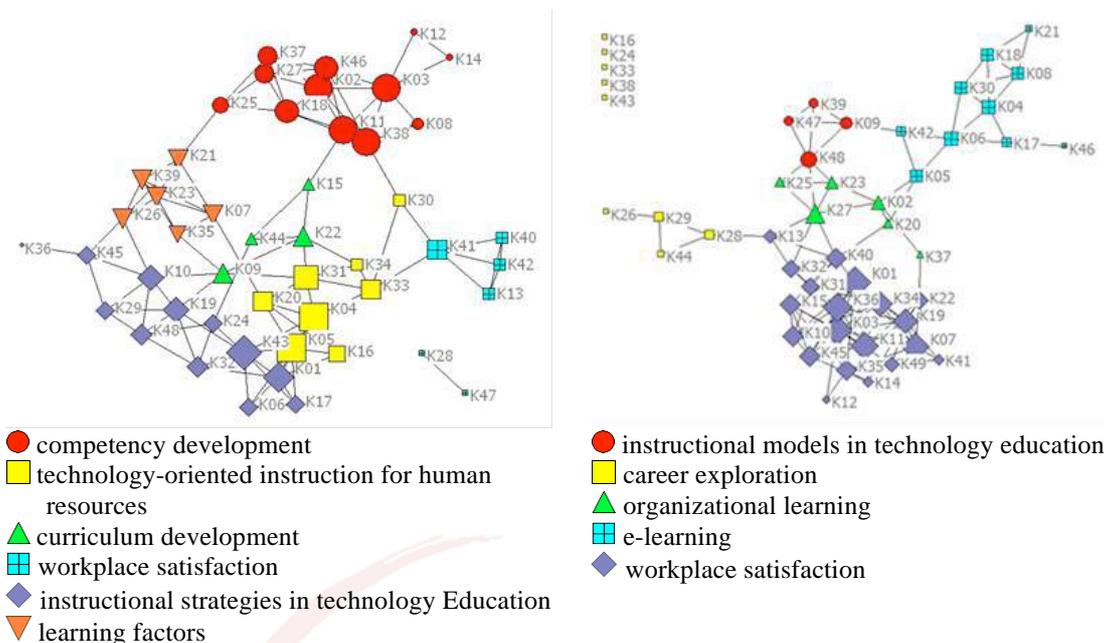
Note: The keywords/nodes in the above two maps are listed in Appendix 1.
Figure 2: The network maps of LT clusters in Phases I (left) and II (right)

The Evolution Directions and Knowledge Orientation of IT

1. There is a downward trend in the number of theses
   There were 542 theses completed in Phase I (2004~2008 academic year), which include 531 master's theses and 11 doctoral dissertations. There were 450 theses completed in Phase II (2009~2013 academic year), which include 444 master's theses and 6 doctoral dissertations.

2. Research topics are broadened but it is doubtful whether in-depth studies are enough
   As shown in Table 2, the cumulative percentage of high-frequency keywords in Phases I and II are 4.02%, 4.41%, respectively.

Table 2: The frequency of IT keywords

| Frequency | Phase I (2004~2008) | | | Phase II (2009~2013) | | |
|---|---|---|---|---|---|---|
| | Number | Cumulative Frequency | Cumulative % | Number | Cumulative Frequency | Cumulative % |
| 25~29 | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| 20~16 | 1 | 1 | 0.08 | 1 | 1 | 0.10 |
| 10~15 | 12 | 13 | 1.07 | 14 | 15 | 1.44 |
| 6~9 | 24 | 37 | 3.03 | 31 | 46 | 4.41 |
| 5 | 11 | 49 | 4.02 | 13 | 59 | 5.66 |
| 4 | 30 | 78 | 6.39 | 19 | 78 | 7.48 |
| 2~3 | 156 | 234 | 19.18 | 143 | 221 | 21.19 |
| 1 | 986 | 1220 | 100.00 | 822 | 1043 | 100.00 |
| 1 | 949 | 1,167 | 100.00 | 895 | 1,097 | 100.00 |

3. Research focuses have moved toward game/toy-based e-learning
   The clusters in Figure 3 (left) are scattered, while the nodes in the cluster of game/toy-based e-learning have high closeness. It indicates that from Phase I to Phase II research focuses have moved toward game/toy-based e-learning.



● digital signature
■ instructional content and models
▲ learning environment and four arithmetic
   operations
▦ learning effectiveness and attitude
▼ information technology and instruction
◆ knowledge management and sharing
■ wide web-based instructioanl models

● game/toy-based e-learning
■ media-based curriculum planning
▲ learning effectiveness and attitude
▦ m-learning devices
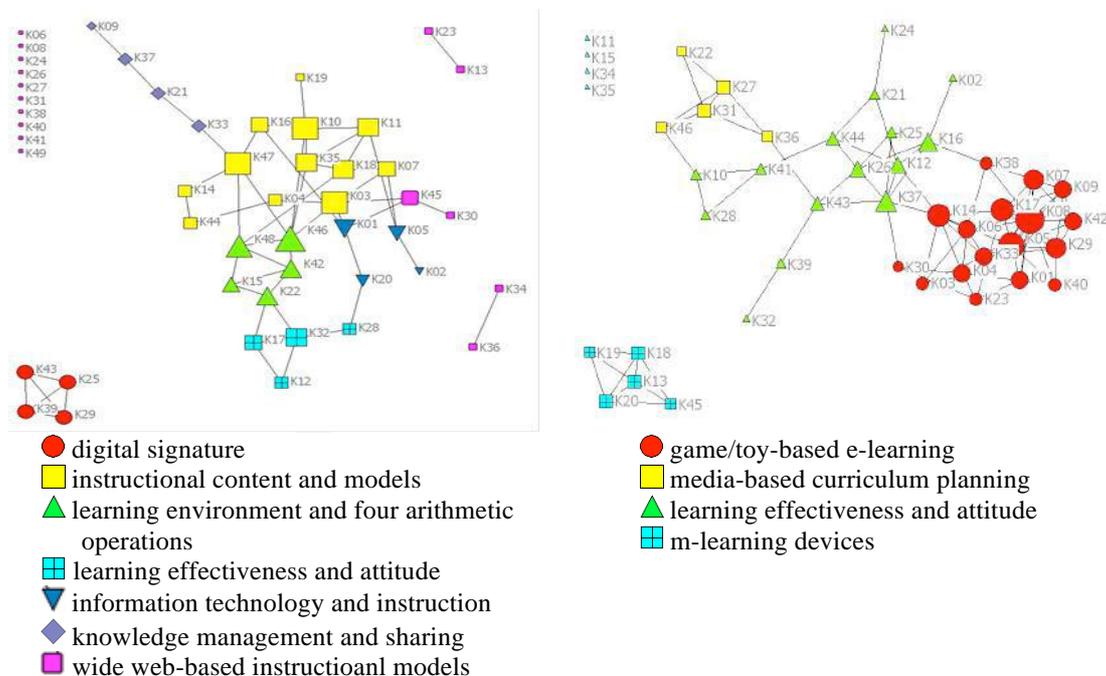
Note: The keywords in the above two maps are listed in Appendix 2.
    Figure 3: The network maps of IT clusters in Phases I (left) and II (right)

A Concern about the Nature of the Departments Producing the Theses Analyzed

Basically, the departments producing the theses analyzed in this study also prepare LT or IT teachers for primary and secondary schools, who are expected to promote technological/information literacy education. However, few research topics regarding teacher education and technological/information literacy are found in this study (Fang & Lee, 2014).

**Conclusion**

In conclusion, the results of this study are as follows: (1) The number of LT's and IT's theses and dissertations significantly declined; (2) LT's research topical focuses have moved to e-learning, while IT's research focuses have changed from universal e-learning to game-based e-learning; (3) The connection between research sub-areas and theme in either LT or IT is not well-structured; and (4) The research topics completed are in lack of teacher education and technological/information literacy.

On September 18, 2013, Cindy Sui in her commentary report on BBC, entitled "Taiwan's struggle to become an innovation leader", raised the question "Taiwan became a manufacturing powerhouse and the centre of the world's laptop production. But it's a difficult place to launch successful start-ups. Can it rise to the challenge?"

When the authors read the report, the slogan in the advertisement of DuPont, "Together, we can solve the world's greatest challenges.", was posted beside the report. Certainly, working together can make a difference and Technology Education research should be a part of it to promote technological development and technology education in Taiwan.

The results of this study can be used by the technology educators in Taiwan to identify what they should focus on to promote technology education research studies. In addition, the method used in this study can be employed in all academic fields to identify their trends and issues.

**References**

Fang, Y. S., & Lee, L. S. (2014). Research trends of thesis and dissertation in the changing departments of technology education in Taiwan: A co-word analysis. *Bulletin of Educational Research, 60*(4), 99-136.

He, Q. (1999). Knowledge discovery through co-word analysis. *Library Trends, 48*(1), 133-159.

Price, D. J. (1965). Networks of scientific papers. *Science, 149*(3683), 510-515.

**Acknowledgement**

Appendix 1.
The keywords/nodes in Figure 2--Phases I (left) and II (right)

| Cluster | Number | Keywords | Cluster | Number | Keywords |
|---------|--------|----------|---------|--------|----------|
| ●(1) | K02 | competency | ●(1) | K09 | action research |
| | K03 | delphi method | | K39 | cooperative learning |
| | K08 | e-learning | | K47 | project-based learning |
| | K11 | key success factors | | K48 | information technology |
| | K12 | concepts | ■(2) | K16 | unified theory of acceptance and use of technology |
| | K14 | indicators | | K24 | competency |
| | K18 | temporary employment | | K26 | living technology |
| | K25 | knowledge management | | K28 | career development |
| | K27 | education and training | | K29 | junior high school student |
| | K37 | non-profitable organization | | K33 | attitude |
| | K38 | organization change | | K38 | energy saving and carbon reduction |
| | K46 | competency model | | K43 | technological creativity |
| ■(2) | K04 | creativity | | K44 | analytical hierarchy process |
| | K05 | technological creativity | ▲(3) | K02 | knowledge sharing |
| | K16 | problem-solving | | K20 | innovative behavior |
| | K20 | structural equation modeling | | K23 | organizational innovation |
| | K30 | human resource | | K25 | knowledge management |
| | K31 | technology acceptance model | | K27 | organizational learning |
| | K33 | personality | | K37 | mentoring functions |
| | K34 | information technology | ▦(4) | K04 | e-learning |
| ▲(3) | K09 | learning effects | | K05 | learning motivation |
| | K15 | career development | | K06 | learning effectiveness |
| | K22 | learning satisfaction | | K08 | satisfaction |
| | K44 | learning motivation | | K17 | learning attitude |
| ▦(4) | K13 | organizational commitment | | K18 | technology acceptance model |
| | K28 | vocational values | | K21 | augmented reality |
| | K40 | turnover intention | | K30 | learning style |
| | K41 | job satisfaction | | K42 | interactive whiteboards |
| | K42 | job stress | | K46 | internet addiction |
| | K47 | value | ◆(5) | K01 | organizational commitment |
| ◆(5) | K01 | living technology | | K03 | job involvement |
| | K06 | technology education | | K07 | turnover intention |
| | K10 | science and technology | | K10 | organizational citizenship behavior |
| | K17 | information integration | | K11 | job benefit |
| | K19 | web-base instruction | | K12 | self-efficacy |
| | K24 | cooperative learning | | K13 | job satisfaction |
| | K29 | satisfaction | | K14 | job performance |
| | K32 | technology concept | | K15 | job passion |
| | K36 | knowledge management | | K19 | organizational |

| | | capability | | K22 | identification |
|---|---|---|---|---|---|
| | K43 | concept maps | | K22 | perceived organizational support |
| | K45 | competence indicators | | K31 | employee engagement |
| | K48 | action research | | K32 | organizational climate |
| | K07 | mobile learning | | K34 | work values |
| | K21 | knowledge transfer | | K35 | job stress |
| ▼ (6) | K23 | web-based learning | | K36 | job characteristic |
| | K26 | influence factors | | K40 | workplace friendship |
| | K35 | problem-based learning | | K41 | internal marketing |
| | K39 | learning style | | K45 | emotional labor |
| | | | | K49 | job contentment |

iafor

Appendix 2.
The keywords/nodes in Figure 3--Phases I (left) and II (right)

| Cluster | Number | Keywords |
|---|---|---|
| ●(1) | K39 | elliptic curve digital signature algorithm |
| | K43 | public key |
| | K25 | PKI |
| | K29 | certificate management |
| ■(2) | K16 | ontology |
| | K47 | Delphi technique |
| | K10 | SCORM |
| | K19 | concept mapping |
| | K14 | e-learning effectiveness |
| | K44 | adaptive learning materials |
| | K03 | project-based learning |
| | K04 | cooperative learning |
| | K07 | programming |
| | K18 | learning styles |
| | K35 | problem solving |
| | K11 | learning effect |
| ▲(3) | K46 | learning satisfaction |
| | K48 | learning motivation |
| | K22 | case study |
| | K42 | situational learning |
| | K15 | addition, subtraction, multiplication, division, fraction |
| ⊞(4) | K28 | multimedia |
| | K32 | mathematics learning attitudes |
| | K12 | mathematics history |
| | K17 | mathematics learning attitudes |
| ▼(5) | K02 | integrating information technology into instruction |
| | K05 | mobile learning |
| | K20 | technology acceptance model |
| | K01 | e-learning |
| ◆(6) | K09 | data mining |
| | K37 | blog |
| | K21 | knowledge sharing |
| | K33 | knowledge management |
| ▢(7) | K30 | data stream |
| | K45 | learning portfolio |
| | K13 | action research |
| | K23 | information incorporating teaching |

| Cluster | Number | Keywords |
|---|---|---|
| ●(1) | K03 | game-based learning |
| | K09 | action research |
| | K06 | experiential learning |
| | K42 | case study |
| | K17 | inquiry-based learning |
| | K33 | ubiquitous learning |
| | K08 | learning attitude |
| | K14 | scaffolding theory |
| | K29 | geometry |
| | K05 | learning effect |
| | K01 | programming |
| | K40 | learning styles |
| | K07 | problem solving |
| | K38 | blog |
| | K23 | scratch programming |
| | K30 | information technology education |
| | K04 | augmented reality |
| ■(2) | K27 | prior knowledge |
| | K31 | cooperative learning |
| | K46 | misconception |
| | K22 | cognitive load |
| | K36 | multimedia materials |
| ▲(3) | K25 | mathematics learning attitudes |
| | K28 | concept mapping |
| | K26 | mistake types |
| | K41 | content analysis |
| | K16 | gender |
| | K10 | remedial teaching |
| | K37 | problem-solving strategy |
| | K39 | symmetry |
| | K02 | spatial ability |
| | K43 | mathematical attitudes |
| | K21 | elementary school students |
| | K32 | reading comprehension |
| | K24 | addition, subtraction, multiplication, division |
| | K34 | online reading |
| | K12 | math learning attitude |

| | | | | |
|---|---|---|---|---|
| K34 | data classification | | K35 | professional development of teachers |
| K36 | genetic algorithm | | K44 | mathematical problem solving |
| K41 | web-base instruction | | K11 | digital game |
| K49 | formative assessment | | K15 | fractional materials |
| K06 | self-efficacy | | K18 | android |
| K40 | instant message | | K20 | mobile forensics |
| K38 | scaffolding theory | | K13 | digital evidence |
| K08 | questioning-assisted instruction | ■(4) | K19 | smartphone |
| K31 | ZMET | | K45 | social network |
| K27 | English e-learning | | | |
| K26 | workflow | | | |
| K24 | mobile devices | | | |

# A Comparison between School Life Activities and GPAs under a New Educational E-portfolio System in University

Noriko Hanakawa, Hannan University, Japan
Masaki Obana, Osaka Institute of Technology

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
Educational e-portfolio is important for Japanese University. Educational e-portfolio accumulates various educational information such as lecture materials, reports, examination results, and lecture notes. However, students spend time not only educational activities but also school life activities such as part-time job, club activities, job hunting, and hobby. These school life activities may influence students' education results.

Therefore, we have developed a new e-portfolio system including educational e-portfolio and school life e-portfolio. Then we compared GPA (Grade Point average) with school life activities. The values of GPA are collected from educational e-portfolio data, school life activities are collected from school life e-portfolio data. As a result, values of GPA in freshmen are related with lecture time and hobby time. In addition, job hunting success is not related with one factor such as GPA, or job hunting time.

**Keywords:** e-portfolio, SNS, GPA, School activity, educational data analysis

iafor

The International Academic Forum
www.iafor.org

## Introduction

Educational e-portfolio is important for Japanese universities. The educational e-portfolio accumulates lecture materials, reports with teachers' comments, examination results, and lecture notes. Students and teachers review their education record and historical data in the educational e-portfolio. The educational e-portfolio is useful to keep high quality education in Japanese universities (R. Brian. von Konsky and O. Beverley(2012), P. Kim, C. Kee Ng, and G. Lim (2010)).

However, students usually spend not only educational activities but also school life activities in universities. School life activities are part-time job, club activity, guidance activity, volunteer activity, hobby, and job hunting. Especially, students have to spend a lot of time for job hunting activity in last year in university. Job hunting is a most important event in their school life. Of course, we can easily expect that school life activities may influence students' educational activities and scholastic attainments. For example, when a student's scholastic attainments are going down in educational e-portfolio data, a teacher images that the student may be busy for job hunting. However, this imagination is an unfounded inference.

Therefore, we try to explore relationship between school life and GPA (Grade Point Average). Values of GPA can present scholastic attainments. We set up two research questions as follows;

Q1: Which activity greatly influences values of GPA ?

Q2: What factors lead smooth success of job hunting?

In order to answer the two question, we have developed a new e-portfolio system that include educational data and school life data with smartphones. The school life e-portfolio system is a new function with shared database with conventional educational e-portfolio system. We explore these questions through a new e-portfolio system that include educational data and school life data.

Section 2 shows our approach, outline of the new e-portfolio system. Related works are described in section 3. Section 4 shows collected data through the new e-portfolio system, and analysis results. We discuss a potential of the new e-portfolio system in section5. Section 6 shows summary and future work.

## Related works

Various e-portfolios for university education have been proposed and applied. Lopez-Fernandez studied to analyze descriptively the undergraduate students' perceptions, attitudes and behavior when using an e-portfolio to support their learning and assessment in practice based courses at two traditional Spanish universities (O. Lopez-Fernandez and J. Luis Rodriguez-Illera (2009)). As a result, the students had positive opinions and self-efficiency through the e-portfolio as a tool to manage their learning and assessment during a semester, especially from the second month of use.

Chang studied to use e-portfolios to enhance university students' knowledge management (KM) performance (C. Chang, K. Tseng, C. Liang, and T. Chen (2013)). The research results revealed that the experimental group outperformed the control group in the performances of overall KM and five KM aspects (knowledge sharing, innovation, acquisition, application, and accumulation). This showed that e-portfolios significantly facilitated KM performance.

Carol developed an e-learning system that couples a blog with a learning e-portfolio (N.L. Carroll, R.A. Calvo, and L. Markauskaite (2006)). They adapted the system to

the first year course education. Because the e-portfolio system is based on web-blog system, massive blog data was accumulated in the system. Rodriguez shows usefulness of e-portfolio in university professional education (S. Rodriguez-Donaire, B.A. García, and S.O. del Olmo (2010)). They claimed that (1) e-portfolio is a complementary tool for student's assessment, (2) e-portfolio is a perfect follow-up device to check student's competences development throughout their degree studies. The other researches also claim benefit of e-portfolio system and analysis data. Shroff analyzed students' behaviors in examinations using e-portfolio system (R. H. Shroff, C. C. Deneen, and E. M. W. Ng (2011)), Alexiou studied beneficial e-portfolio system in university education (A. Alexiou and F. Paraskeva (2010)).

These studies are conventional education e-portfolio system. The usefulness and effects of educational e-portfolio have already been clear. Therefore, we try adding a new function of the school life e-portfolio to the conventional education e-portfolio in order to support the whole of university school life for students.

## Approach

In order to answer the above two questions (Q1 and Q2), we have developed a new e-portfolio system with smartphone. The new e-portfolio system is based on the conventional educational e-portfolio system. School life e-portfolio has been added to the conventional educational e-portfolio system. The database are shared among educational e-portfolio and school life e-portfolio. Figure 1 shows an image of the new e-portfolio system.
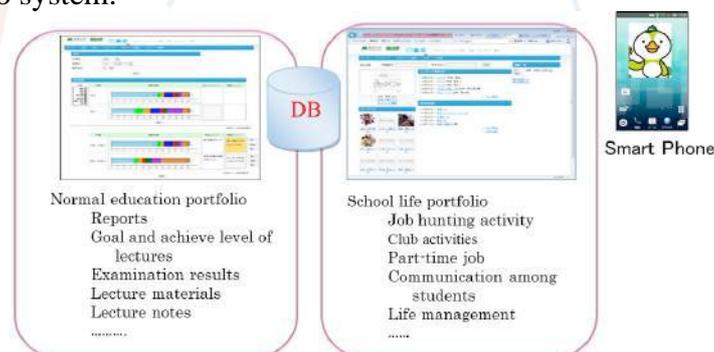


Figure 1 An image of the new e-portfolio system

Next, we compare scholastic attainment with school life data for Q1 (Which activity greatly influences values of GPA?). Figure 2 shows an image of the comparison of scholastic attainment and school life data. Scholastic attainment means GPA values that are derived from the educational e-portfolio system, school life data is collected from through the school life e-portfolio system. Then, in order to clarify the relationship between GPA and school life activities, we use correlation analysis technique and clustering analysis techniques.
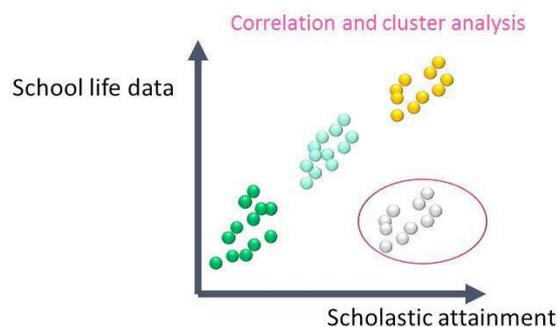
Figure 2 An image of the comparison

After that, for Q2 (What factors lead smooth success of job hunting?), we analyze school life data of fourth year students (See Figure 3). We pick up factors that we expect to cause job hunting success. For example, the factors are GPA (examination results), Part-time job, home study time, and job hunting time. The data of these factors is collected from the school life e-portfolio system. In addition, job hunting success is also collected through the school life e-portfolio system.
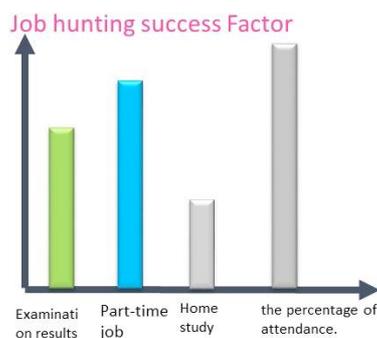


Figure 3 An image of job hunting success factors

**The new e-portfolio system**

In this section, we explain the new e-portfolio system. The new e-portfolio system has four major features. The first feature is that a concierge "Hapinan" in smartphone asks students such as "How are your job hunting?" every day. The concierge select a question based on accumulating data of the school life data. For example, if a student is fourth year, the concierge asks about job hunting. If a student is absent from lectures recently, the concierge asks "Why are you absent from lecture?" Various patterns of the questions will be prepared. However, now, we have prepared basic questions such as "How long are your home study today?", "How long is your hobby time today?", and "How long is your part-time job today?"

Second feature is that students can easily answer the questions through smartphone's speaking recognition function. Students only speak the answers to their smartphones, the school life data is accumulated to the data base of the school life e-portfolio system. Otherwise, students can easily select pull-down menus about the answers in the smartphone.

Third feature is that school life data is accumulated like social network system such as Face book web site. When students use personal computers, or tablet PCs, students can input daily activities as their school life data similarly SNS web sites. Of course,

the school life web sites can connect to friends and teachers. The School life web site is a kind of powerful communication tool in our university.

Fourth feature is a comparison function between educational e-portfolio data and school life e-portfolio data. Because the educational e-portfolio database is shared with school life e-portfolio data, we can easily analyze relationships between educational data and school life data. For example, GPA can easily be compared with various school life data such as home study time, hobby time, and club activity time. Teachers and school advisors can see students' problems in their university life.

**Collecting Data for analysis**

Using the new e-portfolio system, we collected data in two phases. The first phase and the second phase as follows;
- First phase
  - Period: April 2013 – September 2013.
  - Target: Fourth year students who have to do job hunting.
  - Num. of target students: 11
- Second phase
  - Period: April 2014 – September 2014.
  - Target: First year students.
  - Num. of target students: 1296 (all freshmen in our university)

The number of target is small in the first phase because the new e-portfolio system was not completed yet in April 2013. Therefore, this phase is trial version. In contrast, the second phase' target is large because the new e-portfolio system was completed in April 2014. Target was all freshmen in our university.

**An analysis result for the first question**

Q1 : Which activity greatly influences values of GPA?
In order to answer the Q1, we have compared values of GPA with school life data using the new e-portfolio system. The results shows Figure 4.



(1) Relationship of the number of input data  (2) Relationship of lecture time  (3) Relationship of hobby time

(4) Relationship of part-time job time  (5) Relationship of home study time
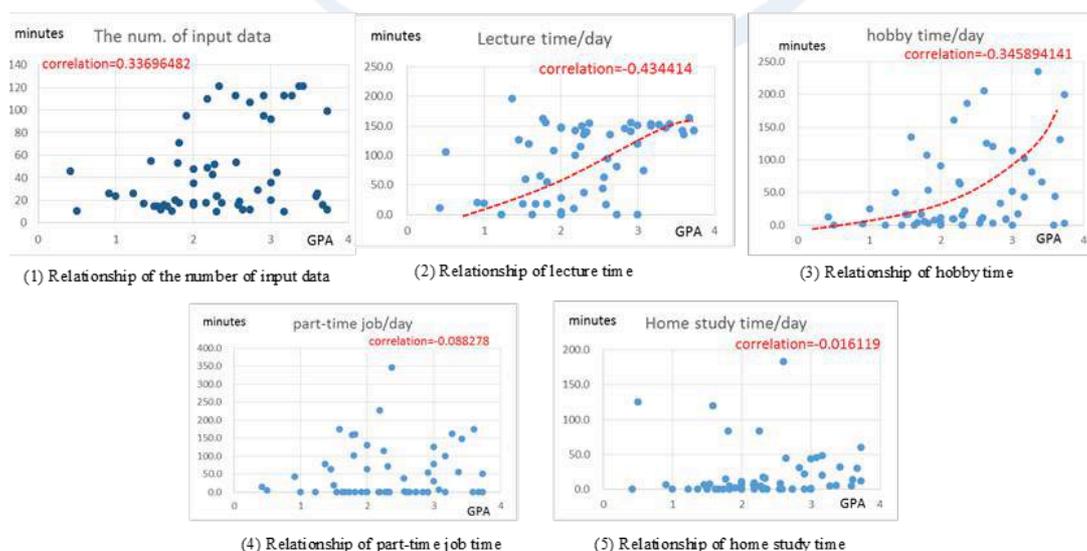
Figure 4 Comparisons between GPA and school life data

We have compared values of GPA with for school life activities;(1) frequency of input school life data, (2) lecture time, (3) hobby time, (4)part-time job time, (5)home study time.

(1) Relationship between GPA and the number of input school life data

At first, we compared GAP with the number of input school life data. The number of input school life data means students' frequency of inputting school life data to the new e-portfolio system. We expected that earnest students for learning are earnest about inputting school life data. The values of GPA have weak a relationship with the number of inputting school life data. The value of correlation was 0.34. As our expecting, earnest students for learning are earnest about inputting school life data.

(2) Relationship between GPA and lecture time

Next, we compared GPA with lecture time. Lecture time means average time of taking lecture a day. For example, if lecture time is 3 hours, the student takes lectures 3 hours every day. Teachers easily expect that GPA is better as lecture time is more. As their expectation, values of GPA had weak relationship with lecture time. That is, earnest students for lecture have better GPA.

(3) Relationship between GPA and hobby time

We compared GPA with hobby time. Hobby time means time that students spend leisure such as sport, reading books, fishing, picnics, and driving by car. We expected that leisure prevents students from learning, because leisure is not directly related to learning. However, values of GPA had weak relationship with the hobby time. That is, students who play hobby much time have better GPA. This is a result unlike our prediction.

(4) Relationship between GPA and part-time job

Next, we compared GPA with part-time job time. The part-time job time means an average time of part-time job a day. For example, if the value of the part-time job time is 1 hour, the student spend 1hour for part-time job every day. Our expectation is that long part-time job prevents students from learning. However, there is no clear relationship between GAP and part-time job. A student who spend much time for part-time job does not always have low GPA.

(5) Relationship between GPA and home study time

Of course, we expected that home study time greatly influences GPA. We think that home study is important for every students. However, relationship between GAP and home study time was not clear. A student who spend much time for home study does not always have high GPA.

In summary, we found that students who earnestly take lectures, and earnestly play hobby have good values of GPA. Part-time job and home study do not clearly influence values of GPA. Here, we reconfirm a limitation of this analysis result. The target is freshmen in our university, moreover, the period from April to September is first season of the freshmen. In limitation of starting new school life for freshmen, these analysis results are available.

**An analysis result for the second question**

Q2 : What factors lead smooth success of job hunting?

At first, we explored actual condition of students' job hunting activities. Using data accumulated in the school life e-portfolio, we investigate (1) how long do students spend time on job hunting?, (2) relationship between total time of job hunting and job hunting success, (3) relationship between GPA and job hunting success.

(1) How long do students spend time on job hunting?

We investigated time on job hunting. Students spent about 40 hours a week at job hunting peak period. A student spent 100 hours a month for job hunting. The maximum time on job hunting was greatly over our prediction.

(2) Relationship between total time of job hunting and job hunting success,

Next, we investigated relationship between total time of job hunting and job hunting success. We found that total time of job hunting was not related with job hunting success. For example, a student who spent maximum time on job hunting did not succeed in his job hunting. Of course, he get a job, however, the job was not his favorite job. And he succeeded his job hunting at late period of the fourth year. Therefore, a student who spends a lot of time on job hunting does not succeed his job hunting.

(3) Relationship between GPA and job hunting success.

We easily expected great relationship between GPA and job hunting success. However, there was no clear relationship between GPA and job hunting success. For example, a student who had a high value of GPA did not succeed his job hunting. In contrast, a student who had a low value of GPA succeeded his job hunting at early period of fourth year. A good value of GPA did not always lead job hunting success.

Therefore, we did not find clear factors of job hunting success. Of course, the number of the target is 11 in the first phase. The number of the target is too small. However, we found difficulty of finding job hunting success factors. One factor does lead job hunting success. At least, a simple factor such as GPA, job hunting total time does not lead smooth success of job hunting. We found that complicated relations among several factors may lead job hunting success. We have to continue investigating the factors for job hunting success using accumulated data in the new e-portfolio system.

**Works in future**

The new e-portfolio has been just started at April 2014. Accumulated data is not sufficient. If the new e-portfolio system continues running for four years, we will see individual historical data of not only educational data but also school life data (See Figure 5). When a student becomes forth years in our university, the student can see change of GPA for four years. For example, at a later half period of second year, GPA was lowest. The student can review how he spent time in school life in the historical data. The student found his problems in his school life. For example, because he spent a lot of time for part-time job, he was frequently absent from lectures. Therefore, GPA was low. In contrast, at fourth year, his GPA improved. Because he faced his job hunting activities, he earnestly studied in lectures. His historical educational data and school life data present in such charts. Teachers and school advisors can also advice students with the historical charts. Problems of students in university life will be shared among students, teachers, and school advisors.
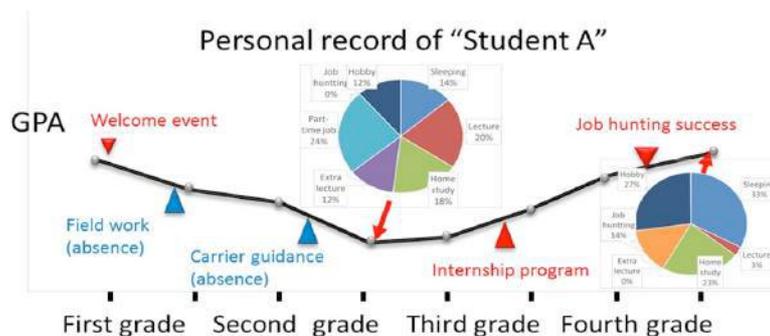
Figure 5 Historical data of education and school life

**Conclusion**

We have developed a new e-portfolio system including educational data and school life data for university education. A feature of the new e-portfolio system is a concierge in smartphone. The concierge asks students various questions every day. Students can easily input their school life data every day. In order to clarify relationship between GAP and school life, we have collected educational data and school life data in two phases. Within the limits of freshmen, students who earnestly take lectures, and earnestly play hobby have good values of GPA. In addition, students spend 40 hours on job hunting a week, maximum time on job hunting was 100 hours at the peak period. At least, a simple factor such as GPA, job hunting total time does not lead smooth success of job hunting. Complicated relations among several factors may lead job hunting success.

In future, we will present individual historical charts including educational data such as GPA and school life data. Teachers and school advisors will be discuss improvement of students' school life with students using the historical charts in the new e-portfolio system.

## References

R. Brian. von Konsky and O. Beverley(2012). The iPortfolio: Measuring uptake and effective use of an institutional electronic portfolio in higher education, *Australasian Journal of Educational Technology, Vol.28, No.1, pp.67-90.*

P. Kim, C. Kee Ng, and G. Lim (2010). When cloud computing meets with Semantic Web: A new design for e-portfolio systems in the social media era, *British Journal of Educational Technology, Vol.41, Issue 6, pp.1018-1028.*

O. Lopez-Fernandez and J. Luis Rodriguez-Illera (2009). Investigating university students' adaptation to a digital learner course portfolio, *Computers & Education, Vol.52, Issue 3, pp.608-616.*

C. Chang, K. Tseng, C. Liang, and T. Chen (2013). Using e-portfolios to facilitate university students' knowledge management performance: E-portfolio vs. non-portfolio, *Computers & Education, Vol.69, pp.216-224.*

N.L. Carroll, R.A. Calvo, and L. Markauskaite (2006). E-Portfolios and Blogs: Online Tools for Giving Young Engineers a Voice, *Information Technology Based Higher Education and Training, 2006. ITHET '06. 7th International Conference on, pp.1-8.*

S. Rodriguez-Donaire, B.A. García, and S.O. del Olmo (2010). e-Portfolio: A tool to assess university students' skills, *Information Technology Based Higher Education and Training (ITHET), 2010 9th International Conference on, pp.114-124.*

R. H. Shroff, C. C. Deneen, and E. M. W. Ng (2011). Analysis of the technology acceptance model in examining students' behavioral intention to use an e-portfolio system, *Australasian Journal of Educational Technology, Vol.27, No.4, pp.600-618.*

A. Alexiou and F. Paraskeva (2010). Enhancing self-regulated learning skills through the implementation of an e-portfolio tool, *Procedia - Social and Behavioral Sciences, Vol. 2, Issue 2, pp.3048-3054.*

The Quilombola School and the Confrontation of Prejudice: A Management Experience in a Riverine-Quilombola Community

Luciane Teixeira da Silva, UFPA, Brazil
José Bittencourt, UFPA, Brazil

**Abstract**
The discussions developed in this paper evolved around the management experience of a *quilombola* school located in a remnant community in the municipality of Abaetetuba, in the state of Pará. Owing to its location in an island, it serves the *quilombola* and riverine residents (non remnants). Some events of prejudice involving students' parents and students were experienced and reported by the school director, who took steps to overcome the situation through dialoguing. This paper was based on a qualitative research developed by means of observation, interviews and document analysis. The main reflections presented refer to the fact that the management of a *quilombola* school involves sensitivity to perceive the problems of the community and attitude to bring them into the school context in order to be debated and challenged.
**Keywords:** Quilombola education; prejudice; educational management.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

To think and produce education in a quilombola community it is necessary to listen, feel and understand the claims that emerge from the context – and that can touch our conscience elicited by our senses of vision and hearing – in terms of educational needs from children, youngsters, elderly people and leaders. This way, we also need to understand the quilombola education with focus on identity and diversity.

The focus on *identity* is justified by one dimension that is shared by all quilombolas and comprises the relationship with the land, territoriality and their condition of citizens of rights. This shared dimension of identity converges towards the idea of ethnic identity by Gaspar:

> (...) Ethnic identity is a process of self-identification not limited to material or biological traces, such as the skin color, for example. They are communities, which have developed resistance mechanisms to preserve and reproduce their peculiar way of life, in a certain location (GASPAR, 2011, p. 45).

Quilombolas are, therefore, defined as social groups whose ethnic identity – common ancestry, specific social and political organization, linguistic, religious and cultural elements – distinguish them from the other social groups. These factors foster our broader comprehension of diversity as different cultures coexist all through Brazilian territory and every community is singular in its identity and dynamics. The ethnic-racial relationships and the cultural diversity in our country impose to the Brazilian nation, the duty to build policies and practices that effectively assure the constitutional principles that imply: promotion of general social wellbeing with no form of discrimination – race, gender, age or ethnic origin. Both State and school are expected to ensure, to all citizens, the right and respect to their cultural traditions, diversity and identity. These are in fact, constitutive parts of our political, historical, social and cultural development process.

This paper is part of my master dissertation and ensues from documental analysis, bibliographical research and interviews with the manager of a quilombola school in the Municipality of Abaetetuba, in the state of Pará. The main focus of the paper is to present the events of racial prejudice experienced by the school manager and the steps taken to deal with and face them. Dialoguing and education proved to sensitize parents and students in the confrontation of this issue.

**About Education in the community and at school**

Before I go deeper into describing Santo André School, it is opportune to present a brief historical background about the schools and the education in the community. This retrospection allows us to perceive the importance of both aspects to the residents as well as how they achieved the right to them.

According to Nunes; Santos; Pimentel (2011), the teaching in quilombolas remnant communities dates from 1963 in Abaetetuba, where there were initially improvised classrooms inside the houses, using precarious teaching materials and lay teachers. These arrangements, however, were extremely important for the process of literacy and schooling of children and youngsters of the region.

In the seventies, supported by the municipal administration of Abaetetuba, the national program MOBRAL[1] was implemented in the community. In the beginning of

---

[1] MOBRAL: Brazilian Alphabetization Movement

the eighties, the first school was inaugurated, still under precarious conditions, with multilevel groups and without the school meal system or didactic resources.

For some years, the situation remained unchanged and only primary school [2] education was offered – from 1st through 4th grades. For many students, reaching the 4th grade meant the very end of their educational trajectory. Those who could afford continuing their studies had to move to other cities. To tackle these difficulties, the community took steps to implement the expansion of primary school – from 5th through 8th grades, and secondary school. This was the birth of the SOME[3] Project in the community, sponsored by the government of the state of Pará, which offered classes from the fifth through the eight grades. In the following year, the secondary school was implemented in its regular format, but still operating in a school far way from the community and under limited conditions.

Santo André School, a public school from the Municipality of Abaetetuba, serves seven communities in the region, offering both early childhood education, and classes from the 1st to the 5th grades. Classes ranging form the 6th to 9th grades as well as secondary level education are offered in partnership with Bem Vinda School located in the urban center of Abaetetuba. This partnership is twofold and results in positive and negative aspects for the community. On one hand, the offer of education opportunities in the community is very beneficial as it allows students to remain and finish their basic education in own place. On the other hand, the partnership restricts the reception of funds by Santo André School. This is due to the fact that students enrolled for the partnership program are registered as Bem Vinda's students. This represents a significant financial loss, but according to the manager, it was a necessary articulation for the benefit of education of children and teenagers of the community.

Currently, there is a process going on with the purpose of settling this situation and turning the school into an autonomous unit, that is, a quilombola school, in fact. In addition to the financial implications, there are also the pedagogical ones concerning the course curriculum of those grades offered in partnership. Urban schools offer a course curriculum and a board of teachers that are coherent to a distinct reality, thus preventing a comprehensive and desired work aligned with the purposes and principles of a quilombola school.

This situation, in fact, evolves in opposite direction to that of the educational pre-established quilombola principles as predicted in the following articles of the CNE-CEB/2012:

> IV – preferential presence of quilombola teachers and managers in quilombola schools and in schools which receive student coming from quilombola territories; VI – ensuring of quilombola students' empowerment in political-pedagogical processes at all stages and modalities; VII – implementation of an open, flexible and interdisciplinary course curriculum, elaborated with a focus on the articulation of the knowledge transmitted at school and the knowledge s naturally constructed within the quilombola communities.

In addition, the educational unit is recognized as a quilombola school, but it does not have a coherent and specific curriculum, teachers or school meal that correspond to

---

[2] Primary school in Brazil "*Ensino Fundamental*" is divided into two segments. I – ranging from 1st to 4th grades and; II – ranging from 5th to 8th grades (ate the time). In 2006, it was expanded to 9 levels.
[3] SOME: Modular system of organization of educational sponsored by the state government.

the quilombola reality and needs. These are legitimate demands, which have been granted by law, but are still unfulfilled.

It is possible to evidence a great effort on behalf of the school towards a sensibilization work with the students – from very elementary levels through the 6th grade – about the quilombola reality. This process of sensibilization and identity awareness involves bringing back folk stories, historical facts reported by the old residents of the community, traditions and festivities, with special emphasis to dialoguing with riverine students who are not quilombolas. It is intended to be a school for all, which does not exclude, but has the main purpose of preserving their identity.

**The issue of racial prejudice at Santo André Quilombola School.**

Another aspect which has called our attention were the narratives collected among the quilombola students expressing events of prejudice coming from riverine students. Some parents of non-quilombola students were reticent in enrolling their children. The manager describes some situations as follows:

> It is one same space shared by all, so, in the beginning, some parents did not want to bring their children because they thought they would suffer those common punishments of the old times.
>
> When we talk about quilombo, you know what that means; you know the story of quilombos who were slaves. If they committed a crime, there was a tree trunk, put him there, tie him there and so on. They thought these things would happen here. Lately, some people were coming here and as they entered, they kept looking around, and we became suspicious. What is this person looking for? Maybe he is trying to find a tree trunk here, if there is something to tie the students to. This is past. History that is gone.

Besides this situation of prejudice, lack and distorted information the, manager reported situations when remnants from quilombolas denied their own culture. For example, to enroll students it is necessary to provide a self-declaration stating that the student *is* or *is not* a quilombola. This is done in a specific form where parents have to tick the appropriate option in a box and some of the quilombolas filled the options 'white', '*mulatto*' or 'non quilombola'. These parents have not been asked why they did so, but the school secretary and manager infer that they might have been moved by the fear of being discriminated for their natural and ethnic conditions.

> There were parents who were ashamed of letting their children know about their origin, or that they had suffered; many are ashamed to say what they have experienced in life. I think this fear of letting the children know about these facts is because, even today when we talk, many parents transmit this idea to the kids, so at that time they did not want to say they suffered, they grieved, they ran away from one place to the other not to be captured, some people still transmit this idea, but it has changed a lot in fact, we see there are people that are ashamed, then after it has been recognized now we are trying to rescue...

In classroom, there were moments when teachers spoke specifically about the slavery and the first quilombos. Then, the condition of remnant quilombola was denied by some students who preferred to self declare as non quilombolas and avoided taking part of the class. Some of these situations are reported as well as the attempt to solve them

Some of these situations and the attempts to solve them have been reported, as illustrated bellow:

> First, we start by the student who comes from the early childhood education levels, so that he starts getting familiar with the idea and when we start with this work we also have to make an investigation to check where the student's father comes from, if it is from this side or the other, because there are fathers who guide, *if they say something you say you are not, it is too much trouble, you now*. This is the point where we still have a lot of difficulties you now. One day, we saw students discussing because they lived on different sides, and even the skin color was a bit different one from the other, then they discussed, we tried to reconcile, oh it cannot be like that, it is about the prejudice, really, racism, we say look, this should not exist here, the school is for all (...).

The reality which echoes in the voice of the manager and that ensues from his experiences shows us how prejudice has affected the remnant quilombolas to the point that they were capable to deny their own ancestry and their own history risking the continuity of their community history. That is, if stories are not told any longer to the teenagers and children, how can their identity be preserved? This is why Education and the school play a crucial role for the community, for it is in the school that the transformation process of reality starts.

For this reason, the quilombola school education should have the social, cultural, historical and economic values of the quilombola communities as references. To make it possible, the school needs to become an educational space that fosters: effective communication between community knowledge and school knowledge, culture preservation, fights for rights to the land and territory, work and sustainable development. The education promoted by the school must reflect the aspirations of the community, even if it accepts non- quilombola students. Education and respect are regarded as the essential means in confronting racism and prejudice.

As it was stated in the beginning of this paper, we must be sensitive enough in order to learn, see, listen and understand what is intrinsic to the community residents' aspirations and needs. Openly welcoming and understanding the remnant quilombolas and non-quilombolas together in the school may be the key actions to achieve this intent. By doing so, the school shows its receptiveness to diversity and gives its first step against prejudice. Furthermore, this attitude means facing the challenge of working with diversity, one that was accepted by the manager, who, in the face of the situations lived has proved once again that education, dialogue and affirmative actions are necessary for defying prejudice.

**References:**

ALMEIDA, Alfredo W. B. de. Os Quilombos e as Novas Etnias. In: O'Dwyer, Eliane Cantarino. Quilombos: Identidade Étnica e Territorialidade. Rio de Janeiro, Editora FGV, 2002**.**

BRANDÃO, C.R. Identidade e etnia: construção da pessoa e resistência cultural. São Paulo: Brasiliense, 1986

GASPAR, Lúcia. *Quilombolas*. Fundação Joaquim Nabuco, Recife. Disponível em: <http://basilio.fundaj.gov.br/pesquisaescolar/>. Acesso em: 28 de dezembro de 2013.

NUNES, Raquel Mesquita; SANTOS, Solange da Costa; PIMENTEL, Valéria Cardoso O Ensino na Comunidade Quilombola do Itacuruça no Municipio de Abaetetuba. Editora Realize. 2010.
<http://editorarealize.com.br/revistas/fiped/trabalhos> Acesso em 27 de dezembro de 2013.

NAHUM, João Santos. De ribeirinha a quilombola: dinâmica de comunidades rurais na Amazônia paraense. Campo Território: revista de geografia agrária, v. 6, n. 12, p. 79-103, ago., 2011.

POJO, Eliana. ELIAS, Lina. Atravessando pelas água de Abaetetuba: Caminhos de uma pesquisa etnográfica. Artigo apresentado do XXI encontro de pesquisa educacional do norte e nordeste, 2013.

ROSA, Edna Ferreira. Comunidade quilombola Kalunga: entre o direito étnico, políticas públicas e a legislação ambiental. *Revista de Direito Agrário*, Brasília, D.F, ano 20, n. 21, p. 31-79, 2007.

# Training on Demand in the Context of the Ongoing Training of Teachers: An Original Design in an Inclusive School Setting

Régine Clottu, University of Teacher Education, Switzerland

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

This research studies the specifications of the practices related to the conception of training *on demand* in the field of continuous training of teachers. Training *on demand*, has the particularity of adapting itself to the problems of professionals. The analysis of the demand faces the inherent complexity of the different contexts as well as the diversity of the relevant professionals. The concept of training, seeks to articulate the problematic provisions of teachers, in order to enable the development of skills. This oral communication emphasizes relevant elements based on a case study to show how the trainer who designs the concept takes into account factors present during the conception i.e. the various aspects of context, contents and students.

The method chosen for the research is qualitative and built related to a specific scholar context in which the teachers have questions and difficulties in their daily work specifically in the field of French language learning and reading. The design of the concept provides various modalities including conferences, discussion groups, and support in the classes in the presence of the pupils. Attendant measures to support the teachers in regular classes are provided by specialized professionals. As the schoolchildren come from a great number of cultures, speak diverse languages and attend the courses of regular schools near their homes, this layout takes place in an inclusive context. This layout aims at enabling the teachers to develop reflective practice.

**Keywords**

Adult education, demand analysis, conception, layouts, inclusive school context

## Introduction

This research examines the specific practices related to the design of training in the field of teacher's continuous training through six case studies.

All of them investigate ongoing training in an inclusive context. Different aspects were considered. The first case study examines the characteristics of school climate, for example concerning relations between pupils, between teachers and pupils, teachers with their colleagues, and relationships with the direction or institution. The second case study presents a project to reintegrate teenagers from specialized classes to ordinary schools. The third examines ongoing training about developmental reading disorder, i.e. dyslexia. The forth focuses on the resources a school can have to progress in the direction of a more inclusive setting. The fifth examines how to support pupils experiencing difficulties and focuses on skills teachers have to develop in this aim.

The sixth case study analyses the practices of a professional named *designer trainer,* Fabian, as he conceives a training to support a school project about language difficulties. In this paper, we will develop this case study's analysis.

## Inclusive context

In Switzerland, different bills of law indicate that handicapped people must not be discriminated against.

The politics order that most children have to go to ordinary schools instead of specialized schools. Therefore, skills to support all children with their differences must be developed in ordinary schools. For that reason, various professionals have to collaborate to receive very different pupils in ordinary classes and answer to their specific needs.

In the state of Vaud, a new law, introduced for the basic teaching to children, has consequences upon the teaching practices. School's teachers have a lot of questions and turn towards ongoing training to have support for reflective practice.

## Research context

School directors, collaborators who are in charge of educational specific sectors and teacher teams request training to discuss their problems and questions related to their daily work. They address a written demand to the University of teacher education, sector of ongoing training, which proposes various courses and also « made-to-measure » trainings.

Enlart (2007) shows the importance of training conception.

« Organizations requirements consist of pushing to adapt offer towards « made-to-measure » and specific trainings. On the other hand, suitable and ready-made training sometimes simply does not exist. In all these cases, conception is at the heart of practice. » (P. 12)[1]

Then professionals of ongoing training, designer trainers, analyse these requests in collaboration with the actors of the schools and create with them an original design to reflect their specific questions. During context and demand analysis, interactions and

---

[1] Les exigences des organisations consistent à pousser vers une adaptation de l'offre, du sur-mesure, du spécifique. D'autre part, la formation idoine, toute prête, n'existe parfois tout simplement pas. Dans tous ces cas, la conception est au cœur du métier. (P. 12)
(Translation by the author)

exchanges usually take place between these actors and the designer trainer. A partnership is often established and different tasks are shared out to create a training that will really take the specificity of teacher's needs in account.

**Providing clues**

For us, it is challenge to understand and follow the reasoning and thoughts of designer trainers during the analysis/conception phase and how they determine choices for their design concept.

We aim at showing how trainers who design the concept « prioritize » or « underestimate » one or more of the three parameters among those present during the conception (Enlart, 2007) i.e. the various aspects of *context, contents* and *learners.*

This reference is a real providing clue of our research and we will show this element in this paper.

We can also mention that this type of « made-to-measure » training have a strong issue i.e. to emphasize on the importance of taking into account problems and questions of the teaching field. It facilitates also training actions built in collaboration and participation. So, the students have the opportunity to contribute to the creation of their own ongoing training.

**Elements of theoretical framework**

a) Reflective practice

When designing the concept, there is no obvious solution. Consequently, the designer trainer has to make sure to use reflexivity in his or her design practice (Schön, 1983, 1996).

Some elements from John Dewey (2004) are relevant relating to design practices. In fact, during design practice, a real « inquiry » attitude is necessary. So, designer trainer has to doubt, avoid anticipated conclusions and pursue systematically the research. Therefore, essential elements of reflexivity are doubt, problem definition and emphasis upon a first provisional hypothesis that will be tested and modified according to new elements.

Also Bourgeois (2013) says that Dewey emphasizes upon the importance of coming and going between thoughts and actions. There is a whole interdependence during inquiry between thoughts and concrete operations.

These are in fact very important elements of reflexivity relating to our research subject.

b) A singular situation and different interactions

The meeting between a designer trainer and school actors is always a singular situation. Barbier & Galatanu (2000) identify three elements in a singular action i.e. *active person, environment and types of actions.*

In sociocognitivist theory, Bandura (2003) proposes a triangle characterized by interactions between *personal factors, behaviors and environment* (p. 17).

His point of view aims at showing how human behavior should be characterized by interactions between *personal factors*, *behaviors* and *environment*. These three factors should permanently influence each other.

Figure 1. Triadic reciprocal causality (Bandura, 2003)
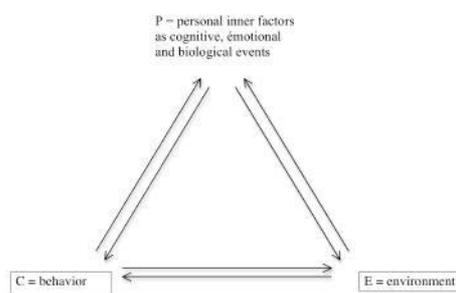


What we can retain of this model are the interrelations between three poles. Individual is indeed characterized by personal capacities inciting him to make a commitment more or less in the action, by previous behaviors and experiments.
This person is going to interact with his or her environment by showing a behavior, which seems appropriate. The environment is going to influence such behavior and individual will reciprocally influence his or her environment. According to Bandura (2003), there is thus reciprocity, but it « does not mean that these three groups of factors have the same impact. Their relative influence can vary according to activities and circumstances. » (P. 17) A temporal factor is important too.
This model applies to all the human activities.
Consequently, we think that these interactions are available also concerning design practices.

c) Conception of training design, a particular case
Enlart (2007) proposes a triangle, which places conception in the center and associates three parameters: *context, contents, learners.* (p. 51)

Figure 2. Conception of training design: a specific activity



In the center is conception. We would say that the designer trainer is placed in the center and interacts with the three poles. In the best case, it seems that these poles could balance each other or in a less favorable case, they could shade mutually according to the importance the designer trainer would attribute to them. But it seems that in the case of this triangle, the main interrelations take place rather between the center and the poles. Indeed, the designer trainer is going to build himself a representation in relation to the singular situation. These elements are fundamental according to conception choices.
Clottu (2013) proposes to add to Enlart's figure elements showing interrelations between the parameters as well as time necessary to create a design. The time

necessary to create a design is long for example several weeks or even several months.
Fabian expresses[2] this fact like that:

> As we are on a school project, it is necessarily long. I want to say, it is like a ship which we have to make turn, to change course. A big ship needs space and time. There is a lot of people to be coordinated.

Figure 3. Conception of training design: interrelations and time
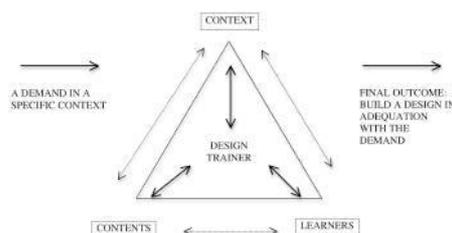


Therefore, the designer trainer examines successively and in interaction with the school actors which elements are relevant in the situation he or she has to analyse relating to context, contents or learners. Are there some substantial difficult problems, some characteristics that he or she *has* to treat during analysis? Which of these elements will be relevant during the phase of creating the design?

d) Critical factors
In design conception, the three parameters are taken into account with diverse ways. In fact, some critical factors related to these parameters appear as *problematic* or *essential*.
« If "something" is particularly relevant, then, the other things lose their relative importance, and the design will be created relating to the critical factor. » (Enlart, 2007, p. 53).[3]
The author states that the way designer trainers articulate these parameters have an impact upon conception choices.

---

[2] Fabian's words are translated by the author.

[3] « Si "quelque chose" est particulièrement marquant, alors le reste perd de son importance relative et c'est autour du facteur critique que l'on va penser le dispositif.» (Enlart, 2007, p. 53) (Translation by the author)

Some examples from the case study illustrate how Fabian perceives these critical factors related to the situation of the teachers who have requested ongoing training. These are not described always as problems but also as essential positive factors.

Figure 4. Critical factors identified by Fabian



**Context**
A project is undertaken where specialized teachers go into three classes to support the pupils and teachers.
Children's families come from complex social situations and a lot of them speak another language at home.
A member of the direction council is in charge of education and training in the school. He sustains the project.

*Designer trainer* Fabian

**Contents**
Teaching about language difficulties and reading ;
Taking into account the differences between children for example cultural differences ;
Let pupils learn through comprehension of their errors without highlighting that they have made faults.

**Learners**
The team of teachers have good communication and collaborate together.
The teachers are stressed and tired : they need to have the opportunity to speak about their difficulties, analyse their practices, develop a reflective practice.

**A qualitative approach**
a) Case studies
To precise the methodology of our research, we refer to Cresswell (2007), who distinguishes five qualitative research types.

1. *Narrative research* : « Studying one or two individuals, gathering data throw the collection of their stories, reporting individual experiences, and chronologically ordering […] the meaning of those experiences » (p. 54).
2. *Phenomenological research*: « A phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon. » (P. 57)
3. *Grounded theory* according to Strauss & Corbin (1998) : « A key idea is that this theory development does not come "off the shelf", but rather is generated or "grounded" in data from participants who have experienced the process. » (P. 63)
4. *Ethnographic research* which focuses on a whole cultural group : « The researcher describes and interprets the shared and learned patterns and values, *behaviors*, beliefs, and language of a culture-sharing group. » (P. 68)
5. *Case study* : « The investigator explores a bounded system (a case), or multiple bounded systems (cases) over time, through details, in-depth data collections involving *multiple sources of informations.* » (P. 73)

We have chosen to realize case studies i.e. to observe a designer trainer as he or she analyses a request from a school. In fact, the approach « case study » seems the most nearby of our research. Indeed, each situation of our six case studies, constitute a

limited system. The beginning and the end are clearly defined. This approach gives the opportunity to observe every trainer in connection with a very precise request.

Fabian is a teacher who is specialized in the field of adult education.

The school concerned is located in a small town where everyday life is not easy when considering economic, cultural and social points of views.

b) Data collection

During the case study, written documents, which show, how Fabian designed the concept, are collected, for example, the e-mails exchanged with a member of the direction council.

An explicitation interview (Vermersch, 1994, 2000) emphasizes the conception choices and the originality of the design.

After the training, some outcomes are described in specific documents.

c) Analysis

Enlart triangle (2007) has been used to establish categories according to Miles & Hubermann (2003), who indicate that « codes are labels, which appoint signification units for descriptive and inferential information compiled during a study. » (p. 112)[4]

So, we have taken in account as starting points Enlart's three parameters, refining them.

According to *context*, we have considered *large* elements as Swiss and state of Vaud legal aspects. Then, we have considered *middle* elements as school characteristics, (organization, pupil's populations…) and school direction (leadership type).

Here are two references from Fabian in relation to school characteristics:

> At the beginning, there were only two or three classes. The simple fact that we transform theses practices into training, it affected the whole school. Thus it made a lot of people.

> The situation was difficult before the beginning of the training, even before they made the request. The situation was this one: pupils' strong proportion of other cultures, and destabilization of the teachers; pupils who had behavior or learning difficulties.

Here is a reference from Fabian in relation to school direction (leadership type):

> There are direction councils, where they say what they are doing, thus the director knew, and by delegation, the dean had practically directorial mandate, and then that worked well.

According to *contents* we have considered general elements (large thematic) and specific elements (after demand analysis, contents taught during the training).

Here is a reference from Fabian in relation to training specific contents:

> At the very beginning, we had realized that it was necessary to work on certain field, for example the co-teaching between special and ordinary education.

According to *learners,* we have considered collective dimension and individual dimension.

---

[4] « Les *codes* sont des étiquettes qui désignent des unités de signification pour l'information descriptive ou inférentielle compilée au cours d'une étude. (Translation by the author)

Here is a reference from Fabian in relation to students in a collective dimension:

> It was really the project of people who were there. They had long-lived questions relating to their situation, they explained the problems, how they saw them.

d) Conception choices

The way Fabian has identified critical factors (cf. figure 4) is directly related to the choices he will operate. So, we remind theses critical factors and put in evidence in *italic characters* the conception choices.

1. Context

A project was created with specialized teachers going into three classes to support the pupils and teachers.

> *The design favors recognized training - not only punctual support - with implication to all classes in the school.*

The children's families are from difficult social situations and a lot of them speak another language at home.

> *As this context is similar for all teachers, the design plans that all teachers would engage themselves in the training.*

2. Contents

Teach about language difficulties and reading.

> *Theoretical elements will be taught at first to teachers speaking about general professional situations.*

Take into account the differences between children, for example cultural differences.

> *Practice analysis will take place every six weeks to fully understand pupils' situations in their classes.*

Let pupils learn through comprehension of their errors without highlighting their mistakes.

> *Contents have to integrate a transversal dimension not only a didactical dimension, for example, errors analysis, observation, learning strategies.*

3. Learners

The teams of teachers have a good communication and collaborate together.

> *The design will give regular formal time for exchanges about professional situations.*

The teachers are stressed and tired: they need to have the opportunity to speak about their difficulties, analyse their practices, develop their reflective practice.

> *Reflective practice has to be developed in the whole design by a lot of exchanges in little groups.*
> *Accompaniment before and during the training is absolutely necessary.*
> *The learners will be in reflective situations at every moment and have the possibility to analyse their difficulties with pupils in interaction with specialized colleague.*

**An original design like a Russian doll**

Fabien qualifies the design as fitting just like « Russian dolls».

> There was co-teaching in the classes, there were small groups, and at times, these small groups had meetings all together. Thus it makes a rather rich structure. [...] Yes, Russian dolls, there is a Russian dolls effect.

This fitting allows that the teachers are practically permanently immersed into the treatment of difficulties, rather than facing them daily. There is an idea of continuity of the reflection and the accompaniment.

Figure 5. An original design



The big doll, of red colour, concerns meetings with all participants. The second doll, of brown colour, concerns practice analysis. The little doll, of green colour, concerns situations that occur in the class at the moment.

**Conclusion**

This training design was conducted for one year and a half. It has stimulated reflective practice and experimentation. It has provided a framework to integrate new approaches.

For Fabian, the one element he thought to be the most essential in relation to all training designs was the accompaniment at all times. He expresses this element in these words:

> I believe in the training by accompaniment. This is the way I do the main part of my work of trainer. […] I propose accompaniment because for me it seems a model, which works very well.

Fabian really develops a posture of « reflective companion », who inducts reflexivity guiding a practitioner to see situations under other angles and walking together around common projects. (Donnay & Charlier, 2008)

Reboul (2005) says that in every domain a value is something that merits efforts, care and personal implication.

So accompaniment for Fabian is a real professional value.

This has an impact on all the designs he creates. In fact, he has been conceiving designs, answering to professional's requests for more than sixteen years.

## References

Bandura, A. (2003). *Auto-efficacité.* Bruxelles : De Boeck.

Barbier, J.-M. & Galatanu, O. (2000). La singularité des actions : quelques outils d'analyse. In J.-M. Barbier & al. *L'analyse de la singularité de l'action.* Paris : PUF.

Bourgeois, E. (2013). Expérience et apprentissage. La contribution de John Dewey. In L. Albarello, J.-M. Barbier, E. Bourgeois & M. Durand. *Expérience, activité , apprentissage* (9-14). Paris : PUF.

Clottu, R. (2014). Conceptrice et concepteur de formations *à la demande* : apprentissages en situation de travail et conséquences sur les dynamiques identitaires. *Savoirs, revue internationale de formation des adultes, 35.*

Clottu, R. (2013). *Pratiques de conception de formations à la demande et apprentissages en situation de travail de conception : six études de cas dans le contexte de la formation continue des professionnels de l'enseignement.* Sous la direction de Sandra Enlart et Etienne Bourgeois. Thèse de doctorat : Univ. Genève, 2013 - FPSE 541 - 2013/09/05, available (except some appendices) on: http://archive-ouverte.unige.ch/unige:30818">http://archive-ouverte.unige.ch/unige:30818 Cresswell, J. W. (2007). *Qualitative inquiry and reseach design.* London : Sage Publications. Ltd.

Dewey, J. (Version française : 2004). *Comment nous pensons.* Paris : Le Seuil.

Donnay, J. & Charlier, E. (2008). *Apprendre par l'analyse de pratiques : initiation au compagnonnage réflexif.* Namur : Presses universitaires de Namur.

Enlart, S. (2007*). Concevoir des dispositifs de formation d'adultes : du sacre au simulacre de changement.* Paris : Editions Demos.

Miles, M.B., & Huberman, A.M. (2003). *Analyse des données qualitatives*. Paris : De Boeck.

Reboul, O. (2005). *Les valeurs de l'éducation.* Paris : PUF.

Schön, D. (1983). *The reflective practitioner. How professionals think in action.* New York: Basic Books.

Schön, D. (1996). A la recherche d'une nouvelle épistémologie de la pratique et de ce qu'elle implique pour l'éducation des adultes. In J.-M. Barbier (Ed.). *Savoirs théoriques et savoirs d'action*. (201-222). Paris : PUF.

Vermersch, P. (2000). Approche du singulier. In J.-M. Barbier & al. *L'analyse de la singularité de l'action.* (239-256). Paris : PUF.

Vermersch, P. (1994). *L'entretien d'explicitation*. Paris : ESF.

**Contact email:** regine.clottu@hepl.ch

# A Comparative Study of Non-Traditional Student Teachers' Social Representations in Brazil, Sweden and Germany

Patrícia Lana Pinheiro, UNESP-Marília, Brazil

## Abstract

It is common to hear that teachers play an extremely important role in society. This statement motivated this doctoral research, whose theme was defined after extensive literature review. There is a lack of educational comparative and international studies that deal with the perception of (future) teachers about what being a teacher is like. In particular, it was noticed the lack of studies in comparative education between Brazil and Sweden, as well as the absence of these studies when it comes to higher education. The objective of this research is to investigate and compare the social representations of non-traditional student teachers on the teaching profession in an educational and compared context between Brazil, Sweden and Germany. The non-traditional nomenclature is used to describe students who were usually deprived from higher education, who have been changing the university scenario because of the mass education phenomenon, and who are the first in their families who enter university. Germany student teachers were included in the investigation because Germany is the largest economic power in Europe. The theories that guide this research are studies in international and comparative education and the theory of social representations of French tradition. The discourse of the collective subject theory guides the analysis of the data collected through semi-structured interviews performed in English, Portuguese and German. Here, we present a partial result of the investigation: the similarities and differences among the social representations about being teachers by non-traditional student teachers in Sweden and Germany.

Keywords: non-traditional students, social representations, teaching, Brazil, Sweden, Germany.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

From the globalization phenomenon on, it is common to see the same trends followed by different countries (STROMQUIST, 2002). Globalization is closely related to neoliberal principles, which became very prominent in the 1990s as a way to reconstruct the economies of the countries around the world after the economic recession of the 1970s and 1980s. These principles argue that the State should be minimized, that financial resources must be used in the most efficient way, that modernization happens through the decentralization of powers and the privatization of companies, and that the development depends on the educational level of the workers, in a way to promote competitiveness and a quest for quality.

The investment in education as a way to promote development is not a new issue. The theory of human capital was a hot topic in the 1960s, a period of strong intellectual movement as well as of modernization post-Second World War. This theory was heavily criticized, but returned in the 1990s as one of the supports for the market in order to justify the need of investment in education.

Hence, the market rules started to govern the policies of different areas in several countries by means of recommendations of big international agencies, such as the World Bank. The quest for qualification led to reforms in higher education in the 1960s and 1970s as well as in the 1990s as a way to prepare more people for the labor market. It was necessary to provide more places for those who were looking for a higher education (HE) degree, as well as to create mechanisms to promote more equality of opportunities by widening the access to HE. It has changed the HE student body, that started to be composed by non-traditional students, and has also changed the functions and the identities of the higher education institutions (HEIs), formerly recognized as places where knowledge and critical thinking used to be constructed, and nowadays seen as places of mere instrumental knowledge (BRON, THUNBORG, 2012; SGUISSARDI, 2008).

There are several definitions for non-traditional students, and all of them refer to students who have a very different background from the elite traditional HE students, because they come from lower class strata of the society, or may have immigrant backgrounds or any disability. Here, beyond these characteristics, they are considered as those who are the first in their families to enter university (BRON, THUNBORG, EDSTRÖM, 2014). Despite the efforts of providing equality through widening the access to HE, the inequalities remain and the non-traditional students still choose professions that have a low status, such as teacher training.

It seems contradictory, because HE should be a way to change their lives and they still choose professions that will not reward them as a very qualified job for the labor market, although teaching is still seen as a very important profession. Hence, it is relevant to understand why it happens, mainly because it has been a borderless trend, because Brazil, Sweden and Germany have experienced the expansion of HE in very similar contexts, and because there is a lack of studies that correlate these three countries.

**Expansion of HE in Brazil**

Brazil is a federative republic of 26 states and a Federal District, whose current president is Dilma Rousseff. It is the fifth largest country on Earth, and has a population of about 200 million inhabitants. It is a country of deep contrasts: poor and rich people share the same areas, but not the same opportunities. This difference in life conditions becomes materialized in some bad consequences, like the increasing violence, the remaining number of about thirteen million people who still do not know how to read and write, and the disgusting results in educational standardized tests.

As one of the ways to minimize these inequalities, the market rules influenced laws and reforms to promote the expansion of HE. First, it is important to explain how the educational system is governed. It is decentralized among the states, HE sector is responsibility of the Union, and the most important educational law is the law number 9.394/1996.

The first big HE expansion in Brazil happened in the 1970s after the HE reform of 1968, regulated by the law 5.568/1968. It happened in a period of intense resistance of student movements against the dictatorship, that gave powers to the Federal Council of Education, which worked according to liberal ideologies supporting private HE. In 1963, there were 39 HEI in the country; in 1971, there were 419 private HEIs in the country; and in 1974, there were 57 universities, of which 32 were public. It means that for the first time in the history of the country there were more enrollments in private HEIs than in public ones (BARROS, 2008).

The end of the dictatorship in 1984 coincided with the period of economic recession, which affected the HE sector. In the 1990s, as a way to recover from the economic crisis, the neoliberal ideologies resurfaced, and again the market rules, through documents written by large agencies like the World Bank, regulated other educational laws. These documents recommended, for example, the diversification of HEIs, the no need to conduct research in HEIs – what is a typical recommendation from an industrialized to a developing country –, as well as the right of education to become a marketable good, that is stated on the decree 2.306/1997. Thus, HE became a billionaire market in Brazil: in 1999, from 1,097 HEIs, 196 were public, 379 were private non-profit HEIs, and 526 were private for-profit HEIs. In 2009, from 2,270 HEIs, 248 were public, and 1,583 were private for-profit HEIs (SGUISSARDI, 2008).

In 2001, a program called Fund for Student Financing (FIES) was created and stipulated in the law 12.260/2001. This program aims at financing undergraduation students in private HEIs with public funding, facilitating their access to HE, in a way to give them more opportunities. According to the same thought, the program University for All (ProUni) was stipulated in the law 11.096/2004 and in the decree 5.493/2005, in order to give full or partial scholarships to undergraduate students of private HEIs, which in turn receive benefits from the government. (MANCEBO; VALE; MARTINS, 2015).

A bit against the HE privatization, a program for the expansion of federal universities was created: the Program of Support for Re-structuration and Expansion Planning for Federal Universities (REUNI), stipulated in the decree 6.096/2007, which aims at increasing the number of students in HE, as well as at the flexibility of the curricula

and at creating distance education. This latter modality was stipulated in the decree 5.622/2005, and the number of enrollments within a period of ten years – from 2000 to 2010 – increased from 6,000 to about 900,000. From these enrollments, about 750,000 were in private HEIs.

The last policy concerning HE access and that has an explicit bias of affirmative action is the law 12.711/2012, that guarantees quotas in public universities for students who come from low social strata and who finished school in public schools. They can also declare their color and background, and can be considered as non-traditional students. The quota policy states that all universities and federal institutes have to reserve the half of their places to these non-traditional students.

Anyway, the number of private HEIs in Brazil is far larger than the number of public ones, and this marketing of the HE leads to some important discussions. The first one concerns the level of quality of the education that is offered, because there is a large demand of contracting teachers, without many criteria of selection, and also because many students arrive at the HE level with many deficiencies from basic education, that cannot be simply fixed (DOURADO, 2002). The second one takes into account the questioning of the functions of HEIs, which have not been seen as a place of formation of critical thinking and knowledge anymore. Instead, it has been transformed into a place of instrumental knowledge (SGUISSARDI, 2008; BRON; THUNBORG, 2012).

**Expansion of HE in Sweden**

Sweden is an industrialized and a low populated country, with about nine million inhabitants. They country charges high taxes from its citizens, but gives them a very good feedback offering them a high quality of life, with almost no violence and with a wide range of public free or very affordable services including health care and education.

Sweden has a large HE tradition, differently from Brazil, where universities were created in the twentieth century. The first large expansion of the Swedish HE sector also happened around the 1960s and the 1970s. After the Second World War, there was an expansion of the educational sector in general, because of the baby-boom generation. It was also a period of economic reconstruction, with the belief of investment in human capital through education (AAMODT; KYVIK, 2005).

In 1977, there was a remarkable educational reform, and after that the number of enrollments in HE increased (BRON; THUNBORG, 2012). There was another expansion in HE in the 1990s, also according to the neoliberal ideas, which guided the educational policies. In 1993 there was another educational reform, and as the expansion in Brazil, in Sweden there was a promise of not only to provide more equality in opportunities for all by widening the access to HE, but also that it was necessary to have more skills to enter the labor market (AAMODT; KYVIK, 2005).

In the school year of 1991/1992, there were about 143 thousand students enrolled in HE in Sweden. In 2000, there were about 257 thousand (KIM, 2004), and it does not stop growing: from 2010 to 2011, the government authorized ten thousand places in HE in Sweden (BRON; THUNBORG, 2012). The massification of HE brought non-

traditional students to the student body. Moreover, since 2001 the HEIs have been supposed to have 10% of their vacancies designed to these students (BRON; THUNBORG, 2012).

However, despite the widening of the access, it is still possible to see inequalities in HE. Working-class students remain underrepresented, and for any reason they still choose to enroll in low status programs, such as teacher training (BRON; THUNBORG, 2012). The number of non-Swedish background does not stop growing either. Another issue is that, as it happens in Brazil, the instrumental approach of HE transforms the very nature of HEIs as a place of critical thinking and knowledge construction (BRON; THUNBORG, 2012). This approach may also frustrate those students who do not get a job when concluding their studies, what may contribute to the high rates of drop-off, because they may stop believing in the university as a good place for the formation they were aiming at.

Regarding the widening access, one possible conclusion is that

> while Sweden has been successful in widening access, on its own it is not sufficient to obtain real equality for certain sections of society such as young men from working class backgrounds […]. One reason for this may be that education, including higher education, is viewed instrumentally by public policy, the labour market and indeed by the students (BRON; THUNBORG, 2012, p. 108).

## Expansion of HE in Germany

Germany is the most populated country in Europe, with about 81 million inhabitants, and it is also Europe's strongest economy, which is export-oriented. The German educational system is very complex: it is decentralized among the 16 states (*Länder*), and it is divided into three main school types: *Hauptschule, Realschule* and *Gymnasium*. Each of these types leads to different possibilities of upper secondary education, as well as to different kinds of HEIs:
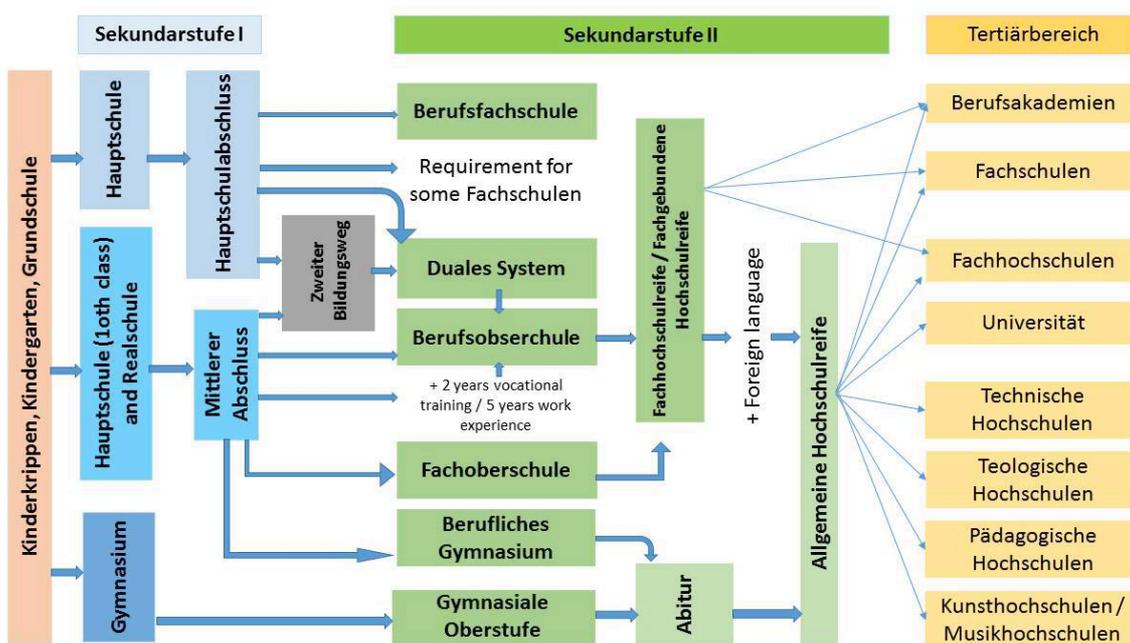


Figure 1: German educational system.

As in other countries of Europe, Germany – especially Western Germany – presented a large expansion of its educational system after the Second World War, mainly because of the baby boom generation. Around the 1960s and 1970s, this generation was ready to enter HE, given that the access to this level depends on secondary school leaving certificates and on the grades of the students. However, with so many students, there was a lack of teachers, and the 1960s were a time of heavy intellectual development. Thus, it was necessary to expand the HE system, also under the argument of investment in human capital in order to promote more development to the country with more qualified professionals in the labor market (DE RUDDER, 1999).

The HE expansion from the 1960s was also a way to promote more equal educational opportunities to the citizens. In order to do it, educational reforms and advertisements were performed, in a way to convince parents to let their children study for a longer time. Parents started to believe that children would have a better future than theirs by continuing their studies. However, despite the efforts towards a more democratic education, which permitted the entrance of non-traditional students in the secondary and in higher education levels, it was common to see lower strata families still more interested in vocational education (DE RUDDER, 1999). Even nowadays, it is possible to see inequalities in HE due to facilities in the access, because the treatment given to non-traditional students is different from those who entered university after concluding *Gymnasiale Oberstufe* (SCHÖMER, 2014).

In 1960, there were about 79 thousand students from West Germany enrolled in the first year of HE. In 1993, this number was of about 170 thousand, what can be explained by the rise in the number of students after the reunification in 1991 (ERTL, 2005). In 1995, there was a decline in the amount of HE enrollments – they were about 166 thousand. This is one of the differences between HE expansion in Germany and in other European countries, and it probably happened because of some reasons: the overqualification of the population; the lack of places for these people in the labour market; the attractiveness of vocational education; and the divided educational system, that imposes barriers to HE access from the beginning of secondary education (ERTL, 2005).

After 1999, the number of enrollments in HE started to grow again, but the main factor for this increase is related to the role of applied sciences HEIs (*Fachhochschulen*). In 2003, about 200 thousand students were enrolled in HEIs. From 1999 to 2003, there was a rise of about 25% in the enrollments in the *Fachhochschulen*, whilst in universities and similar institutions this increase was of about 10% (ERTL, 2005). Moreover, it is necessary to emphasize that the recent increase in HE in Germany is considered low in comparison to this increase in other European countries.

**The theory of social representations as discursive practices**

It is not a simple task to define the meaning of the social representations, particularly when they are referred to as discursive practices. In a very general way, they can be considered as symbolic images that are built and shared within a community, by familiarizing what is not familiar. Also in a general way, discursive practices are the

discourse in action produced by a discursive community, and like the social representations, they consist of what is accessible from reality to the individuals.

Both social representations and discursive practices rely on communication to exist, combining language, thought and interaction for meaning production. According to Moscovici (2007), the beliefs constructed by the individuals must be considered in a collectivity, because they rely on what is common and has already been accepted by this collectivity. These collective and shared beliefs are forms of knowledge about concepts, objects or people oriented to communication and to the comprehension of the social and material context within which we live (MOSCOVICI, 2007; SPINK, 1993).

The social representations are iconic, because they are like images, and they are also symbolic, because they produce meaning. They function as a version of reality, and depend on memories to exist. The process of their construction occurs in a cycle, in a movement that comes from the social, goes to the individual and comes back to the social, in an unconscious way. When a certain thing comes back to the social and when it is shared by the community and becomes familiar, it turns into a social representation. It comes from the social because all the representations and discourses circulate in the collective memory and in the discursive memory. Then it goes to the individual because the cognitive processes as well as the individual memory are important to recognize the new social information. This new social information anchor in the collective and in the individual memories. When it is recognized, it is objectified because it receives a name, and then it goes back to the social. Once it is shared and accepted, it becomes a social representation.

There are several similarities between the social representations and the discursive practices: they are crossed by ideology, they produce meanings in certain circumstances, they rely on memories to exist, they depend on communication and interaction to exist, they are materialized in texts, and they guide the actions of the subjects of a determined discursive community, which produces the discourses (MAINGUENEAU, 2007) and the social representations.

The discourses exist in a discursive memory in the same way that the social representations exist in a collective memory. Subjects have an illusion that what they say has never been said before, what is not true. The meanings are constructed in the relation with the exteriority and concern the contextual conditions. Thus, the meanings do not depend on the intentions of the subjects (ORLANDI, 2007). As it depends on the exteriority, the discourses are never neutral, even when they appear to be so. This is the reason why the discourses do not serve merely for communication, whose relations are intrinsically connected to relations of power.

All the discourses, in order to be produced, follow some regulations, known as discursive formations, that determine what can be said or not from the positions where the subject[1] is when enunciating something. This subject belongs to a discursive community, that is a "place" in which discourses and texts[2] are generated. These discourses are regulated by discursive formations, which spread the organization and

---

[1] The subject is the individual when crossed by the ideologies that exist in the discourses when he/she enunciates.

[2] According to Maingueneau (2007), the discourses can only be analyzed when materialized in texts.

ways of life of the discursive community by means of the discourses that this community produces. For example, the discursive formations may be related to economy, in cases of discursive communities such as companies, or they may be scientific, in cases of discursive communities such as universities. In this article, the discursive community is composed by non-traditional students enrolled in teacher training formation, and the discourses that they produce are ruled by discursive formations that are closely related to the nature of the discursive community they belong to.

The discursive formation can be described as a way people organize themselves, as well as a specific network within the discursive memory for the circulation of the discourses (CHARAUDEAU; MAINGUENEAU, 2008). The discursive formations rule what the subjects can enunciate in determined conditions, and are in a very close relation with the discursive community, to which these subjects belong. According to Maingueneau (2007), the concept of discursive practice covers the concept of discursive formation, because the discourse simultaneously acts and refers to a certain thing, leading to a junction of the world and the discourse.

Hence, the world is accessible to the subjects by means of the discourses, as well as the world and the reality are accessible to the individuals by means of the social representations. Because of this and of all the similarities mentioned above, the social representations can be considered as discursive practices. As they are discourses, the methodology chosen to analyze the data is the theory of the discourse of the collective subject, that is explained below.

**The theory of the discourse of the collective subject (DSC)**

The social representations can be analyzed in very different ways, and the theory of the discourse of the collective subject is one of them (LEFÈVRE; LEFÈVRE 2003). Similarities and differences are noticed when the data are analyzed, and then they are grouped into one synthesis-discourse that responds for all the participants, which represents the meanings constructed and shared by a collectivity.

The DSC combines qualitative and quantitative methods. The former are related to the discursive nature of the social representations in the narratives, and the latter are related to the categorization of the social representations as well as to the number of participants. This methodology comprises some steps:
1. The conductions of the interviews, that must be open or semi-structured, in a way that the interviewee does not feel limited when answering the questions;
2. After transcribing the interviews, the most relevant excerpts, in which the social representations are found, are selected and receive the name of key-expressions (E-Ch);
3. After the selection of the key-expression, the researcher must give a name to the meaning found on them, and these names are known as the central ideas (IC);
4. Once the key-expressions are selected and the central ideas are named, it is possible to analyze how the anchorage (AC) happens, stating that the E-Ch are the social representations shared by a community, and that the IC anchor in the collective memory to produce new meanings;

5. Lastly, the E-Ch, IC and the analysis of the AC are grouped into one single discourse – the synthesis-discourse, which represents a collectivity, despite being written in the singular.

## Data analysis

The analysis conducted in this research is small-scale and interpretative. In Sweden, ten non-traditional students in Stockholm took part in the research. There were three men and four women. Four of the participants are Swedish with a Swedish background, other four are Swedish with a non-Swedish background (from Denmark, Finland, England and Lebanon), and two are foreigners who went to Sweden as adults (one from Argentina and another one from Sri-Lanka). They were interviewed in January of 2015.

In Germany, three non-traditional students were interviewed in Hamburg in March. They are all women. One was born in Kazakhstan, but went to Germany when a child. Another one was born in Germany, but has Turkish background, and the other one is German with German background. In Sweden and in Germany these non-traditional students are the first in their families to enter university, and they all take teaching practice classes.

In Brazil, five non-traditional students who entered teacher training programs for children education by means of social quotas were interviewed in May and June of 2014. However, these interviews will have to be redone because the participants at that time have not had taken teaching practice classes yet.

The semi-structured interview was divided into three different axes: previous experiences, the option for teacher training, and opinions about the profession. The students were also free to talk about anything they wanted, because fruitful information can rise from this free conversation.

For this article two narratives were analyzed: one from Germany and one from Sweden, showing very preliminary results (only where it was possible to find common answers). The interviews in Sweden were conducted in English and in Germany, in German. The E-Ch in German will be translated into English. The names of the participants will be hidden and transformed into codes: the first letter shows the country (B for Brazil, S for Sweden and G for Germany), the second letter if it is a woman (W) or a man (M), and the next two letters represents the person (Jn, for example). Thus, a complete code would be: GWJa, or SMJn.

## Expectations

IC:         Hard/Tiring
E-Ch:       GWKa:
            I think it's very tiring in the first years.

            SWSa:
            I mean it's very… when you get home you're tired, and you like sleep for 3 hours.
Synthesis-  I think teaching is good because it's fun and because it's nice to work
discourse:  with different people.

## Value

IC:         Very important
E-Ch:       GWKa:
            It's important because it deals with education, and education forms a society. But it can't be a basic education, it must be something more, because the next generation will be formed.

            SWSa:
            I think it is one of the most important ones. Because no one teaches you, like stuff about life, and about animal language, and math, and like natural sciences (…) and social sciences, different cultures and how you're supposed to work in a society.
Synthesis-  It's a very important profession, because education is fundamental for
discourse:  different kinds of information, and also to form society and its new generations.

## Final considerations

Comparing Brazil, Sweden and Germany may lead to thoughts that that these countries are not comparable. However, there are many commonalities among them regarding education: they have been affected by global economic trends, they have a decentralized educational system, there was an expansion of the HE system in the three countries and because of this, there are problems with inequality in HE.

The preliminary results between Sweden and Germany show different social representations about the profession, in the point of view of non-traditional students. So far, there are two different synthesis-discourses that cover negative and positive aspects of the profession: it is hard and tiring, and it is very important to the basis of the society.

## References

Aamodt, P. O. & Kyvik, S. (2005). Access to higher education in the Nordic countries. In: David Palfreyman (Eds.). *Understanding mass higher education:* comparative perspectives on access. London & New York: Routledge Falmer.

Barros, C. M. (2008). *Ensino superior e sociedade brasileira:* análise histórica e sociológica dos determinantes da expansão do ensino superior no Brasil (décadas de 1960/70). Dissertação (Mestrado em Educação). UMESP, São Bernardo do Campo,

Bron, A. & Thunborg, C. (2012). Higher education and lifelong learning in Sweden. In: M. Slowey & H. G. Schuetze (Eds.). *Global perspectives on higher education and lifelong learning.* London and New York: Routledge.

Bron, A.; Thunborg, C.; Edström, E. (2014). Ethnicity and class matters: experiences in Swedish higher education. In: F. Finnegan; B. Merrill; C. Thunborg (Eds.). *Student voices on inequalities in European higher education:* challenges for theory, policy and practice in a time of change. Oxon and New York: Routledge.

Charaudeau, P. & Maingueneau, D. (2008). *Dicionário de análise do discurso.* 2. ed. São Paulo: Contexto.

De Rudder, H. (1999). Access to higher education in Germany: the career of an issue. *Higher Education in Europe,* vol. XXIV, No. 4.

Dourado, L. F. (2002). Reforma do estado e as políticas para a educação superior no Brasil nos anos 90. *Educ. Soc.*, Campinas, vol. 23, n. 80, 234-252.

Ertl, H (2005). Higher education in Germany: a case of 'uneven' expansion? *Higher Education Quarterly*, 0951–5224, Volume 59, No. 3, 205–229.

Kim, L. (2004). Massification in a uniform system of higher education: the Swedish dilemma. In: Ingemar Fägerlind & Görel Strömqvist (Eds.). *Reforming higher education in the Nordic countries:* studies of changes in Denmark, Finland, Iceland, Norway and Sweden. Paris: UNESCO International Institute for Educational Planning.

Lefèvre, F. & Lefèvre, A. M. C. (2003). *O discurso do sujeito coletivo:* um novo enfoque em pesquisa qualitativa. Caxias do Sul: Educs.

Maingueneau, D (2007). *Gênese dos discursos.* Curitiba, PR: Criar.

Mancebo, D.; Vale, A. A.; Martins, T. B. (2015). Políticas de expansão da educação superior no Brasil: 1995-2010. *Revista Brasileira de Educação*, v. 20 n. 60 jan.-mar.

Moscovici, S. (2007). *Representações sociais.* 5. ed. São Paulo: Vozes.

Orlandi, E. P. (2007) *Análise do discurso:* princípios e procedimentos. 7. ed. Campinas, SP: Pontes.

Schömer, F. (2014). Non-traditional students and barriers to participation in German universities. F. Finnegan; B. Merrill; C. Thunborg (Eds.). *Student voices on inequalities in European higher education:* challenges for theory, policy and practice in a time of change. Oxon and New York: Routledge.

Sguissardi, V. (2008). Modelo de expansão da educação superior no Brasil: predomínio privado/mercantil e desafios para a regulação e a formação universitária. **Educ. Soc.**, Campinas, vol. 29, n. 105, 991-1022.

Spink, M. J. P. (1993). O conceito de representação social na abordagem psicossocial. *Cad. Saúde Pública* [online]. 1993, vol.9, n.3 [cited 2010-05-13], 300-308.

Stromquist, N. P. (2002). *Education in a globalized world:* the connectivity of economy, power, technology and knowledge. Lanham, MD: Rowman & Littlefield Publishers.

### *Resilient School Practice: Actions to Address Contextual Situations of Vulnerability*

Genoveva Gutiérrez Ruiz, Universidad Autónoma de Baja California, México
Alicia Chaparro Caso López, Universidad Autónoma de Baja California, México

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
Resilience has been defined as the human capacity to overcome adversity and build on it, adapt, recover and access a meaningful and productive life. Schools as social communities, also generate the capacity to adapt to adverse events and contexts, through resilient actions. Thus, the goal of this research was to identify the actions that schools conducted to respond and overcome vulnerable contextual situations, which may affect their academic processes. 16 high added value secondary schools were selected. To make this selection, multilevel techniques were used. Schools whose academic results of census assessments were higher compared to other schools in similar contextual conditions, were involved in this study. Open interviews were applied to school supervisors and management teams of these schools. Participants answered questions about actions that their school communities do to cope disadvantaged contextual situations and get outstanding academic results. Answers of supervisors and management teams were compared and analyzed. Fourteen categories of different types of practice emerged through this analysis. These actions were related to school organization; strategies of discipline; promotion of school life; leadership of the principal; involvement of parents; assessments of teachers and students; innovative teaching activities; time management; inclusion practices; attention to poor performance; teacher training; among others. It was concluded that the high added value schools shared, resilient actions to address similar contextual situations of vulnerability. But also, there are certain actions that are specifically built to adapt to adverse events and contexts. All those actions are discussed in this study.

**Keywords:** School resilience, secondary schools, vulnerability, school context.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Schools can offer opportunities to students that help to enable them to perform satisfactorily, even against what would be expected for pupils under the same conditions (Wrigley, 2013). It is possible to identify schools in vulnerable contexts that obtain satisfactory academic results. Even schools that have achieved outstanding results despite having various risk factors or be located in vulnerable contexts (Bellei, Muñoz Perez & Raczynski, 2003). Thus, social conditions surrounding the school may determine policies and actions within the institution, just as the expectations of parents regarding the education of their children can shape school practice as well as the type of financing the school receives, finding that the environment around public schools (as opposed to private schools) provides less support for the school to reach their educational goals (Hallinger & Murphy, 1987). Martin & Mauri (1989) stated that a school should be considered as a system that is in relation to other systems, and develops an institutional activity, same which is mediated by society and culture. As a result, the organization and planning are important elements because they allow to regulate, in a favorable way, all the activities at the school.

Murillo (2004) stated that the internal determinants of success, those belonging to the school, do not act independently of external determinants, those based on the context. In this sense, the author claimed that teaching activities and policies are conditioned at socio-economic and environmental level of discourse in which the schools are located.

Regarding Latin America, the results of research on school effectiveness list a number of elements that are present in schools, and their effectiveness relays in the presence of certain characteristics attributed, include elements such as resources, educational leadership and school climate (OREALC/UNESCO, 2008). On the opposite sense, the absences of these factors result in inefficiency (Hernández, Murillo & Martínez, 2013). Murillo (2003) stated that for secondary schools in México the context has high significance with respect to the effect that the school has on educational achievement that students obtained.

Some of the situations associated with educational failure, such as desertion and low quality of education, are related to socio-economic poverty in which students live, this feature represents a very important factor of social vulnerability (Villalta, 2010). Often, in investigations about school failure it is include cases of students who live under poverty, this sector of the society it is already vulnerable itself, not only because the economic conditions to which students and their families live, this population is affected directly and indirectly on the academic performance due to their living conditions. Most of the investigations of schools in vulnerable contexts had been aimed at justifying the reason for the low academic performance of their students or simply to list the risk factors (Wang, Haertel & Walberg, 1997). While the power that the context is in the school community is recognized in such studies rarely these schools are studied combining contextual variables and school success, because belonging to a vulnerable context is a predisposing factor for the failure.

The study on the academic success of students in adverse conditions can be addressed, from the perspective of School Resilience. This approach recognizes the existence of the

vulnerability in educational settings, risk and protective factors in the school community, as well, the actions used to deal with difficulties that are presented in the schools (Villalba, 2003). The most important contribution of studies on resilience has been the ability to provide resources and skills to individuals, families, schools and society in general, giving them the power of overcome or circumvent the adverse situations (Aguiar & Acle, 2012).

The actions carried out within an educational institution impact the lives of students by encouraging and facilitating higher results, more than academic achievement, the school can not only benefit the student in their school development, but in other areas of their life. Therefore, the school may provide certain factors that protect and support the student as an individual, even outside the academic community; factors such as high performance expectations and opportunities for meaningful participation (Acevedo & Mondragón, 2005), representing a contribution to their life. On the other hand, the school may have negative elements that hinder obtaining satisfactory academic achievement in students.

The analysis of educational actions and environments where they are used and their proper application, can result in progress towards the understanding of the influence of the factors involved in not only academic results of schools in vulnerable contexts. Murillo (2004) mentioned that there have been numerous investigations focused on identifying the determinants of academic achievement; however, there remains a need not only to know what works in the areas of learning and education, but to know why and how it works.

Mostly the study of schools in vulnerable contexts has been aimed at justifying the reason for the low academic performance of their students or simply to list the risk factors (Wang, Haertel & Walberg, 1997). While the power that the context is in the school community is recognized in such studies rarely these schools are studied combining contextual variables and school success, as belonging to a vulnerable context is almost always guarantee failure.

Escudero (2009) affirmed that identifying the knowledge and successful experiences that others have applied may encourage reflection on who uses, but it is necessary to take into account the context in which that experience, translated into practice, applies; since some actions may be beneficial in certain contexts and specific subject under similar conditions, while in other contexts not. Within this logic, educational institutions can promote resilient responses to emerging or permanent situations and thus cushion the negative effect they could cause to the school organization; providing the necessary conditions for this to happen, through preventive or remedial practice, taking into account the environment (Trujillo, López & Lorenzo, 2011). All this, based on evidence to support your application, it is intended to generate evidence in this investigation.

The perspective of resilience seeks to interpret the strengths in terms of contextual risks to which it responds, in consequence the study of successful schools in vulnerable contexts from this perspective, rescue most of the elements in the educational reality. Thus, the goal of this research was to identify the actions that schools conducted to respond and overcome vulnerable contextual situations, which may affect their academic processes.

**Method**
This study is part of an investigation (in the process to this date) called *Characterization of good actions in secondary schools with high added value in Baja California* (Caso, Chaparro & Lizasoain, 2012) which is a replica of the one held in Spain named *Characterization of good practice in schools with high added value*, by Lizasoain et al. (2012). The main objective of those researches is to identify school actions that take place in educational institutions that have academic results above expectations, or in other words, schools with high added value.

The data to perform the analysis in the Baja California study were, firstly, the results of *Enlace* 2010 and 2011, and secondly the information obtained in the context questionnaires that were applied to a large sample of students at the Evaluative Strategy Integral 2010 and 2011, conducted by the Educational Assessment Unit (Contreras et al., 2011, 2012).

In the Baja California study from Caso et al., (2012) and using multilevel techniques, 16 secondary schools that got results beyond what, according to its context variables (high value, or high residue) would be expected were identified. It also identified 16 schools whose academic results fell below what would be expected, according to its context (low residue). In this way a sample of 32 schools was selected. A qualitative treatment was applied to the data, a type of study in which interviews were conducted with management teams, through a predefined category system (see Instruments subsection) was performed.

The information derived from these interviews is the input for the study presented, in which an in-depth analysis was made of these interviews to identify the actions that schools conduct to address the vulnerability environments.

**Participants**
Management teams of 32 secondary schools in the state of Baja California, Mexico; of which 16 were located as high value-added schools (seven general schools, 44%; eight private, 50%, a technique, 6%) and 16 low residue (six comprehensive schools, 37%; seven technical, 44% ; three private, 18%) were participants in this study. The management teams were composed mainly of principal, assistant principal, counselor prefect. A participatory approach to the interviewees was that they had seniority in the school of at least six months, if that did not meet this criterion the presence of another member who regularly worked on campus was requested and it did comply with the requirement.

**Instruments**
The interviews were based on a list of categories derived from a comprehensive review of literature on school effectiveness, same that were used by Lizasoain et al. (2012). The categories addressed during the interviews were: a) general perception of the school, b) environment and history, c) management and organization, d) management team, e) resources, f) programs, plans and projects, g) training and commitment School staff, h) assessment, i) assessment of student learning, j) teaching methods and teaching materials, k) attention to diversity, l) coexistence and school climate, m) two-way relationship between the school, family, community and support networks and n) other. These topics

discussed openly, so that they could identify contextual and school actions that were carried into school issues.

An observation checklist was also used as a complement to the script interview that was applied to the management teams. The visits to campus for interviews, also allowed for direct observation to identify aspects such as the dynamics and organization of personnel, infrastructure, physical aspect of the school environment and coexistence.

## Procedure

The interviews were conducted in schools buildings. Management teams was requested that the interview be conducted in an office or classroom alone. All interviews were audio recorded and transcribed for later analysis. Two persons of the research team (interviewer and observer) attended each of the interviews.

## Data analysis

Four previously trained analysts participated in the process of analyzing the interviews. Based on the fourteen integrated in interviews categories, contextual vulnerabilities were identified, the schools were defined as all those problems that the school faced in their daily work and that could come from both the internal context and the external. Analysts also identified actions that schools conducted to address these vulnerabilities.

Subsequently classification and grouping of the identified contextual situations, concentrating on three major groups was made: vulnerabilities of the school context; of the students; and the social and family context. Also, the actions carried out by schools to deal with these contextual situations were identified. Both contextual situations such as school actions were organized hierarchically highest to lowest incidence and occur together, both actions are performed and the contexts in which they apply.

## Results

The results are reported in hierarchical order, sorted from highest to lowest incidence. At first the vulnerabilities related to the school context are presented. It is noted that the biggest problem facing schools in this area is the lack of staff. It is also seen that the actions are different schools, high and low residue, implemented to address this situation. For example, schools are characterized by high residue take action where the school community is involved, whereas in most low residue schools have a specific practice.

Another problem the school context is the lack of equipment and materials. In this case high schools residue actions are characterized by the involvement of teachers, while schools in low residue, most do not have a specific practice or ask students to bring their materials. Likewise, schools also face the problem of uncommitted teachers. This striking that fewer actions are exercised in schools residue high compared to low. However, as can be seen in schools in low residue actions they are focused more on coercion, this can be seen in table 1.

Table 1
*Situations of vulnerability in school context and educational actions taken by the school*

| Situation | High residue | Low residue |
|---|---|---|
| Lack of staff or teachers absents | 1. Teachers work more than 100%<br>2. Staff do other duties (i.e. a teacher is also psychologist)<br>3. Parents make financial support<br>4. Planning helps to cover charge absents of teachers<br>5. The principal does other duties<br>6. Support social service students | 1. Do not have a specific action.<br>2. The existing staff distributes tasks<br>3. It calls on the authorities to replenish the staff, though no response |
| Lack of equipment and materials in laboratories | 1. Teachers bring their mobile laboratory<br>2. Teachers improvise with what you have available | 1. They do not have a specific strategy<br>2. Students bring their tool<br>3. It gradually repair equipment<br>4. Activities are carried out to raise funds to purchase equipment<br>5. Teachers bring their equipment |
| Apathetic teachers and / or unwilling | 1. The management team seeks to establish agreements with them<br>2. The school seeks support from social service UABC<br>3. No relocation or new activities | 1. They are given by trade agreements or commitments.<br>2. Teachers are asked about their needs<br>3. The principal talks to them to sensitize<br>4. There they were missing and already<br>5. The school justifies<br>6. They provide Internet pages as suggested<br>7. Attention calls on the teaching meetings<br>8. They are given to support materials |
| Incomplete installations (laboratories, workshops, libraries, etc.) | 1. Adjustments are made to available spaces | 1. They do not have a specific strategy<br>2. Support to the authorities and parents are requested, however no response is obtained<br>3. Adjustments are made to spaces |
| Inexperienced teachers | 1. Accompaniment and strategies<br>2. Supervision of plannings<br>3. Supervision of classroom activities | 1. They do not have a specific strategy |

Lower incidence, but also referred by schools are the problems related to poor reading comprehension and students who do not speak the language. In this regard it is noted that the number of actions taken by schools of higher residue than those made by low residue, for example, who do not count, even with specific action to support students who do not speak Spanish.

The second area discussed is related to the students, presented in table 2. It is showed that the main problem is, without doubt, the low student performance. It also notes that various

actions are exerted by schools to address this situation. However, you may notice that both schools of high and low residue predominant action is the educational support outside of class time.

Table 2
*Situations of vulnerability in students and actions taken by the schools*

| Situation | High residue | Low residue |
|---|---|---|
| Low achievement | 1. Educational support outside school hours<br>2. Each case is analyzed in a particular manner<br>3. In necessary cases it is channeled to support institutions<br>4. Evaluations are used to address the areas to difficult<br>5. Parents are notified to seek help.<br>6. Specific suggestions are provided to parents<br>7. Savannah strategy (registration and individual follow up)<br>8. Hours adviser within the day<br>9. Recovery program<br>10. Strengthening program supported by the university | 1. Educational support outside school hours<br>2. Make appointments for parents<br>3. To prevent problems these students are distributing between groups<br>4. Plans tutorials students helping other students, supervised by the teachers<br>5. Refer them to USAER<br>6. Work with the minimal normality<br>7. Academy meetings each month<br>8. Surveillance students.<br>9. The principal supervises the strategies that teachers do in classroom.<br>10. Tracking ballots used<br>11. Differential assessment<br>12. Follow up<br>13. Participation in PEMLE network (individualized attention)<br>14. Inform parents of the tasks that the student must perform a week.<br>15. Tracking ballot.<br>16. Notebook tracking support for parents. |
| Students with special educational needs | 1. Teachers planning different activities for those students<br>2. Differential assessment<br>3. Group meetings to seek support strategies.<br>4. They are detected at the beginning of the school year, and the management team and teachers follow up<br>5. They are located in accessible rooms<br>6. Students ramps to lidos with Wheelchair accessible<br>7. It allows students to progress at their own pace<br>8. The counselor provides specific exercises to those students | 1. The management team suggests strategies for teachers<br>2. Make appointments for parents<br>3. Without Direction support teachers became tutors<br>4. Teachers have external training<br>5. Teachers work intuitively<br>6. Refer to external support<br>7. Differentiated assessment<br>8. USAER support within classroom<br>9. Adaptation of classes<br>10. Teachers discuss each case to exchange strategies<br>11. They do not have a specific strategy |

| | | |
|---|---|---|
| Children with behavioral problems and hyperactivity | 1. The staff (principal, psychologist or counselor and teacher) analyze each situation | 1. They do not have a specific strategy<br>2. Chat with students<br>3. As prevention action, these students are distributed between groups<br>4. The situation is analyzed take agreements<br>5. It seeks support with external institutions<br>6. Tracking Cards<br>7. The counselor informs teachers for lookout the students.<br>8. The counselor informs teachers how to handle these students<br>9. Students are sending to therapy |
| Truancy and Dropout | 1. School and every teacher take control assistance | 1. Make appointments for parents<br>2. The principal asks sensitivity teachers<br>3. They do not have a specific strategy<br>4. Control systems, roll call<br>5. A control sheet signatures of teachers is used to inform student attendance to parents<br>6. Continuous assessment |
| Low reading comprehension | 1. Circle readings<br>2. Family reading<br>3. Classroom reading<br>4. Reading index<br>5. Parents are informed | 1. Reading classroom daily |
| Students who do not speak Spanish | 1. Ask a peer to be his/her tutor<br>2. Arrange students in teams to support each other. | 1. They do not have a specific strategy |

Low residue schools that more action is implemented is to give citations to parents. However, in this area there are differences in the actions they take both types of schools, because while not exactly the same actions, all have the characteristic of supporting the student.

To a lesser extent, the second problem facing schools in the area of student are the special educational needs. In this case as in the previous situation, support operations in both high- and low residue was observed, exceeding the amount undertaken by past them. So it is also noted that other vulnerable schools are facing the problems of student behavior. Here it is noteworthy that in schools of high residue found only one action to address it, while many were those performed by schools low residue. Very similar to what happens with the problem of absenteeism and dropout rates, in which high residue schools the only action performed is control of assistance.

Finally, the third area in which schools face situations of vulnerability is related to the family context. In this case, the main problem referred is negligence and lack of parental interest, to which, it is noteworthy that in general there are few actions taken by the schools, but in the case of low residue, most do not even have a specific strategy, the above is reported in table 3.

Table 3
*Situations of Vulnerability of the family and social context and actions taken by the schools*

| Situation | High residue | Low residue |
|---|---|---|
| Negligence and lack of parental implication | 1. Teachers support including economically help<br>2. Home visits<br>3. A calendar is used to informed of activities undertaken | 1. They do not have a specific strategy<br>2. Make appointments for parents<br>3. Teachers sponsor students<br>4. The cooperative school gives students food<br>5. Home visits |
| The school is in a very conflictive area | 1. Strengthen the fence<br>2. Support programs for the care or violence<br>3. Teachers make guards and patrols inside and outside school | 1. Rounds are made to monitor school<br>2. Protecting mesh and placed in the windows<br>3. Operative revision or backpacks<br>4. Shock Therapy (visits to youth centers integration)<br>5. Support mothers watching around the school.<br>6. The patrol is called |
| Gangs and theft at school | 1. Set surveillance camera<br>2. Students are taken with the principal<br>3. Parents are called | 1. Chat with students<br>2. Make appointments for parents<br>3. Parents are seeking for help<br>4. Teachers ask students to repair de damage |
| Drug Addiction | 1. Agreements with parents<br>2. Searching support of external institutions<br>3. Students are taken with the principal<br>4. Parents are called<br>5. Research project with students to raise awareness | 1. Students are taken with the principal<br>2. Make appointments for parents<br>3. They do not have a specific strategy<br>4. Students are separate from school (ask them to come just once a week) |

In this same area another problem that arises is that schools are geographically located in conflict zones. In this case, it appears that both types of schools doing similar actions to address this problem. Although to a lesser extent, other problems faced by schools are gangs and drug abuse to which the actions are very similar between the two schools.

**Conclusions**

The problems facing schools are different, but similar. Schools with high and low residue perform different actions in different situations of vulnerability, but in some cases have common ground.

In secondary schools with high added value management teams take various types of leadership and pedagogical function or the bureaucracy is not limited but articulates different dynamics in the exercise of its function, depending on the needs that the school has. It values, recognizes and promotes the participation of all stakeholders; management, personal computer (administrative, teaching and support staff), students and parents. Continuous training in various subjects, both academic and health care and other offers.

The director and his team recognized the importance of an appropriate working environment. They take into account the views of staff and their personal needs, however the manager is the main figure in the decision making. Each of the members takes responsibility in different areas, not limited to a specific activity.

The management teams showed a constant concern about their students reach satisfactory academic achievement, which translates into specific actions, such as: attention to students with special educational needs, monitoring of special cases or teaching involvement from the management team.

With regard to administrative, the director and his team are involved in all activities resulting therefrom. Depending on the hierarchy, the manager delegates responsibilities to his team, and also in the educational field. This without diminishing autonomy to each of the members of the management team and teachers.

The lack of equipment and personnel are the main problems that schools face in schools. To which high residue schools perform proactive actions aimed at lessening the effects of this, managing resources and seeking support outside the education system institutions. Parents are actively involved in obtaining resources, whether organizing fundraisers or supporting financially to address some of the needs of the school.

In the area of student the main problem facing schools is poor school performance, to which schools high residue present actions very focused on promoting student achievement, paradoxically the number of shares held are in low residue schools.

Finally in the family and society, the main problem facing schools is negligence and lack of parental interest. To which, high residue schools focuses more on search strategies approach with parents, adjust schedules personalized attention, communication is via Internet or implement sanctions.

As general conclusion, the findings are according from Wrigley (2013) who stated that schools can offer opportunities to students that help to enable them to perform satisfactorily, even against what would be expected for pupils under the same conditions. However, the results of this study showed that high and low residue took similar actions to equal vulnerable contexts (Bellei et al., 2003).

**References**
Acevedo, V. E. y Mondragón, H. (2005). Resiliencia y escuela. *Pensamiento Psicológico*, 1(5), 21-35. Recuperado de
http://revistas.javerianacali.edu.co/javevirtualoj/index.php/pensamientopsicologico/article/view/18

Aguiar, E. y Acle, G. (2012). Resiliencia, factores de riesgo y protección en adolescentes mayas de Yucatán: elementos para favorecer la adaptación escolar. Acta Colombiana de Psicología, 15(2), 53-64. Recuperado de
http://portalweb.ucatolica.edu.co/easyWeb2/files/23_9966_v15-n2-art5.pdf
Bellei, C., Muñoz, G., Pérez, L. M. y Raczynski, D. (2003). Escuelas efectivas en sectores de pobreza. *La educación en Chile, hoy*, 347-372. Recuperado de
http://www.asesoriasparaeldesarrollo.cl/secciones/documentos/escuelas_efectivas_sectores_pobreza.pdf

Caso, J., Chaparro, A. y Lizasoain, L. (2012). *Caracterización de las buenas prácticas en las escuelas de alto valor añadido en Baja California.* Proyecto CONACyT No. SEP/INEE 2012- 189833

Contreras, L. A., Rodríguez, J. C., Caso, J., Díaz, C. y Contreras, S. (2011). Estrategia evaluativa integral 2010: Factores asociados al aprendizaje de estudiantes de primero, segundo y tercero de secundaria en Baja California. UEE RT 11-001. Ensenada, México. Universidad Autónoma de Baja California. Recuperado de
http://uee.uabc.mx/uee/documentos/estudiosYproyectos/UEERT11-001.pdf

Contreras, L. A., Rodríguez, J. C., Caso, J., Díaz, C. y Urías, E. (2012). Estrategia evaluativa integral 2011: Factores asociados al aprendizaje de estudiantes de primero, segundo y tercero de secundaria en Baja California. UEE RT 12-001. Ensenada, México. Universidad Autónoma de Baja California. Recuperado de
http://uee.uabc.mx/uee/documentos/estudiosYproyectos/UEERT12-001.pdf

Escudero, J. M. (2009). Buenas prácticas y programas extraordinarios de atención al alumnado en riesgo de exclusión educativa. Profesorado. *Revista de currículum y formación del* profesorado, 13(3). Recuperado de
http://www.ugr.es/~recfpro/rev133ART4.pdf

Hallinger, P. & Murphy, J. (1987). Social context effects on school effects. Ponencia presentada en the Annual Meeting of the American Educational Research Association. Washington, D.C.

Lizasoain, L., Angulo, A., Azpillaga, B., Damborenea, M. D., Del-Frago, R, Etxeberria, F., Intxausti, N., Joaristi, L., Méndez, Y., Núñez, C. y Valadez, C. (2012). Caracterización y buenas prácticas de los centros escolares de alto valor añadido: Informe final, Fase I. Recuperado de http://www.isei-ivei.net/cast/pub/altovalor/informe_resumido.pdf

Martín, E. y Mauri, T. (1989). Las instituciones escolares como fuente de influencia educativa. En M. C. Wittrock (ed.). La investigación sobre la enseñanza I. Enfoques, teorías y métodos (pp. 575-595). Barcelona: Paidós.

Murillo, F. J. (2003). Una panorámica de la investigación Iberoamericana sobre eficacia escolar. *Revista Electrónica Iberoamericana sobre la Calidad, Eficacia y Cambio en Educación*, 1(1). Recuperado de http://www.ice.deusto.es/RINACE/reice/vol1n1/Murillo.pdf

Murillo, F. J. (2004). Un marco comprensivo de mejora de la eficacia escolar. *Revista Mexicana de Investigación Educativa*, 9(21), 319-359. Recuperado de http://mail.quadernsdigitals.net/datos_web/hemeroteca/r_54/nr_604/a_8232/8232.pdf

OREALC/UNESCO (2008). Reporte técnico SERCE. Santiago de Chile: Oficina Regional de Educación para América Latina y el Caribe de la UNESCO, Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación. Recuperado de http://www.oei.es/pdf2/Eficacia-escolar-factores.pdf

Trujillo, J. M, López, J. A. y Lorenzo, M. E. (2011). Análisis y descripción de las percepciones del liderazgo resiliente y liderazgo distribuido en torno al ejercicio directivo (2.0) como posibilidad para aprehender y transformar las instituciones educativas. *REICE: Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 9(3), 13-29. Recuperado de http://dialnet.unirioja.es/descarga/articulo/3932577.pdf

Villalba, C. (2003). El concepto de resiliencia individual y familiar. Aplicaciones en la intervención social. Recuperado de http://www.copmadrid.org/webcopm/publicaciones/social/87653.pdf

Villalta, M. A. (2010). Factores de resiliencia asociados al rendimiento académico en estudiantes de contextos de alta vulnerabilidad social. *Revista de Pedagogía*, 31. Recuperado de http://www.redalyc.org/articulo.oa?id=65916617007

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). What Helps Students Learn? Spotlight on Student Success. Recuperado de http://files.eric.ed.gov/fulltext/ED461694.pdf

Wrigley, T. (2013). Repensando el cambio escolar y el papel de la evaluación: La experiencia de dos países anglófonos. *Revista Iberoamericana de Evaluación Educativa*, 6(2), 73-90. Recuperado de http://dialnet.unirioja.es/servlet/articulo?codigo=4695360

**Contact email:** psicologa_gutierrez@hotmail.com, achaparro@uabc.edu.mx

# A Study of Students' Orientation in the Virtual Classroom

Anna Toom, Touro College, USA

**Abstract**
One of the most important features determining successful adjustment and learning in the virtual classroom (VCR) is an individual's ability to quickly, independently, and flexibly orient oneself in the new learning environment. It means grasping the idea of information-technological resources as well as the course organization with its academic, administrative, technical, and communicational requirements. In our pilot study, we investigated this ability of twenty five students enrolled in the author's online psychology class. The research methodology included an analysis of the students' preparation for their study and an evaluation of correlations of these data with students' previous online experience as well as academic performance demonstrated in the course. According to the results, 1) positive correlation between students' effective orientation and their academic performance was found, 2) negative correlation between students' orientation and their' online experience was found, and 3) different students' orientation strategies were identified that allow to predict students' success in online classes. The results' reliability was checked and mostly confirmed using a control population of 51 students. We conclude that farther enhancement of the online courses' design should account for the potential difficulties in orientation in the VCR. New forms of instructional support are needed to help online students, especially beginners, obtain adequate knowledge of the VCR and develop skills for orientation and it. A better understanding of the instrument of learning allows for a more productive study of the course subject.

**Keywords:** online education, virtual classroom, students' orientation in the VCR, orientation strategy

**Introduction**

Development of Internet-based distance programs which transfer the study of traditional disciplines into non-traditional learning environments is among the most actual tasks of today's education. Now it is possible to teach and study all subjects in asynchronous online classes. Social sciences are studied also with the use of information technology tools. However, mastering these tools may be an uneasy task for those individuals who have a humanitarian mentality and lack technical know-how. If their needs, such as help with adjusting to and orienting in the virtual classroom (VCR), are not met, it can act as a barrier to successful learning.

One of the most important features determining adjustment to the new learning environment is ability to quickly, independently, and flexibly orient oneself in all aspects of this environment. It means grasping the idea of information-technological resources as well as the online course organization with its academic, administrative, and communicational requirements.

This study is about how such a goal is achieved in a population of online students specializing in education.

**Theoretical Frame**

**Orientation in the VCR as the first step to problem solving**
George Polya[1], a prominent mathematician and educator, rightfully noticed that problem solving constitutes an integral part of human life. Indeed, whenever humans do not sleep or daydream, and maybe even in such moments, they try to solve some problems. Problems belong to different areas of knowledge. They may be theoretical or practical, and may require a proof or a finding. In spite of differences between problems, solving them fit into the universal procedure which Polya described in his well-known book "How to solve it"[2] (Polya, 1973).

According to Polya, the first stage of solving a problem is "working for its better understanding". Before people start to solve a problem, they have to identify and understand its principal parts: the data, the conditions, and what is unknown. Solvers have to examine many details that eventually will play their role in solving a problem. They have to refine and restate the statement. Only after that it becomes possible to move to the next stages – devising a plan and carrying it out.

This approach seems to be productive for analyzing of how students take a course in the VCR. Orientation in the VCR would correspond to Polya's first stage of the

---

[1] George Polya (1887-1985) – born in Hungary; one of the most influential mathematicians of the twentieth century. Professor of mathematics from 1914 to 1940 at Swiss Federal Institute of Technology in Zurich, Switzerland; from 1940 to 1953 at Stanford University in California, USA; remained Stanford Professor Emeritus for the rest of his life and career. He made fundamental contributions to probability theory, number theory, numerical analysis, and combinatorics. His work in mathematics education and heuristic technique made him an internationally recognized educator. Actually, he is one of the modern founders of the theory of problem solving.

[2] This Polya's book is a perennial bestseller that describes methods of problem solving; it had numerous editions and was translated into many languages.

problem solving. Specifics of orientation in the VCR are in collecting the data needed: they may be not given explicitly, as it happens, for example, in word problems. Typically, they should be found though exploration. It is shown below how Polya's concepts can be applied to the problem which students have to solve when taking online classes.

In Figure 1, a fragment of the main page of the online course is shown where our study was conducted. On the left side of the screen, there is menu with links leading to the major content areas of the VCR. Orientation should consist in examining these content areas and getting the data for solving the problem. The *Course Policies* link leads to the administrative aspect of the VCR. The links *Syllabus*, *Course Information,* and *Coursework by Week* are multifunctional and provide information about all aspects of the educational process. The *Instructor Information, All Discussions, Send E-mail,* and *All Announcements* links represent the communicational aspect of the VCR. The *Blackboard Help* leads to description of technological resources, and the *Library Homepage* helps to perform academic tasks.
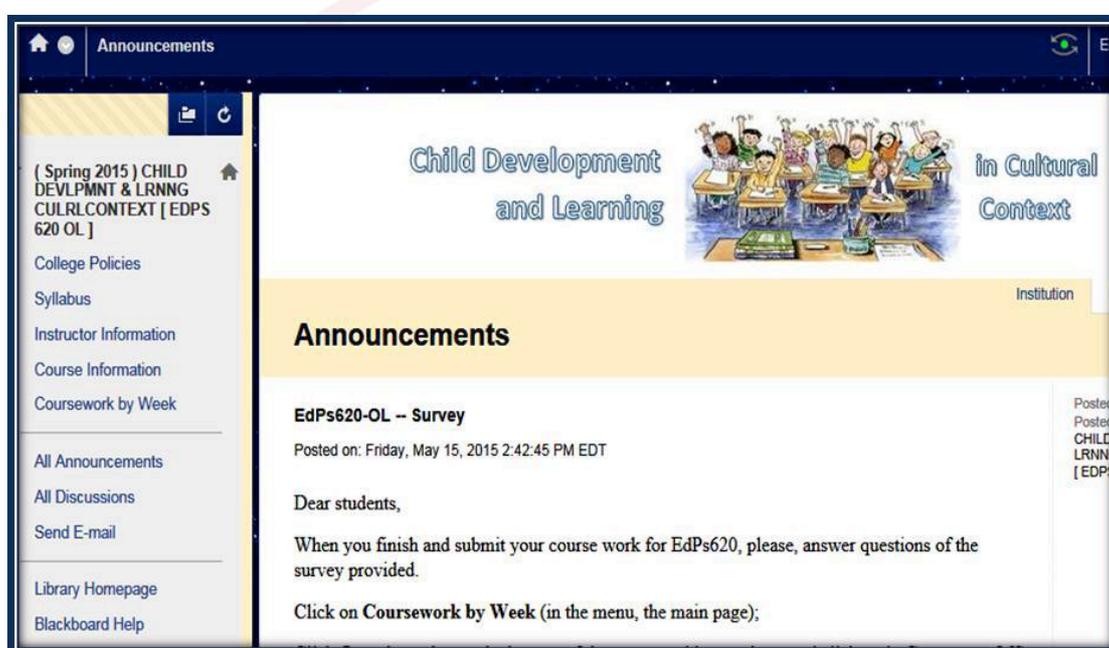


Figure 1. The main page of the online course where the study was conducted

By clicking the links and exploring the course content areas any student can receive information needed for successful learning and completion of the online course. This information constitutes the data of the problem which allow refining the problem's statement. After that a student is ready to start the actual solution of the problem. As Polya would say, a solver can advance to the next stage of solving the problem. In our case, it will be devising a study plan.

**Orientation in the VCR and e-Learning readiness**
Orientation means "the act or process of adjustment to a new environment, situation, custom, or set of ideas…" (The Free Dictionary). Virtual classroom, according to the definitions, is "a mode of computer-based education" (Dictionary), "an online learning environment", "a learning environment created in the virtual space" (The

Virtual Classroom Defined). Adjustment to such environment is successful when and as far as orientation is successful. Orientation in the VCR, like e-Learning readiness, may predict successful learning. These two concepts are closely related.

The first instrument to measure readiness for online learning was created in Australia in 1990s (Warner et al., 1998). After that it was modified on many occasions (McVay, 2000, 2001; Hung et al, 2010). In its initial version, such characteristics of students' readiness as computer-use skills and Internet-navigation skills were absent; probably, they appeared first in the recent works of Taiwanese specialists. The Online Learning Readiness Scale with five dimensions created by M.-L. Hung and his colleagues was eventually validated and adopted by educators from many Asian, African and Middle East countries (Kaur & Abas, 2004; Watkins et al, 2011; Yurdugul & Alsancak, 2013). Remarkably, the researchers are increasingly interested in the population of the teachers mastering new learning environments (So & Swatman, 2006; Bukaliya & Mubika, 2011).

However, an ability to quickly and flexibly orient oneself in an online course is not included into the mentioned scale. No one out of statements related to the computer/Internet self-efficacy dimension, reflects this characteristic. We suggest that the cause rather is methodological than logical. To construct the scale of e-Learning readiness, authors conducted surveys. However, measuring students' perceptions and opinions is not the best method for the study of their orientation in a virtual environment, a process which does not yield too easily to awareness and verbalization. For this purpose, there exists another methodology based on the analysis of people's learning activity. Being more direct, the latter method is at least as, or even more objective and efficient than the prior one. The virtual classroom has been already fruitfully used to assess cognitive processes and diagnose learning disabilities (Rizzo et al., 2002; 2004). We also apply this methodology for studying the students' orientation in the VCR and predicting their success in online courses.

## Research

### Goals, hypotheses, and methodology

The purpose of this work is to develop a method for quantifying students' orientation in VCR and study various orientation strategies which they demonstrate when learning online. Our hypotheses consisted in the following: a) there may be a connection between students' orientation strategies and their academic achievement; b) previous online experience may influence a student's orientation in the VCR. The research methodology included: a) an analysis of the students' preparation for their study in the course, b) an evaluation of correlations between students' orientation in the VCR and their final grades as well as the number of taken online courses.

### Participants

The participants were students of Touro Graduate School of Education (GSE) enrolled in the Education and Special Education degree and certificate program. All of them were current preschool or school teachers. The students were assigned by the college registrar's office at random to groups in which they remained throughout the semester.

76 graduate students participated in the study. The experimental group included 25 students; the control group 1 had 26 students, and a control group 2 had 25 students. All the students took the same online psychology course *EdPs620-Child Development and Learning in Cultural Context* in the spring semester of 2015 with the same instructor (the author of the study). The author was the only course designer, developer, and instructor for the experimental group. Students of both control groups studied in the sections of the course designed differently. Four members of the experimental group were beginners who had to go through a preliminary training to become familiar with the Blackboard platform and develop some skills necessary for learning online. There were no beginners in the control groups. All participants of the study had some skills of using basic functions of a word processor such as Word.

**Procedures and outcomes**
First, we analyzed the students' activities in the VCR during a week before the semester had begun. Based on these activities we classified the students' orientation strategies.

Second, we evaluated correlations between some indicators of students' orientation and their final course grades as well as the number of courses taken online. It helped to advance certain assumptions about the nature of human orientation in the VCR.
Finally, we analyzed the relationship between students' orientation strategies and their final course grades. It allowed to find out whether there was a connection between certain strategies and high or low academic achievement. This might help to predict the students' success or risk of failure in online classes.

**Methods of collecting statistical data**
As we have already mentioned, The Blackboard, a software platform for our VCR, was used as an instrument of collecting data about students. It recorded and archived all the students' activities in the course during the semester and a week before it. The Black Board registered the students' time of arrival and departure as well as activities in the VCR content areas. "Course Management – Evaluation" was that Black Board tool which provided the instructor with access to course statistics. This tool generated various reports and allowed viewing information about course usage and the students' specific activities in the course site. *Course Activity Overview* and *All User Activity inside Content Areas* reports were the most helpful for the purposes of our research.

The *Course Activity Overview* report displayed overall activity within the course sorted by student and date. The data included the total and average time spent per user and the total amount of visits made by every user to the VCR. The *User Activity inside Content Areas* report displayed a summary of all activities inside such major content areas as *Black Board Help, College Policies, Course Information, Coursework by Week, and Syllabus*.

**Data Representation**

**Students' orientation in the VCR before the semester had begun**
Unlike students of the traditional classroom, online students' may start their attendance and activities earlier than the semester begins officially. The participants of our study had an opportunity to log into the course site and freely explore there

during a week before the semester had begun. This preparation appeared to be the most informative for identifying their strategies. When examining the students' activities and analyzing statistical data, we focused on the three indicators described below.

**Time spent in the VCR**

Time spent in the VCR within the evaluated period is called the students' orientation activity and denoted by $ORN_A$. Its values are presented in Figure 2. The vertical axis of the graph shows the students' encoded names; the horizontal axis shows time (in hours.) Time spent by the students in the VCR is presented by the horizontal bars located on the right side of the codes. Numbers on the right of the bars mean amount of time.
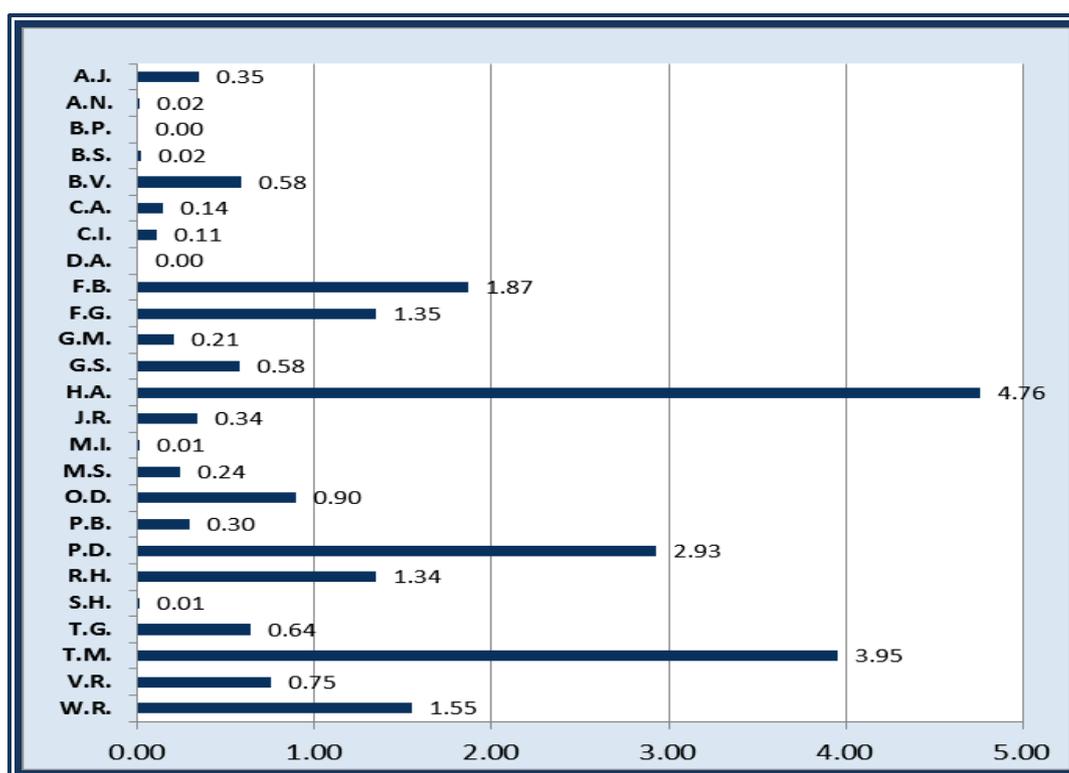


Figure 2. Statistics of time spent by students in the VCR before the semester started

**Visits to the VCR**

Like time spent in the VCR, the total number of visits into the VCR, which occurred within the evaluated period, is a parameter of the students' orientation activity that we denote by $ORN_{A1}$. These data are placed in Table 1 in the columns *a* through *e.* For each student their number constitutes the sum of the values in these columns.

**Explored content areas of the VCR**

Distribution of visits between content areas in the evaluated period indicates students' orientation in the VCR content and is denoted by $ORN_C$. These data are presented in the columns *a* through *e* of Table 1.

**Mathematical Analysis of Data**

**Principles of encoding data**

Times spent in the VCR before the semester had begun represented students' $ORN_A$. Numbers of visits to the VCR were used for the same purpose. Numbers of explored

areas of the VCR content represented students' orientation in content. Final course grades were used as an indicator of students' academic achievement *AA*. The numbers of previously taken online courses represented the students' online experience *EXP*. We encoded students' experience with the values of 0, 1, and 2. If a student had taken no courses, his experience was set to 0. If the number of courses taken by a student was between one and four, her/his experience was coded by 1. If a student took more than four courses, his/her experience was set to 2.

Table1. Statistics of students' visits to the content areas of the VCR

| | Content areas of the VCR | | | | | Σ (a, b, c, e) | Ratio (d/f) |
|---|---|---|---|---|---|---|---|
| | BB Help a | C. Policy b | Course Info c | C.W. by W. d | Syllabus e | f | g |
| AJ | 0 | 0 | 3 | 10 | 0 | 3 | 3.33 |
| AN | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| BP | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| BS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BV | 0 | 0 | 10 | 51 | 3 | 13 | 3.92 |
| CA | 0 | 0 | 1 | 14 | 2 | 3 | 4.67 |
| CI | 0 | 0 | 0 | 13 | 0 | 0 | 0 |
| DA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FB | 0 | 3 | 9 | 31 | 2 | 14 | 2.21 |
| FG | 0 | 0 | 2 | 46 | 1 | 3 | 15.33 |
| GM | 0 | 0 | 2 | 17 | 0 | 2 | 8.5 |
| GS | 0 | 0 | 3 | 3 | 2 | 5 | 0.6 |
| HA | 0 | 0 | 15 | 107 | 3 | 18 | 5.94 |
| JR | 0 | 0 | 0 | 4 | 1 | 1 | 4 |
| MI | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| MS | 0 | 0 | 7 | 6 | 2 | 9 | 0.67 |
| OD | 0 | 0 | 1 | 36 | 1 | 2 | 18 |
| PB | 0 | 0 | 6 | 20 | 3 | 9 | 2.22 |
| PD | 0 | 1 | 5 | 12 | 2 | 8 | 1.5 |
| RH | 0 | 0 | 5 | 19 | 2 | 7 | 2.71 |
| SH | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| TG | 0 | 1 | 6 | 9 | 3 | 10 | 0.9 |
| TM | 0 | 1 | 27 | 91 | 3 | 31 | 2.94 |
| VR | 0 | 0 | 0 | 5 | 1 | 1 | 5 |
| WR | 0 | 0 | 8 | 28 | 3 | 11 | 2.55 |
| Average ratio | | | | | | | 4.72 |

Note: The leftmost column presents students' encoded names; BB Help (a) is short abbreviation for *Blackboard Help*; C. Policy (b) - the same for *College Policies*; Course Info (c) – the same for *Course Information*; C.W. by W. (d) – the same for *Coursework by Week;* Σ (f) is the sum of the columns a, b, c, e.

After coding the data, every one of the 25 participants, was specified by a tuple of five numbers shown in Table 2. Based on these data the correlation analysis was conducted.

Table 2.  The sample of tuples representing some students' data (fragment)

|     | ORN$_A$ | ORN$_{A1}$ | ORN$_C$ | AA | EXP |
|-----|---------|------------|---------|-----|-----|
| **AJ** | 0.35 | 13 | 2 | 85 | 1 |
| **AN** | 0.02 | 1 | 1 | 81 | 1 |
| **BP** | 0.00 | 1 | 1 | 80 | 1 |
| **BS** | 0.02 | 0 | 0 | 90 | 1 |
| **BV** | 0.58 | 64 | 3 | 87 | 0 |
| ... | … | … | … | … | … |

From the mathematical point of view, a variable corresponds to every mentioned above characteristic. To find how strong the relationships between the variables were, Pearson's correlation coefficients were calculated with the use of the following formula:

$$K = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}},$$

where *n* is the number of students in the group; x=(x$_1$…x$_n$) and y=(y$_1$…y$_n$) are distributions of the chosen variables ("How to Compute Pearson's Correlation Coefficient", 2015).

Correlational analysis showed a high positive dependency between both indicators of orientation: *K (ORN$_A$, ORN$_{A1}$)* = 0.83. So, for convenience, in farther calculations we will use only *ORN$_A$*. Also, indicators of orientation positively correlate with each other:  *K (ORN$_A$, ORN$_C$)* = 0.5.

A positive correlation was found between students' orientation activity and their academic achievement: K *(ORN$_A$, AA)* = 0.38. No significant correlation was found between orientation activity and online experience: *K (ORN$_A$, EXP)* = – 0.1.

Moderate positive correlation was found between students' orientation in the VCR content and their academic achievement: *K (ORN$_C$, AA)* = 0.57. A negative correlation was found between orientation in the content and online experience: *K (ORN$_C$, EXP)* = – 0.47.

The analysis of preferences which the students gave to the content areas of the VCR showed that *Coursework by Week* was visited much more often than all the other areas. Average ratio for that subgroup of students which visited the VCR before the semester had begun was 4.72.

**Results and Discussion**
**Orientation in the VCR**
Students explored the content areas of the VCR with different degrees of interest. Nobody explored technological resources provided by *Blackboard Help*. Only six out of 25 participants familiarized themselves with *College Policies* for online education. Even such an important document as *Syllabus* was not examined by some students (see Table 1, rubrics *a, b,* and e.)

Meanwhile, many students were mainly interested in the *Coursework by Week* – it was visited much more often than all the other areas of the VCR put together. It seems

that they wanted to start the first homework assignment which was due soon. However, their eagerness to learn the subject did not compensate for lack of curiosity in mastering the instrument of learning. In fact, they substituted the problem. As Polya would have said, instead of clarifying the problem, they immediately started trying to solve it.

### Orientation and academic achievement

The hypothesis about connection between orientation and academic achievement is confirmed: $K (ORN_A, AA) = 0.38$. A higher orientation activity occurred together with a higher final grade. The amount of time spent in the VCR before the semester had begun ensured more successful performance during the semester. Dependence between orientation in content and final grades is even more significant: $K (ORN_C, AA) = 0.57$. These results correspond to Polya's theory: the more time is spent for understanding the problem: its data, statement, and the unknowns, – the higher the probability that the problem will be solved successfully.

### Orientation and online experience

No correlation was found between orientation activity and experience: $K(ORN_A, EXP) = – 0.1$; and negative correlation was discovered between orientation in the content and experience $K (ORN_C, EXP) = – 0.47$. Thus, an extensive review of the VCR was undertaken more often by novices than experienced students. There are several explanations of this result. By online experience we mean the number of taken courses. However, the courses differ in their quality. Perhaps, some "experienced" students attended courses in which they were not taught to explore the VCR. Also, need for orientation may depend more on a student's personality than on her/his professional experience. Self-organized and self-disciplined individuals need less time than others to prepare themselves for a new online course.

Another interpretation is connected with a well-known discussion about "digital natives and digital immigrants"[3] (Prensky, 2001; Margaryan, 2011). Some authors call these terms metaphor and question their rightfulness. Anyway, we cannot deny young people's ability to act (work, learn, and entertain) more freely and easily in the virtual spaces than such of the older generations. This feature is more visible in individuals competent in natural sciences and less – in humanitarians. However, people with such inclinations may appear in all areas. No doubt, there were "digital natives" among our students, and their special learning style in the VCR is reflected in the results obtained.

### Orientation strategies

The data provided by the Blackboard allowed to detect two components of the students' orientation: orientation activity and orientation in the content of the VCR. The first one is similar to cognitive eagerness and curiosity; the second one relates to erudition and ability to organize and structure accumulated knowledge. Presence of both components determines successful orientation and learning, while absence of one or both components results in adoption of special orientation strategies.

---

[3] The terms *digital natives* and *digital immigrants* were originated by Mark Prensky. They may apply to different generations: those who were born after and before the spread of digital technology. Some were exposed and some others were not in their young years to computers, videogames, video cams, tablets, I-phones, Internet, and other toys and tools of the digital age.

The students' data are represented by the two-dimensional diagram in the Figure 3. The two components of orientation are displayed as perpendicular axes: "Orientation activity" vs. "No orientation activity" represents the vertical axis, and "Orientation in content" vs. "No orientation in content" represents the horizontal axis. The students are illustrated as colored disks; the numbers inside them are their final grades. Colors of the disks mean degrees of success: effective students are shown in blue, students that experienced difficulties within the semester are shown in yellow, and failed students – in orange.
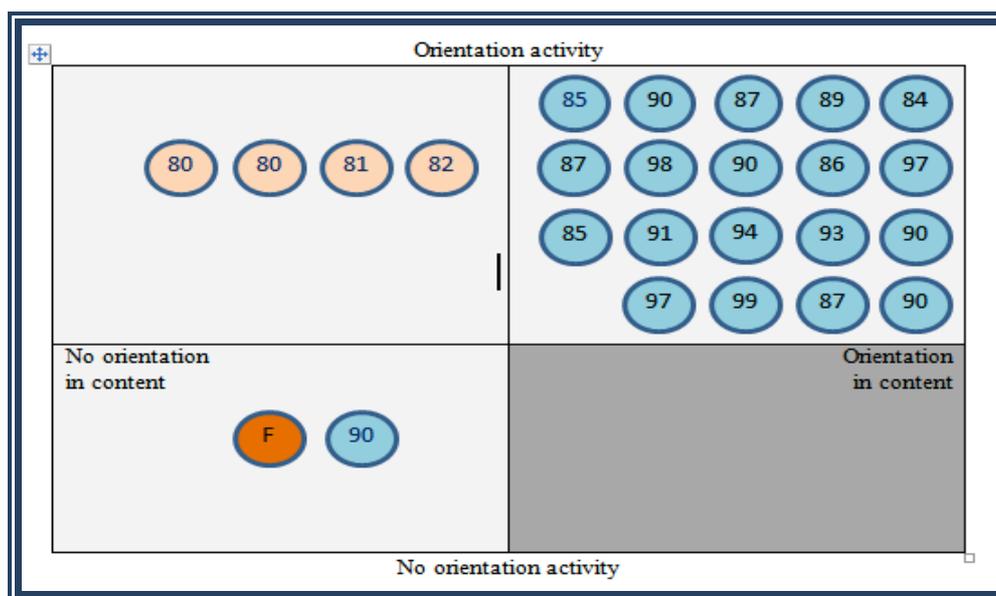


Figure 3. Representation of orientation strategies in students of the experimental group

In the *right top quarter* of the Figure 3, 19 students are located whose orientation strategy included both components – orientation activity and orientation in the content. All of them received good grades, were productive learners and successfully completed the course[4]. Therefore, presence of both components of orientation makes favorable prognosis for studying in online course.

Students located in the *right top quarter* have **prudent strategy.** They start with a preliminary acquaintance with the learning environment, in which they will study. They come to the VCR in advance and explore the course organization, its policy, technological tools, instructions for performing the coursework and submitting it to the Blackboard etc. Also, they prepare their first homework assignment early. They learn how to work with the VCR ahead of time, and it makes them feel comfortable. Metaphorically speaking, these learners undertake "acceleration before jumping". They are caring and diligent. They are sensitive to stress and try to avoid mistakes and misunderstanding which may prevent them from successful learning. This is the most common type of online students.

---

[4] In American education, the 100-point system for evaluating students' knowledge with corresponding letters is commonly used. At Touro GSE, grades from 80 to 100 are considered passing. They include A+(98-100), A (94-97), A-(90-93), B+(87-89), B (83-86), and B-(80-82); grades below 80 are considered failing (F).

In the *right bottom quarter,* there are no students. This case is impossible: if one does not have orientation activity, s/he certainly will have no orientation in content either.

In the *left top quarter* of the Figure 3*,* four students are located who displayed orientation activity but showed no orientation in the VCR content. Although these students completed the course, their final grades were on the boundary of failure. Thus, ignoring the VCR content may serve as a prediction of failure.

We say that these students have ***close-minded strategy*.** Although they came to the VCR before the semester had begun, they did not explore it. They barely understood importance of such exploration. They had a limited outlook and goal. They only wanted to see their first homework assignment. They had false ideas about their competence as online students. "Should I examine this online course, – they might have reasoned, – if I have already taken some others?" Very soon they exhausted their possibilities and realized that they could not master the new knowledge and skills alone; so they asked the teacher for help. Thus, they succeed only due to an additional instructional support. Such students are not common, but they constitute that category of online learners to which the additional instructional attention and support has to be given.

In the *left bottom quarter* of the Figure 3*,* two students are located; both did not visit the VCR before the semester had begun. Eventually, one of them successfully completed the course, and the other failed. Thus, total absence of preliminary orientation in the VCR is an ambiguous case which may have different consequences: it may lead to a failure but not always. The progress of such students should be monitored for more substantiated expectations and conclusions.

Let's discuss in detail the two students in this category. The first one had, as we say, ***self-assured strategy*.** It is one of those individuals who do not need a preliminary acquaintance with the VCR. They prefer «immediate immersion». They can explore the VCR along with performing the coursework. When working in the course, they rarely ask their teacher or classmates for help. They are not anxious; they are stable and very independent.

The other student, as we say, applied ***neglectful strategy*.** Usually, such students appear in the VCR by the first due date for submitting the coursework, if not later. They provide various excuses and ask about "some extension". However, extension does not save them. All of them quit the course sooner or later. Such students fail because they "try playing the game without knowing its rules". They ignore the fact that there are rules to follow. They are known as "problem students", whose enrollment in on-line distance classes, probably, was a mistake. They first need to be helped in developing skills for learning in general.

**Reliability of the Result**

*Course Activity Overview* and *All User Activity inside Content Areas* reports of 51 students from the control population were analyzed. Their $ORN_A$ and $ORNc$ shown within a week before the semester had begun were discovered.

Correlation coefficients between the students' $ORN_A$ and their *AA* for both control groups were calculated. A dependency between the students' orientation activity and final grades in both control groups was found. These results are displayed in Table 3. Closeness of these results to the result of the experimental group confirms their reliability.

Table 3. The Correlation Coefficients between $ORN_A$ and *AA* Listed by Group Type.

| The Correlation Coefficient K ($ORN_A$, AA) | | |
|---|---|---|
| The experimental group | The control group 1 | The control group 2 |
| 0.38 | 0.40 | 0.32 |

In the control groups, the same four orientation strategies were found: prudent, close-minded, self-assured, and neglectful. Their quantity in the control groups was different; their quality was similar. Like in the experimental group, the students with prudent strategy constituted a majority in the control population.

Some students from the control groups 1 and 2 did not orient themselves in the VCR before the semester had begun. Again, like in the experimental group, opposite orientation strategies were found among such students. Those of them, who had the neglectful strategy, failed; others succeeded.

Similarity of orientation strategies demonstrated by students of the experimental and control groups also confirms the reliability of the results received in the study.

**Conclusions**

An analysis of students' activity in the VCR before the semester had begun is an appropriate approach which allows the instructor to better understand the students' needs, problems, and orientation strategies as well as to predict their success in the online classes. Blackboard environment provides the data for identifying two major components of orientation in the VCR: orientation activity and orientation in the content. Their presence makes prognosis of online learning favorable, while their absence predicts a risk of failure.

Analysis of two major components of the students' orientation in the VCR allowed to identify four different students' strategies: prudent, close-minded, self-assured, and neglectful. Orientation strategies of the same types were found in the control population.

Students who used a chance to explore the VCR before the semester had begun productively studied within the semester. However, some others did not use extra time given for exploring the VCR, and it did not undermine their success in learning.

Probably, they belonged to the category of technologically advanced individuals, those who in the literature are often called "digital natives".

Farther enhancement in the online courses' design should account for the potential difficulties of many students' adjustment to the VCR. New forms of instructional support are needed to help online learners specializing in social sciences, especially beginners, develop skills for acquiring adequate knowledge of the VCR. A better understanding of the instrument of learning allows for a more productive study of the course subject.

# References

Bukaliya, R., Mubika, A.K. (2011). Teacher competence in ICT: Implications for computer education in Zimbabwean secondary schools. *International Journal of Social Sciences and Education.* Vol. 1, issue 4, 414-425

Dictionary. Retrieved on August 3, 2015 from http://dictionary.reference.com

Hung, M.-L., Chou, C., Chen, C.-H., Own, Z.-Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education, 55,* 1080-1090.

*How to Compute Pearson's Correlation Coefficient*. Retrieved on August 3, 2015 from http://www.statisticshowto.com/articles/how-to-compute-pearsons-correlation-coefficients/

Kaur, K., Abas, Z.W. (2004). An assessment of e-Learning readiness at Open University Malaysia. Retrieved on August 2004 from http://www.researchgate.net/profile/Zoraini_Wati_Abas/publication/228651396_An_assessment_of_e-learning_readiness_at_Open_University_Malaysia/links/53cf3f180cf2fd75bc59b527.pdf

Margaryan, A., Littlejohn, A. & Vojt, G. (2011). Are digital natives a myth or reality? Students' use of technologies for learning. *Computer & Education, 56,* 429-440.

McVay, M. (2000). Developing a web-based distance student orientation to enhance student success in an online bachelor's degree completion program. Unpublished practicum report presented to the Ed.D. Program. Florida: Nova Southeastern University.

McVay, M. (2001). *How to be a successful distance learning student: Learning on the Internet.* New York: Prentice Hall.

Polya, G. (1973). *How to solve it. A new Aspect of Mathematical Method.* Princeton, New Jersey: Princeton University Press.

Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon.* MCB University Press. Retrieved from http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Rizzo, A., Boverly, T., Buckwalter, J.G., Schultheis, M., Matheis, R., Shahabi, C., Neumann, U., Kim, L. & Sharifzadeh, M. (2002). Virtual environments for the assessment of attention and memory processes: the virtual classroom and office. *Proceedings of the 4th International Conference on Disability, Virtual Reality & Assoc. Technology. Veszprem, Hungary.*

Rizzo, A., Buckwalter, J.G., Shahabi, C. & Mitura, Roman (2004). Diagnosing attention disorders in a virtual classroom. *Computer, Vol. 37* (6). DOI: 10.1109/MC.2004.23.

Smith, P. (2005). Learning preferences and readiness for online learning. *Educational Psychology, Vol. 25* (1), 3-12

So, T., Swatman, P. (2006). E-Learning readiness of Hong Long Teachers (2006). Proceedings of CollECTeR Europe 2006 conference. Basel, Switzerland, June 9-10. Ed. by Schubert P. and Risch D. Printed by University of Applied Sciences Northwestern Switzerland FHNW.

The Free Dictionary. Retrieved on August 3, 2015 from http://www.thefreedictionary.com/orientation

The Virtual Classroom Defined. Retrieved on August 3, 2015 from http://thelearningexplosion.blogspot.com/2010/12/virtual-classroom.html

Warner, D., Christie, G. & Choy, S. (1998). *Readiness of VET clients for flexible delivery including on-line learning.* Brisbane: Australian National Training Authority.

Watkins, R., Leigh, D. & Triner, D. (2004). Assessing readiness for e-Learning. *Performance Improvement Quarterly, 17*(4), 66-79.

Yurdugul, H., Alsancak Sarikaya, D. (2013). The scale of online learning readiness: a study of validity and reliability. *Education and Science. Vol. 38* (169), 391- . Retrieved on August 3, from http://search.proquest.com/openview/c6b0a56d9385205d7bf3759a9bedd68d/1?pq-origsite=gscholar

Contact email: anna.toom@touro.edu

## *Important Considerations in the Pedagogy of Teaching and Learning in Contemporary Education Setting*

Muhammed Baba Gambari, Kwara State University, Nigeria

**Abstract**

Teaching and learning are core reasons why educational institutions are established in the world over. It is important to note, however, that the quality of what is being taught and learnt hinged heavily on the approaches used in teaching-learning situation. This is a technology age and as such requires a dramatic technological revolution through a well-structured and purposive educational system that encourages development of skills and competencies that are capable of impacting positively on the lives of people in our societies.

This paper therefore suggested best pedagogical considerations to facilitate effective teaching and learning in contemporary school settings would include consideration for the teacher, learner, curriculum and teaching facilities.

Keywords: Teaching, Learning, Pedagogy, Contemporary education setting

iafor

The International Academic Forum
www.iafor.org

**Introduction**
Teaching and learning are basic reasons why institutions of learning are established all over the world. The quality of what is being taught and learned rest heavily on teaching approaches. In the past and to some extent  in recent time in some countries, Nigeria inclusive, the conditions under which teaching and learning take place can be described to say the least compromising, classes are overcrowded, teachers do not have adequate professional preparation and certification. Facilities in some cases are grossly inadequate and there are curriculum issues. All of these do not allow for the right pedagogy of teaching to be applied in teaching courses to the students in the classrooms.

The age we live in is a technology age, and as such requires dramatic technological approaches through a well structured and purpose oriented educational system that encourages skills development and competences necessary to impact positively on the lives of people in our societies. To achieve these, the right pedagogy of teaching should be employed by teachers so that a more meaningful learning can take place on the part of the students who are expected to pilot the affairs of the nation someday. In this paper, emphasis is not on methods of teaching and learning but about other considerations such as the teacher, learner curriculum and facilities tied to teaching and learning methods and strategies, without which effectiveness would be lost in education setting. The focus in this paper therefore is on the understanding of what teaching, learning and pedagogy mean and to look at important considerations tied to the pedagogy of teaching and learning in the contemporary education setting.

What is teaching?
A layman definition to teaching might suggest "impacting knowledge to other people". This definition to me is myopic because to understand what teaching is, you need to know the processes and approaches involved. According to Amaele (2003), teaching is the guidance of students through planned activities so that they may acquire the riches learning possible from their experiences. The world "guidance" to me is an important element of teaching in the contemporary education setting. A teacher does not give instruction or lecture on issues, the guides. Students are guided to learn by themselves independent or group task and project work.

What is learning?
There is no absolute definition to learning. People define learning taking into consideration the learning theories and strategies adopted in the course of learning. For example, there are Associationist, Gestalt field theories etc. There are also many learning strategies such as conversational approach, problem-based learning, play-way method, computer and electronics device application flied trip method and so on.

Fundamentally, learning can be conceived as a product of teaching. However, it is not always the case as people learn by accident or through personal experience. Ability of the learner to recall, discriminate, categorize and application are often associated with learning (Watanabe, 1985). A relatively permanent change in behaviour as result of teaching, practice, previous experience, team and project work to me will give a concised definition to learning.

**Pedagogy of teaching**

Pedagogy deals with the theory and practice of education. It concerns the study and practice of how best to teach. It aims range from the general (full development of the human being via liberal education) to the narrower specifics of vocational education (the impacting and acquisition of specific skills). Methodologies, approaches and strategies of impacting knowledge to learners constitute important components of pedagogy in teaching and learning. ("Analysis of Pedagogy". Educ.Utas.edu.au).

It is therefore very important to know that it would be very difficult to talk about methods of teaching and learning without considerations for other factors that must be put in place for their effectiveness, the basis for this paper. At this juncture, permit me to give a picture about a typical public primary school for example in some states in my country-Nigeria.

- Most classes in primary schools have average population of fifty pupils.
- Sometimes, there is only one teacher to a class.
- Some schools do not have adequate teaching equipment and facilities.
- Time table for classes mostly is 35-45 minutes.
    The fundamental question, therefore, is how can best pedagogy of teaching be applied under these circumstances.

Basically, Pedagogy means Teaching and Learning Strategy Pedagogy is the art (and science) of teaching. Effective teachers use an array of teaching strategies because there is no single, universal approach that suits all situations. Different strategies used in different combinations with different grouping of students will improve learning outcome. Some are better suited to teach certain skills and field of knowledge than the others. Some are better suited to certain students' background and abilities. Pedagogy is how teaching learning occurs. Students are not empty vessels to be filled with our expert knowledge they must construct their own understanding through our considered learning experiences.

**Advantages**

1. Effective pedagogical practice promotes the wellbeing of students, teacher's and school curriculum.
2. It improves students' and teacher confidence and contribute to their sense of purpose at school.
3. It build community confidence in the quality of learning and teaching in school.
4. It supports intellectual engagements and connectedness to the wilder world, particularly when technology such as computer web-site and internet are used in learning.

**Important Consideration in the Pedagogy of Teaching and Learning in Contemporary Educational Setting**

The goal of education in the 21$^{st}$ century is not only to prepare students for jobs upon graduation from schools but primarily to prepare them to face challenges of this life. These challenges could be ecological, nutrition, political economic, aviation, job security social security among others. Today's education prepares global citizens. The following are therefore presented as important considerations in the pedagogy of teaching and learning in the contemporary education setting, if students would be adequately and productively prepared to face the challenges as heighted above.

**Consideration for teacher**
According to Douglas, teacher plays the primary role as a dispenser of information to orchestrator of learning and helping students turn information into knowledge, and knowledge into wisdom. Culture of inquiry should be applied by the teacher in the classroom. He is therefore an important consideration in the pedagogy of teaching and learning partly because he creates the strategies to ensure effective learning in the classroom.

In recognition of the importance of teachers to apply effective pedagogy of teaching and learning, countries like Switzerland, Japan, Newzealand, Shangai (China) and France have developed cultures of lifelong learning that begin with induction processes that are comprehensive, coherent and sustained (Oladunjoye, 2015). According to him, in the Carlbad school district in New Mexico in the USA, the induction for programme for teachers is focused on teaching teachers how to teach the required benchmarks and standards.

In Nigeria, Teachers Registration Council of Nigeria has the responsibility of ensuring quality assurance in teaching profession by licensing professional teachers. It has been observed that so many teachers in schools in Nigeria do not have professional qualification to teach.

The following are therefore the expectations of teachers in the contemporary education setting:
1. He plays the role of a model.
2. He arouses interest of learners to the subject matter.
3. He ensures that instruction is not teacher-centred but rather student centred (Durkin, 1993).
4. He plays the role of facilitator.
5. The teacher provides learning environment that allows for inquiry.
6. He encourages project method of teaching. This allows for interaction among members of the group through this, collaboration and meaningful learning is made possible.
7. Whatever strategy of teaching that is adopted and depending on the topic or course, the teacher must appeal to the visual, auditory and kinesthetic capacity of the learner.
8. The use of web-site and other technology devices must be used by the teacher in topic delivery and students must be encouraged to use internet facilities in their search for information.

9. Learners diversity should be put into consideration in the course of choosing strategies to teach.

**Learners' Consideration**

1. The curriculum and instruction should address learners' diversity too.
2. In the classroom, in schools, active learning is promoted where learners work collaboratively with classmate and others around the world (global classroom).
3. Learning is student –oriented to ensure that this happens, learning environment should be conducive.
4. Our goal is to help students become global citizens. This is a technological age and as such, students should be exposed to computers, laptops, internet facilities phones, gaming devices, web etc. My experience with students has revealed that although many of these students today are familiar with these facilities they use them for entertainment purposes rather than academic and knowledge enhancement.

The Learner in the past was a young person who would go to school, spenta specified amount of time in certain courses, receive passing grades and graduate. Today, as emphasized by Merrill & Jennyson (1977), Kellner (2008), learners must be seen in an new context as follows:

1. Learners interest must be maintained by helping them to understand how what is being taught prepares them for life in the real and challenging world.
2. Learners' curiosity must be arounsed, which is fundamental in lifelong learning.
3. Flexibility in how learners are taught because learning pedagogy that works for learner 'A' may not be productive for learners "B".
4. We must encourage learners to be resourceful and independent in their learning approach.
5. Application should be more emphasized in teaching and learning. Let learners work in group. Give them task to solve. Here the teacher's role is to guide. Therefore, the choice of teaching pedagogy must recognize the learner because teaching is centred around him. Deviation from this will only result into poor learning. There are a number of students in schools today who have learning difficulties not because they are dull but partly because, the choice of pedagogy being adopted by their teachers are not advantageous to them. They ordinarily would have done well in school if their peculiarities were taken into consideration.

**Consideration for the Curriculum**

Curriculum is a set of courses and their contents offered at a school. Curriculum in the contemporary education setting was summarized by Kellner (2008) as follows: it is interdisciplinary, project-based and research driven. It is connected to community-local, state, national and global. Sometimes through internet, mobile phones, web-sites, students collaborate with people around the world in projects. The curriculum incorporate higher order thinking, skills, the use of technology to solve problems.

The classroom is expanded to include the greeter community, students are self directed and work independently and interdependently.

Curriculum is not textbook-driven. Skills and contents are not taught as an end in themselves, rather, students learn them through their researches and application in their project. Textbooks therefore is just one of the learning resources, (Kellner, 2008).

The contemporary curriculum also emphasizes ICT, technology and entrepreneurship. Because so many schools neglect these aspects of the curriculum, particularly, entrepreneurship, many schools neglect these aspects of the curriculum particularly, entrepreneurship, many school graduates end up without jobs. This is partly because, they are not jobs and they do not possess entrepreneurial skills to create job and wealth. This shortcoming is pronounced Nigeria, my country. I am aware that other countries have this problem too Soludo (2006) a former central Bank Governor of Nigeria, stressed that in the knowledge driven 21st century, education must be the key driver of socio-economic transformation and the curriculum of all levels of education should reflect this. In 21st century education, facts and figures are constructed through researches and applications are connected to previous knowledge, personal experience, interest, talents and passion of the 'learners.

Yes, the curriculum of the contemporary education setting is robust and developmental, prevailing conditions in our schools, particularly, schools in some developing countries like Nigeria Cameroun, Niger, etc can not support it. In Nigeria, there are many schools with average class population of more than 50 students, gross inadequacy in facilities and qualified personnel. The question again is, how can you have curriculum of the 21st century under these circumstances?

**Consideration for the Curriculum**
The proposition in the $21^{st}$ century education is that without adequate facilities, learning cannot be meaningful, practical and application of theories, concepts, information to solve problem would be elusive. The fact remains that the students require adequate and relevant facilities to do project learning that is recommended in the contemporary education setting. Gambari (2011) pointed out that in order to promote ICT, vocational and entrepreneurship education, in the $21^{st}$ century education, basic infrastructure and facilities to support effective teaching in this direction should be put in place. Workshops for vocational course should be provided, entrepreneurship centers, studios for Arts and craft, photography are also necessary facility requirements. If all of these are not present in a school setting, how do you teach some of these courses most effectively.

In the contemporary education setting and school system, computers, internet, e-library, studio, workshops, web-sites fields, condusive classrooms, re-agents for laboratory experiments, the laboratory itself, phones, television etc have been found indispensable in teaching and learning to prepare students for lifelong education. All of these have the capacity to support the most appropriate pedagogy a teacher choses to apply in teaching his students ("Enhancing Education"
(http://enhancinged.wgbh.org/started/what/forma.html).

**Conclusion**

It can be concluded that without proper considerations for teacher, curriculum and facilities, teaching and learning in contemporary education setting will not be effective. And that the choice of pedagogy to be applied in the classroom should reflect these considerations.

**References**

"Analysis of Pedagogy". Educ.utas.edu.au.Retrieved 2010.

Amaele, S. (2003) Understanding the philosophy of education. Ilorin: Tesa Printing Enterprises and Computer Centre.

Durkin, M.C. (1993). Thinking through class discussion- the Hilda Taba approach. Lancaster, P.A: Delmar Publishers.

Enhancing Education" (http:llenhancinged.wgbh.org/started/what/formal.html).

Gambari M.B. (2011). Primary School Education in the 21st Century. The need to empower Head teachers. Being a paper presented at the 2nd Quadrennial Delegate Conference of AOPSHON, Kwara State at Nui Secretariat, Ilorin, Kwara State, Nigeria.

Kellner, D. (2008). Reconstructing education for the new millennium: New Media and New Literacy.

Merril, M.D. & Tennyson, R.D. (1977). Concept Teaching: An Instructional Design Guide Englewood Cliffs, NJ. Educational Technology.

Oladunjoye, T. (2015). "Professionalism: The Teaching Profession". Induction Lecture Graduating Students at Kwara State University, Malete, Nigeria.

Soludo, C.C. (2006) Can Nigeria be the China of Africa? A lecture presented at the Founders Day of the University of Benin, Benin City in November, 2006.

Watanabe, S. (1985) Pattern Recognition: Human and Mechanical: New York: Wiley.

# *Attitudes and Behavior of Ajman University of Science and Technology Students Towards the Environment in Light of Some Variables*

Rasha Abdellah, Ajman University of Science and Technology (AUST), UAE

**Abstract**
This study examined the attitudes and behavior of Ajman University of Science and Technology (AUST) students towards the environment according to their gender and college. The sample consists of (375) students (230 males and 145 females) from different colleges. A survey investigated the attitudes and behavior scale towards the Environment (ABSTE) and environmental sciences course via an evaluation questionnaire. Results revealed wide differences in the environmental attitudes and environmental behaviors between the undergraduate students enrolled in environmental sciences course and others who didn't study the course yet. Findings also showed that females have higher environmental attitudes and environmental behaviors than males. According to colleges, students of Dentistry and Pharmacy colleges have the highest environmental attitudes and environmental behavior than students of Law and Information, Mass Communication and Humanities colleges. Engineering students have the least environmental attitudes and environmental behavior. The results generally assert the importance of environmental education in all educational stages, especially in university.

**Keywords:** Environmental Education, Attitudes, Behavior, University Students

iafor

The International Academic Forum
www.iafor.org

## Introduction

Environmental deterioration has emerged as a serious issue in the current world. Human factor is the largest contributor to the creation and exacerbation of many environmental problems that might advance into serious threats to the human being and all living organisms (Gore, 1993). These environmental problems may increase greatly, mainly due to some global negative activities or lack of environmental legislations in countries rather than an individual activity. Individuals with negative attitudes towards the environment will continue to pose problems regarding the environment (Uzun and Saglam, 2006). Only individuals who have environmental literacy, awareness and sensibility would contribute to the solution of these environmental problems.

Environmental Education (EE) has been viewed as an important approach to educate students about environmental issues, and to identify challenging environmental problems at all educational levels, including university (Fernandez et al., 2007; Tuncer et al., 2009). Therefore, Environmental Education is crucial to prepare environmentally literate graduate who would play an active role in protecting the environment by making informed decisions and taking environmental-friendly behaviors (UNESCO, 1980; Roth, 1992).

## Environmental Education

The main aim of environmental education is to encourage citizens to act in an environmentally conscious manner that balances the current social, economic, and environmental needs without compromising those of the future (Yorek et al., 2010); as well as to defy and set goals at the cognitive, metacognitive, affective and behavioral levels (Sanera, 1998). Furthermore, to help people develop positive attitudes, emotions, thoughts or behaviors that increases their sensitivity towards the environment (Erten et al., 2003).

Therefore, many studies put forward the important outcomes of environmental education that, given in the different system of education (formal and informal), enables people to: 1) lead positive changes in their attitudes and behaviors towards the environment.2) protect and sustain the environment. Thus, it should be an essential part in all educational levels, as well as universities (Grodzinska J et al., 2006; Palmberg and Kuru, 2000).

## Attitudes and Behaviors

It is assumed in social Psychology field that an individual's personal evaluations are more informative of the person's attitude than what she/he pretends to do (Eagly and Chaiken, 1993).Atkinson has defined attitudes as "favorable or unfavorable evaluations of/and reactions to objects, people, situations, or any other aspects of the world." They help us to predict and change people's behavior (Atkinson et al., 1996).

To be precise, "Attitude can also be considered as an "overall evaluation that expresses how much we like or dislike an object, issue, person or action" (Pride and Ferrell, 1991, Petty et al., 1999; Hoyer, 2001; Solomon, 2004).

Schultz and Zelezny (2000) pointed that the attitude of environmental concern originates from the individual's concept of ~~about~~ himself and from the degree of perceiving himself as a fundamental part of the natural environment. It is believed that behavior is what people do, whether it is appropriate for the environment or not (Hernandez and Monroe, 2000). In general, behavior is supported by knowledge and

attitude, but the direct connections between knowledge to attitude and to behavior does not always exist (Monroe et al., 2000).

Many studies confirmed that knowledge itself is not enough to change individuals' attitudes or even to motivate them to adapt a new behavior (Stern, 2000; Schultz, 2002), Although the lack of knowledge may represent an obstacle for behavioral changes (DeYoung, 2000; Schultz, 2002). That means, knowledge is not the only thing that affects individual environmental awareness, but there is also a combination of awareness, attitudes, and values; social, cultural and psychological. Newhouse (1990) confirmed also that the lack of knowledge about a certain aspect of life may be considered as a barrier for attitude change. Only attitudes, which are a derived from life experiences and education, can affect behavior. (Oweini and Houri, 2006).

**Environmental Attitude, Environmental Behavior and Environmental Education**
The educational and ecological literature contains various approaches in defining the environmental attitudes. It consist of attitudes, psychosocial variables, personal responsibility, and locus of control (Hines et al, 1986). Attitudes have been expressed as—common feelings towards the environment, being concerned about specific environmental issues, and taking action to reform environmental problems. While personal responsibility expresses the individual's feeling of obligation toward the environment, locus of control stands for individuals' understanding of their ability to bring about environmental change through personal behavior (Peer et al, 2007).Therefore, the individual characteristics that change according to external factors, will have little to no effect on the situation. Those that do change according to internal factors will have strong effect on the situation.

Internal locus of control describes people who believe in their ability to bring about change through personal procedures (Peyton and Miller 1980; Hungerford and Volk 1990).

One of the critical goals in establishing environmental literacy is to support people in believing in their ability to contribute in solving environmental problems through personal behavior, either as individuals or as a part of a group (Peer et al, 2007; Mondéjar-Jiménez, 2012). Consequently, environmental behavior can be defined as the action of an individual or a group that promotes the sustainable use of natural resources (Sivek and Hungerford, 1989).

Thus, students' attitudes affect their behavior, especially their choice of action, and their decisions. For instance, in schools, students who have high scientific knowledge tend to choose more convenient decisions (Ugulu, 2011). This means, there is direct relationship between environmental education and environmentally responsible attitudes and behaviors (Vlaardingerbroek and Taylor 2007).

Certain previous studies pointed that the correlation between cognitive and affective attributes is weak and non-linear (Myers et al, 2004). They also suggested that knowledge is not enough to change attitudes and adopt a responsible behavior.

On the other hand, many researchers found significant effects of environmental education on students' attitudes. (Bradley et al, 1999; Pooley and O'Connor, 2000; Sama, 2003; Maki et al, 2003; Yılmaz, Boone and Anderson, 2004; Alp 2005; Eroland Gezer, 2006; Uzunand Saglam 2006; Fernández-Manzanal et al, 2007; Aslan and Cansaran 2008; Ozsoy 2012). Some of them indicate that attitudes can be a

predictor of environmental behavior (Bamberg S, Moser G, 2000; Chewla L, 2006; Sivek D, 1988).

Various researchers found significant differences between males' and females' attitudes towards environmental problems and behavioral variations towards the environment. Females had a higher pro-environmental attitudes than males (Kuitunen Tynys, 2000; Talay et al, 2003; Sherkat Ellison ,2007 ;Fernández-Manzanal et al, 2007; Torgler et al, 2008; Ek Kılıç et al, 2009; Kose et al, 2011; Ozsoy, 2012)

## Purpose of the Study

Provided the importance of a strong sense of positive attitudes towards the environment related to environmental behavior, the understanding and consciousness about environmental issues seem to be of particular importance in examining university students' attitudes and behaviors towards the environment. Therefore, the purpose of this study is to explore undergraduate students' attitudes and behaviors toward the environment. More specifically, this will be based on the main problem; and the research questions to be addressed in this study are as follows:-

1: What are undergraduate students' attitudes and behaviors towards the environment in Ajman University?
2: Are there any differences among undergraduate students' attitudes and behaviors in Ajman University towards the environment regarding their gender?
3: Are there any differences among undergraduate students' attitudes and behaviors in Ajman University towards the environment regarding their colleges?
4: Are there any differences between attitudes and behavior of undergraduate students enrolled in environmental sciences course and others who did not yet study environmental sciences course?
5: What is the students' evaluation of the course materials and their suggestions to improve it?

## Importance of the Study

- Investigating factors that affect students to adopt positive attitudes and responsible behavior towards their environment.
- Studying students' attitudes and behaviors towards the environment may help in developing the course material and activities, as well as providing suggestions to protect the environment and explore solutions to the environmental problems.

## Methods
## Participants:-

This sample was taken from undergraduate students enrolled in Environmental Sciences course in the first semester for the academic year of (2014/2015). It consisted of (375) students 230 females (61.3%) and 145 males (38.7%). The sample included 180 students (49.4%) from (Law and Information, Mass communication and Humanities colleges) as one group of students who have a literacy background, 140 students (37.3%) from Engineering college, and 50 students (13.3%) from (Dentistry and Pharmacy colleges) as one group who have science background in Ajman University in UAE, Participants were volunteers in this study.

| College | Female | Male | Total | Ratio % |
|---------|--------|------|-------|---------|
| Law &Sociology | 110 | 75 | 185 | 49.4% |
| Engineering | 90 | 50 | 140 | 37.3% |
| Dentistry& pharmacy | 30 | 20 | 50 | 13.3% |
| Total | 230 | 145 | 375 | |
| Ratio | 61.3% | 38.7 % | 100% | |

Table 1: **Profile of participant**

## Instrument

• *The Attitudes and Behavior scale towards the Environment (ABSTE)*: it was designed to determine students' attitudes and behavior towards the environment. The scale consists of (30) items put in two groups in 5-point Likert scale, that ranged from 1 (strongly agree) to 5 (strongly disagree). The two main factors of the scale are:

   1.Students' Attitudes towards the Environment (SATE). (15 items-0.50%)
   2.Student's Responsible Behavior towards the Environment (SRBTE). (15 items-0.50%)

• *Environmental sciences course evaluation questionnaire*: it was designed to evaluate students' opinions towards environmental sciences course, it consisted of (10) items in 5-point Likert scale, that ranged from 1 (strongly agree) to 5 (strongly disagree), and one open question about their suggestions to improve environmental sciences course.

## *Validation and Reliability of the Attitudes and Behavior scale towards the Environment Scale (ABSTE)*

• **Validity:** The attitudes and behavior scale towards the environment was consisted of (38) items, it was subjected to content validity by submitting it to experts in psychology and experts in measurement and evaluation for their input and necessary corrections. According to their comments some items were deleted and some items have been modified, the remaining items are (30).

➢ Internal consistency validity has been determined by applying (ABSTE) on another sample consisted of (40) students and calculate r person between every item of the scale and the total score of the scale, the correlation coefficients were ranged between (0.59 and 0.77).

➢ Then calculate r person between every item and the total of its factor. The Correlation coefficients ranged between (0.67 and 0.89), all correlation coefficients were significant which confirmed the validity of the scale.

• **Reliability**: the attitude and behavior scale towards the environment (ABSTE) was subjected to Cronbach alpha reliability measure where the study was used. Student's attitudes towards the environment (SATE) was 0.77, Student's responsible behavior towards the environment (SRBTE) was 0.75, and Total of (ABSTE) was 0.78. These are satisfied reliability coefficient.

## Result

| | Highest points | mean | SD | RW | Order |
|---|---|---|---|---|---|
| **Factor 1** | 75 | 55.8 | 6.94 | 77.39 | 1 |
| **Factor 2** | 75 | 49.65 | 8.15 | 66.34 | 2 |
| **Total scale** | 150 | 105.6 | 11.37 | 71.87 | |

**Table 2: Mean, standard deviation and relative Wight for (ABSTE)**

| N | ITEM | Mean | SD | Relative weight | Descending order |
|---|---|---|---|---|---|
| | **-Factor (1):  Student's Attitudes towards the environment (SATE).** | | | | |
| 5 | Awareness of environmental problems contributes to countries' development. | 4.42 | 0.75 | 88.49 | 1 |
| 4 | The so-called ecological crisis facing humankind has been greatly exaggerated | 4.40 | 0.70 | 88.00 | 2 |
| 3 | Environmental problems have to be discussed in all the countries. | 4.29 | 0.69 | 85.85 | 3 |
| 13 | Media mast have role in spreading environmental awareness. | 4.21 | 0.67 | 84.29 | 4 |
| 1 | I concerned about problems affecting the current environment in the world | 3.98 | 0.71 | 79.61 | 5 |
| 2 | There are a little to be done about current environmental problems | 3.90 | 0.69 | 79.10 | 6 |
| 14 | I think that is essential to raise the awareness about the dangerous of  environmental problem among all citizens | 3.87 | 0.88 | 77.46 | 7 |
| 15 | I think the recycling bins around the country are valuable. | 3.85 | 0.99 | 77.20 | 8 |
| 12 | I appreciate the efforts  made to preserve  and protect the environment | 3.80 | 0.94 | 76.00 | 9 |
| 7 | Environmental problems in the UAE is not critical. | 3.50 | 1.06 | 75.33 | 10 |
| 8 | Seminars and workshops regarding development of environmental awareness are useful | 3.34 | 1.07 | 73.24 | 11 |
| 6 | It's useless to warn people about environmental problems | 3.12 | 1.06 | 72.10 | 12 |
| 9 | I enjoy reading books and magazines on environmental issues | 3.10 | 1.01 | 69.91 | 13 |
| 10 | Knowledge about environmental problems in not my specialty. | 2.99 | 1.14 | 68.10 | 14 |
| 11 | I am bored by news related to environmental issues | 2.97 | 1.10 | 66.23 | 15 |
| | **Total score of  factor (1)** | **3.72** | **1.65** | **77.39** | |
| N | ITEM | Mean | SD | Relative weight | Descending order |
| | **- Factor (2): Student's Responsible Behavior towards the environment (SRBE)** | | | | |
| 1 | For saving energy, I turn off the light in my house when it is not used. | 4.43 | 0.65 | 88.78 | 1 |
| 2 | I willingly join activities to help save the environment. | 4.36 | 0.70 | 88.00 | 2 |
| 6 | I don't consume long time while I'm showering | 4.21 | 0.79 | 86.24 | 3 |
| 7 | I don't waste much water while I'm brushing my teeth | 4.17 | 0.79 | 84.78 | 4 |
| 15 | I've always reused the white paper in old notebook. | 3.59 | 0.86 | 77.86 | 5 |
| 11 | I always put any old staff (clothes, shoes…etc.) in recycling bins. | 3.55 | 0.89 | 73.11 | 6 |
| 8 | I buy only as much as needed while I'm shopping | 3.41 | 1.03 | 71.02 | 7 |
| 5 | I always watch T.V program about environmental problems. | 3.38 | 0.91 | 68.50 | 8 |
| 4 | I always talk with people around me about environmental matters. | 3.34 | 0.96 | 67.57 | 9 |
| 13 | I share links relevant environment and environmental awareness on social networks (Facebook / twitter, link in,…) | 3.01 | 1.12 | 66.72 | 10 |
| 3 | I avoid buying products in aerosol containers | 2.91 | 1.14 | 52.39 | 11 |
| 14 | I read labels on products to see if the contents are environmentally safe | 2.40 | 1.03 | 47.34 | 12 |
| 10 | I feel happy when I see people recycle used bottles, cans and papers | 2.39 | 1.00 | 43.56 | 13 |
| 12 | My friends know me as sensible person towards environment | 2.30 | 1.34 | 40.25 | 14 |
| 9 | I prefer using environmental harmless products | 2.24 | 1.42 | 38.93 | 15 |
| | **Total score of factor (2)** | **3.31** | **1.74** | **66.34** | |
| | **Total of the scale** | **3.52** | **1.15** | **71.87** | |

**Table 3: Means, standard deviations and relative weight of the sample**
**Respondents' scores of Attitudes and behavior scale towards the environment**

To answer the questions, and investigate the attitudes and behavior of undergraduate students enrolled in environmental sciences course towards the environment, we considered (3) is the midpoint, which means item indicates positive if it gets score 3 or above.

As seen in table (3) the undergraduate students indicated somewhat positive attitudes and behaviors toward the environment in the total scale, the total mean of scale was (3.52) with SD (1.15) and RW (71.87). For factor (1) student's attitudes towards the environment total mean was (3.72) with SD (1.65) RW (77.39). For factor (2) Student's Environmentally Responsible Behavior (SERB), the total mean of the scale was (3.31) with SD (1.75) and RW (66.34).

**In factor (1): Student's attitudes towards the environment**
As seen in table (3), students scored the three relatively highest in item 5 (M=4.42), which is "Awareness of environmental problems contributing to countries' development", then item 4 (M=4.40) which is "The so-called ecological crisis facing humankind has been greatly exaggerated", then item 3 (M=4.29) which is "Environmental problems have to be discussed in all countries". In these items, students showed their understanding about the importance of environmental awareness and its effect on countries' development and how the ecological crisis is threatening the humankind, and as a result students think that it is essential to discuss environmental problems among all countries together - not in separate. The lowest item was item 11 "I am bored by news related to environmental issues" (M=2.96).

**In factor (2): Student's Responsible Behavior towards the environment**
We can see that students scored the three relatively higher in item 1 (M=4.43), which is "For saving energy, I turn off the light in my house when it is not used", then item 2 (M=4.36) which is "I willingly join activities to help in saving the environment.", then item 6 (M=4.21) which is "I don't consume long time while I'm showering". In these items students translate their environmental awareness in many practical reactions and responsible environmental behaviors for saving environmental recourses like water and energy. The lowest item was item 9 "I prefer using environmental harmless products" (M=2.24).

| | | N | M | SD |
|---|---|---|---|---|
| Gender | Female | 230 | 83.95 | 18.20 |
| | Male | 145 | 49.57 | 14.25 |
| college type | Law & Information ,mass communication and Humanities | 185 | 73.12 | 23.18 |
| | Engineering | 140 | 54.05 | 18.01 |
| | (dentistry& pharmacy) | 50 | 83.39 | 8.98 |

**Table 4: Descriptive statistics of the sample**

In order to investigate if there any difference in students' attitudes and behaviors towards the environment according to their gender or college. A two-way Analysis of Variance (ANOVA) was conducted on the attitudes and behaviors towards the environment Scale (ABTES).

| Source | Df | Means square | F | P |
|---|---|---|---|---|
| Gender | 1 | 26469.112 | 147.208 | 0.000 |
| college type | 2 | 9205.579 | 50.835 | 0.000 |
| College* gender | 2 | 9967.041 | 56.412 | 0.000 |
| Error | 370 | | | |
| Corrected total | 373 | | | |

**Table 5: Results of two-way ANOVA on the (ABTE) scale**

According to table (5) there is a significant mean difference between females and males in their attitudes and behaviors toward the environment. It was found that females have higher positive attitude and behavior towards the environment than males.

Consider that to main effect of students' college, a statistically significant mean difference were found amongst (Law and Information, Mass communication and humanities) colleges, (Dentistry and Pharmacy) and (Engineering) colleges on the student's attitude and behaviors towards the environment Scale [F=50.835, p=0.000].

The Scheffe post-hoctests were conducted to determine the mean score differences between groups. The comparison of mean scores according to the college type indicates that (dentistry & pharmacy) students expressed more positive attitudes and behaviors toward the environment than both (law and Information, Mass communication and humanities) colleges and (Engineering college). However, Law and Information, Mass communication and humanities colleges' students showed more positive attitudes and behaviors than engineering students. The result shows also that females in (Law and Information, Mass communication and humanities) have the highest score in the attitude and behaviors scale towards the environment than other colleges while males in (dentistry & pharmacy) have highest score in the (ABSTE).

In order to investigate if there are any differences in attitudes and behaviors towards the environment between undergraduate students enrolled in environmental sciences course and others who did not study the course yet. A group of 120 students (32%) has been taken from the main sample (375), and another group with 120 students (32%) who did not yet studied environmental course was taken randomly. T-test was determined for independent samples for the two groups.

|  | N | M | SD | df | T | p |
|---|---|---|---|---|---|---|
| Group(1) | 120 | 113.7 | 6.78 | 238 | 28.12 | 0.001 |
| Group (2) | 120 | 84.3 | 9.23 |  |  |  |

**Table 6: Difference between students enrolled in Environmental course and others who didn't study the course yet**

According to table (6) there is a significant mean difference in the attitudes and behaviors towards the environment between group (1) - the undergraduate students enrolled in environmental sciences course, and group (2) - students who did study the course yet in their attitudes and behaviors towards the environment for group (1) [t(238)=28.12,p=0.001]

In order to investigate what the students' evaluation of the course materials and their suggestions to improve it. Environmental sciences course evaluation questionnaire was applied.

| N | Item | M | SD | RW | order |
|---|------|---|----|----|----|
| 1 | Environmental sciences course is somewhat difficult. | 3.56 | 1.72 | 73.21 | 5 |
| 2 | If the environmental courses was not required course, I think will choose it to study. | 2.61 | 1.46 | 66.11 | 8 |
| 3 | Environmental sciences course is an important course for students in science major (medicine - pharmacy …….) | 2.43 | 0.99 | 65.53 | 9 |
| 4 | Environmental sciences course provide very important information about environmental issues. | 3.93 | 0.98 | 85.46 | 1 |
| 5 | Environmental sciences course is only necessary for passing examination. | 2.41 | 1.33 | 64.38 | 10 |
| 6 | After studying environmental sciences course ,I feel responsibility towards the environment | 3.82 | 1.31 | 79.45 | 3 |
| 7 | Environmental sciences course made me think to find solutions for environmental problems | 3.78 | 1.47 | 75.17 | 4 |
| 8 | The course content successfully covered all environmental issues in very simple way. | 2.98 | 1.12 | 68.62 | 7 |
| 9 | Environmental sciences course need more practical activities | 3.87 | 1.03 | 83.22 | 2 |
| 10 | Feeling satisfied of studying Environmental sciences course | 3.33 | 0.89 | 69.44 | 6 |
| | | **3.27** | **2.09** | **73.06** | |

**Table7: Mean, standard deviations and relative weight of respondents'**
**Scores on the environmental sciences course evaluation questionnaire:**

According to table (7) undergraduate students indicated somewhat positive attitudes towards environmental course, the total mean of questionnaire was (M=3.27) with (SD) =2.09 and (RW) =73.06. And regarding the open question about students' suggestions to improve the course, they proposed many suggestions like:

1. Environmental sciences classes should not exceed 30-40 students. That gives students chances to be more involved in class activities (discussion–presentation–projects).
2. Environmental sciences course material should be updated and focused on some current critical environmental problems that treat humankinds like (climate change–nuclear problems) and mention some practical solutions that students can do to share in saving the environment.
3. Environmental course materials contained much information, so they should be divided into two parts information to know and information to exam in.
4. Environmental course materials should be presented in interesting way with more practical and interactive work.
5. Environmental sciences course must have practical activities to make students more involved in environmental issues like:

➢ Trips to (Planetarium - Masder city - Desalination factories – Groundwater wells - Solar power plants).
➢ Visits to organizations working in environmental field (Abu Dhabi Authority for Environment - ministry of environment …etc).
➢ Invite organizations working in environmental industries to held some activities in Ajman University like (workshops, seminars, training, lectures and competition) to make students more care and aware about their environment.

**Discussion**

According to the descriptive result of this study, it has been observed that there were significant differences in the environmental attitudes and environmental behaviors between the undergraduate students enrolled in environmental sciences course and undergraduate students that didn't study the course. Where the students enrolled in environmental sciences course indicated positive environmental attitudes and environmental behavior. However, the total scale score and item scores were clustered just above the mid-point.

This finding supports previous studies which observed that students who had environmental education were more aware of environmental attitudes than other students (Bradley et al, 1999; Thapa, 1999; Pooley and O'Connor 2000; Taloyetal, 2003; Sama 2003; Maki et al, 2003; Yılmaz, Boone and Anderson, 2004; Alp 2005; Erol and Gezer, 2006; Uzun and Saglam 2006; Fernández-Manzanal et al, 2007; Aslan and Cansaran 2008; Ozsoy 2012). The result also agrees with other studies that found significant effects of environmental education on students' environmental behaviors (Bamberg S and Moser G, 2000; Chewla L, 2006; Sivek D, 1988). Otherwise, it disagrees with some previous studies that found the environmental education of the students don't affect their environmental attitudes and environmental behavior (Kahraman, Yalcın, Ozkan, and Aggul, 2008; Ozdemir et al, 2004; Müderrisoǧlu H, and Altanlar A., 2011).

Concerning factor one of the scale related to student's attitudes towards the environment: students scoring the three relatively highest were:"Awareness of environmental problems contributes to countries' development", "The so-called ecological crisis facing humankind has been greatly exaggerated", "and Environmental problems have to be discussed in all the countries". These three items reflect the students' consciousness and understanding, the importance of environmental awareness and its effect on countries' development, and how the ecological crisis is threatening humankind of environmental problems and show how they keen and care about the environment which indicates to the students' positive attitudes towards the environment. The lowest item was "I am bored by news related to environmental issues," it might be acceptable for the undergraduate students (teenager) because the positive attitudes towards the environment does not mean they have to be involved in reading news about environment all the time.

In the second factor of the scale which is about student's responsible behavior towards the environment: students scoring the three relatively highest were "For saving energy, I turn off the light in my house when it is not used", "I willingly join activities to help in saving the environment.", "I don't consume long time while I'm showering". In these items students translate their environmental awareness and environmental attitudes in many practical reaction like saving environmental recourses (water and energy). Thus assert the positive effect of the environmental awareness and attitudes on responsible behavior towards the environment. The lowest item was "I prefer using environmentally harmless products". This finding might be logical because the harmless product is somewhat expensive for them as they are still students.

Overall, it's clear that students have a good background knowledge about the environment which is translated in their attitudes and behaviors towards the environment. Although there are many factors could be affect their attitudes and behaviors, the environmental education could be one of the most important factors that affects their attitudes and behaviors towards the environment. The significant difference between students enrolled in environmental sciences course and others who didn't study it confirmed the importance of environmental education that reflect itself in students' environmental attitude and behavior. Therefore, it is a good sign for Ajman University of Science and Technology (AUST) to integrate an environmental sciences course as a required course.

 (Ozmen et al, 2005; Ek et al, 2009) showed, an environmental course should be included at university education as well as primary and secondary education. For the future implications, the content and delivering of the environmental course would be restructured to obtain more interests of university students from a wide range colleges and different backgrounds in handling environmental issues and improving their environmental attitudes and behaviors.

The two way ANOVA results revealed significant differences in the perceptions of male and female students' attitudes and behaviors towards the environment. Female students expressed more positive attitudes and behaviors towards the environment than males. This finding is consistent with many other studies (Kuitunen and Tynys, 2000; Talay et al, 2003; Sherkat and Ellison, 2007; Fernández-Manzanal et al, 2007; Torgler et al, 2008; Ek and Kılıç et al, 2009; Kose et al, 2011; Ozsoy, 2012). Also this finding could be logical because females are more sensitive and keen than males, and show high degree of social responsibility and make a significant contribution to environmental protection (Jenkins and Pell, 2006)

These findings indicate that there are differences among the mean scores of students based on their colleges on the Attitude and Behavior Scale towards the Environment. The comparison of mean scores according to their colleges indicate that male students from (Dentistry and Pharmacy) colleges display more positive attitudes and behaviors towards environment than both (law and Information, Mass communication and humanities) and Engineering colleges. On the other hand female students from (Law and Information, Mass communication and humanities) expressed more positive attitudes and behavior towards environment than (Dentistry and Pharmacy) and Engineering colleges.

Actually, it was expected that students with science background (Dentistry and Pharmacy) have more positive environmental attitudes and behaviors than (law and Information, Mass communication and humanities) colleges, as they enrolled in environmental sciences courses and may learn or read about environment for the first time. Consequently, they might be more interested in environmental issues which reflected in their positive attitudes than engineering students.

Findings about evaluation of the environmental course shows positive attitudes towards course materials and that was clear in the choices for the three highest items that were: "Environmental sciences course provides very important information about environmental issues", "Environmental sciences course needs more practical activities" and "After studying environmental sciences  course, I feel responsibility

towards the environment". These items stated students' understanding of importance of the environmental sciences course information in their life. It shows also their interaction with course materials that made them think and decide that course materials need more practical activities. In addition they consider that the course information had a positive impact on them because it made them feel responsible towards the environment. Also students were very keen to share their positive suggestion to improve the course material.

**Conclusion:**

Environmental problems have emerged as a serious issue in the world today. So educating people is the main way to reduce the environmental problems by raising awareness and responsiveness towards the environment. Thus Environmental Education (EE) has an effective impact on students' environmental attitude and environmental behaviors. So, it is an essential way to reduces environmental problems that happened due to lack of environmental legislations all over the globe rather than individual activities.

Education is a long-life process, so it is crucial to teach subjects about environment at all educational stages beginning from pre-school and continuing to university education. It seems to be more important to university's stage because University's student of the present will be the leaders in the future. Some of them may be engineers in large factories or administrative staff in private and public places in the future, or as direct policy makers or applying pressure on policy makers in diminishing the environmental problems.

Therefore, universities for all programs and colleges should offer an environmental education program covering environmental sciences to improve awareness and consciousness of students towards environment.

**References**

Atkinson, R.L, Atkinson, R.C., Smith, E.E., Bem, D.J., NolenHoeksem, S.,(1996). *Hilgard's introduction to psychology*. Fort worth, TX: Harcourt Brace College publication.

Aydin, F., Cepni, O.,(2010).*university students' attitudes towards environmental problem. Acase study from Turkey*. International journal of the physical sciences.No.5 (17).

Bradley, J.C., Walickzek, T.M&Zajicek, J.M., (1999).*Relationship between environmental knowledge and environmental attitudes of high school students.* The journal of environmental education, 30(3):17-21.

Eagly.A.H. &Chaiken, S. (1993). *The psychology of attitude*. Fort Worth. TX: Harcourt Brace Jovanovich.

Eilam, E., Trop, T. (2012).*Factors influencing adults' environmental attitudes and behaviors and the role of environmental schools in influencing their communities'* .Edu. Urban soc.2012, June, 1-30

Erten,S.Özdemir,P.&Güler,T.(2003).*Determination of pre-school Teachers' levels of environmental awareness and status of environmental education in the school*, Proceeding of OMEP,world council and conference ,Turkey,Vol.2,P.334-350.

Erten, S., Özdemir, P, &Güler, T. (2003).*Determination of the pre-school teachers' levels of environmental awareness and the status of environmental education in their schools*, proceedings of OMEP2003 world council and conference, Turkey.vol.2, p334-350.

Fernández- Manzanal.R, Rodríguez-Barreiro, Carrasquer.J.(2007).*Evaluation of environmental attitudes: Analysis and results of a scale applied to university students*. Science Education, 91(6):988-1009.

Gore, A., (1993). *Earth in the balance:* ecological and the human spriti, Boston, MA. Houghton Mifflin.

Grodzinska-Jurczzak, M.Stepska, A., Katarzyna, N.,Bryda,G.,(2006). *Perception of environmental problems among pre-school children in Poland*.Int.Res Geogr Environ Edu, 15(1):62-76.

Hawkins, D.I., Best, and P.J. &Coney, K.A. (1989) .*consumer behavior: implications for marketing strategy* (4th Ed).BPI.Irwin: Boston.

. Hines, J.M., Hungerford, H.R., Tomera, A.N., (1987).*Analysis and synthesis of research on responsible environmental behavior*: Ameta –analysis Environ Edu, 18(2):1-8.

Hini, D.,Gendall,p.&Keans,Z.(1995).*The link between environmental attitudes and behavior*, Marketing Bulletin,(6):22-31.

Hoyer, W, D., Machnnis, D.J., (2001).*consumer behavior*, Houghton Mifflin Company, 2nd ED.

Hungerford, H.R, Volkt, (1990). *Changing learner behavior through environmental education* .Environ Edu, 21(3):8-21.

Koses, Savran-Gencr.A, Gezer.K, Eroll.GH, Bilen.K(2011).*investigation of undergraduate students' environmental attitudes*.Int Electron journal .Environ.Edu,(2):85-96.

Loudon, O.L., &Della, Bitta, A.J. (1993).*consumer behavior: concepts and applications* (4th ed).McGrew Hill: Auck land.

Maki.M.H.Abddel-Khalick.F, Boujaoude.S (2003*).Lebanese secondary school students' environmental knowledge and attitudes*. Environ Edu, Res, 9(1):21-23.

Mayers.G, Boyes.E, Stanisstreet, M. (2004).*school students' ideas about air pollution: knowledge and attitudes*,Res Sci Teac.Edu.(22):133-152.

Metin, Moustfa., (2013). *A study on developing a general attitude scale about environmental issues for students in different grade level*.

Mondèjar-Jimènez.J, Mondèjar-Jimènez.J.A.,Vargas-Vargas.M.,(2012).*personal attitudes in environmental* protection.Int.J.Environ Res 6(4):1039-1044.

Mutisya,S.,Kipgetich.K., Rono,K.J.,(2013).*Positive attitudes towards environmental conservation* :The role of primary education in Kenya ,Asian journal of management science and education,vol2,No.4.

Müderrisoglu, A., Altanlar, A.,.(2011).*Attitudes and behaviors of undergraduate students towards environmental issues*.

Newhouse.N, (1990).*Implications of attitudes and behavior research for environmental conservation,* Environ Edu, 22(1):26-32.

Oweni,A., Houi,A.,(2006) .*Factors affecting environmental knowledge and attitudes among Lebanese college students* ,Appt Environ Edu.comm.Int.J,5:95-105. Ozsoy, S. (2012). *A survey of Turkish pre-service science teachers' attitudes towards the environment*.Eurasian.J, Edu.Res, 12:121-140.

Palmberg, I.E&Kuru, J. (2000).*outdoor activities as a basic for environmental responsibility*, the journal of environmental Education, 31(4):32-36.

Peer.S, Goldman.D, Yavetz.B. (2007).*environmental literacy in teacher training: Attitudes knowledge and environmental behavior of being students.* Environ Edu, 39(1):45-59.

Petty, R.E., Unnava, H.R., Strathman, A.J., T (1999).*Theories of attitude change,* Handbook of consumer Behavior, Prentice –Hall.

Peyton, R.B, Miller, B.A., (1980). *Developing an internal locus of control as prerequisites to environmental action taking*, J-Environ Edu, 18(2):1-8.

Pooley.J, O'conner.M (2000). *Environmental education and attitudes, Emotions and beliefs are what is needed,* Environ Behav, 32(5):711-724.

Pride, W.M., Ferell, O.C. (1991).*Marketing: concepts and strategies*, Houghton Mifflin company,7 Ed.

Rath, C.E. (1992).*Environmental literacy: Its roots Evaluation and directions in the 1990s*(Columbus. OH.ERIC/SMEAC information reference center)

Sama.E(2003).t*eacher candidates' attitudes towards environmental problems*, journal of Gazi Educational Faculty,23(2):99-110.

Sanera, M. (1998).*Environmental education: Promise and Performance*, Canadian Journal of environmental Education, 3(3):9-26.

Scott.W, Gough.S (2003).*sustainable development and learning*: Framing the issues. Landon: Routedge-falmer.

Soloman, M, R., (2004). *Consumer Behavior, buying having and being*, *Pearson Prentice Hat*, 6th Ed.

Tikka, P, M., Kuitunen, M.T, Tynys, S.M (2000). *Effect of educational background on students'' attitudes, Activity levels and knowledge concerning the environment* .J.Environ.Edu.3 (3):12-19.

.Tuncer.G (2008). *University students' perception on sustainable development: A case study from Turkey*.Int Res.Gerogr Enivron.Edu.

Ugulu, I, Sahin, M., Baslar, S., (2013). *High school Students' environmental attitude: scale development and validation*, Int J.Edu Sci.5 (4):415-424.

Ugulu.I, Sahin.M, Baslar, S. (2013).*High school students' environmental attitude: scale development and validation*: Int.J.Edu.Sci, 5(4):415-424.

UNESCO-UNEP1999.*Chaning minds earth wise connect*, 23:1-69.

UNESCO (1980).*Environmental Education in the light of the Tbilisi Conference* (Paris UNESCO).

Uzun, N. &Seglam, N. (2006).*Environmental attitude scale for high school students*. Journal of Hacettepe education Faculty, 30,240-250.

Vlaardinger broek.B, Taylor.G (2007).*The environmental knowledge and attitudes of prospective teachers in Lebanon*: A comparative study.Int Res Geogr Rnviron.Edu.16 (2), 120-134.

Yilmaz, O., Boone, W.j&Anderson, H.O., (2004).*Views of elementary and middle school Turkish students towards environmental issues*. International journal of science education, 26(12):1527-1546.

Yorek.N, Ugulu.I, Sahin.M, Dogan.Y. (2010). *A qualitative investigation of students' understanding about ecosystem and its components*. Nature Montenegrina, 9(3):973-981.

Yousf, A., Butta.S. (2012).*secondary school students' attitude towards environmental issues in Karachi Pakistan*, journal of educational and social research, vol.2 (10).145-165.

## APPENDEX

**Attitudes and Behavior Scale Towards the Environment (ABSTE)**

Dear Students,

This questionnaire discusses some items about the environment and our relation with it .It consists of 30 items. Write your personal information, then read carefully every item and choose only one option out of five (strongly agree- agree-not sure-disagree-strongly disagree). We ensure you full confidentially and will only use for scientific research

**Thank you for your cooperation**

| Name :……………………………. | | Gender:…………………………. |
|---|---|---|
| College:……………………………… | | Midterm mark:……………………………. |
| Class :……………………………… | | Age:……………………………. |

| | ITEM | Strongly agree | agree | Not sure | Disagree | Strongly disagree |
|---|---|---|---|---|---|---|
| 1 | I concerned about problems affecting the current environment in the world | | | | | |
| 2 | For saving energy, I turn off the light in my house when it is not used. | | | | | |
| 3 | There are a little to be done about current environmental problems. | | | | | |
| 4 | Environmental problems have to be discussed in all the countries. | | | | | |
| 5 | I willingly join activities to help save the environment. | | | | | |
| 6 | I avoid buying products in aerosol containers | | | | | |
| 7 | The so-called ecological crisis facing humankind has been greatly exaggerated | | | | | |
| 8 | I always talk with people around me about environmental matters. | | | | | |
| 9 | Awareness of environmental problems contributes to countries' development. | | | | | |
| 10 | I always watch T.V program about environmental problems. | | | | | |
| 11 | I don't consume long time while I'm showering | | | | | |
| 12 | I don't waste much water while I'm brushing my teeth | | | | | |
| 13 | It's useless to warn people about environmental problems | | | | | |
| 14 | I think the recycling bins around the country are valuable. | | | | | |
| 15 | Environmental problems in the UAE is not critical. | | | | | |
| 16 | I buy only as much as needed while I'm shopping | | | | | |
| 17 | Seminars and workshops regarding development of environmental awareness are useful | | | | | |
| 18 | I enjoy reading books and magazines on environmental issues | | | | | |
| 19 | I prefer using environmental harmless products | | | | | |
| 20 | Knowledge about environmental problems in not my specialty. | | | | | |
| 21 | I feel happy when I see people recycle used bottles, cans and papers. | | | | | |
| 22 | I am bored by news related to environmental issues | | | | | |
| 23 | I appreciate the efforts  made to preserve  and protect the environment | | | | | |
| 24 | Media mast have role in spreading environmental awareness. | | | | | |
| 25 | I always put any old staff (clothes, shoes…etc.) in recycling bins. | | | | | |
| 26 | My friends know me as sensible person towards environment | | | | | |
| 27 | I share links relevant environment and environmental awareness on social networks (Facebook / twitter ,…) | | | | | |
| 28 | I read labels on products to see if the contents are environmentally safe | | | | | |
| 29 | I think that is essential to raise the awareness about the dangerous of environmental problem among all citizens | | | | | |
| 30 | I've always reused the white paper in old notebook. | | | | | |

## Environmental sciences course evaluation

Dear students,

In order to develop the content of environmental sciences course, we kindly ask you to select one options for your point of view for every item. We ensure you full confidentially and will only use for scientific research purpose.

**Thank you for your cooperation**

| N | ITEM | Strongly agree | Agree | Not sure | disagree | Strongly disagree |
|---|------|------|------|------|------|------|
| 1 | Environmental sciences course is somewhat difficult. | | | | | |
| 2 | If the environmental courses was not required course, I think I will choose it to study. | | | | | |
| 3 | Environmental sciences course is an important course for students in science major (medicine - pharmacy …….) | | | | | |
| 4 | Environmental sciences course provide very important information about environmental issues. | | | | | |
| 5 | Environmental sciences course is only necessary for passing examination. | | | | | |
| 6 | After studying environmental sciences course ,I feel responsibility towards the environment | | | | | |
| 7 | Environmental sciences course made me think to find solutions for environmental problems | | | | | |
| 8 | The course content successfully covered all environmental issues in very simple way . | | | | | |
| 9 | Environmental sciences course need more practical activities | | | | | |
| 10 | Feeling satisfied of studying Environmental sciences course | | | | | |

DO you think that course material of environmental sciences is satisfied?
Yes ( )  No ( )
If your answer no, please write your suggestion for improving course materials:
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
…………………………………………………….................................................................
..............

# Determinants of Quality in Higher Education Institutions in Morocco

Youssef Loutfi, Al Akhawayn University in Ifrane, Morocco

## Abstract

In today's modern economies, education has become a crucial competitive differentiator. The quality of different products and services is hugely determined by how engineers, businesspersons, executives, managers, and educators think about and execute quality measures. Similarly, higher education (HE) in today's competitive world is driven by quality because of the growth and development of the global market of education. Although there are some voices that are skeptical about the outcomes of implementing the total quality management philosophy in an educational context, it argues in this paper that educational institutions are one of the most fitted platforms for the implementation of total quality management values.

Furthermore, the literature suggests a plethora of critical success factors with potential influence on quality management in higher education institutions (HEI's) with no universal agreement. Hence, this paper aims to identify the critical success factors of quality management in HEI's in Morocco. By using the Delphi Technique and university professors from eight different Moroccan public universities as panelists, this research revealed that top management commitment and responsibility, working environment, employee involvement, employee training and development, infrastructure, and cultural and organizational transformation ability are critical success factors of quality management in HEI's in Morocco.

It is hoped that this study will showcase to Moroccan decision makers that education is not a one size fit all matter and that we should stop projecting the French educational system into ours. The focus and challenges of each system are indeed widely different. Education is the most intimate national matter of all, and it should be treated at such in Morocco.

Keywords: Quality Management, HEI's, Critical Success Factors, Delphi Method.

**Introduction**

Over the last two decades, quality management has become a focal point to many industries such as health care and manufacturing. In the past, the leadership style has been believed to be the most important quality management parameter that can lead to enhance the performance (Juhl, Kristensen, Kanji, & Batley, 2000). Today, the proliferation of IT, as well as the globalized business markets have brought the end quality of the produced product, or delivered services to center stage. Up after World War II, total quality management was not a commonly used concept. However, researchers and academicians pointed its importance as logical evolutionary step towards quality assurance, and subsequently total quality management. Currently, total quality management and quality management could be used interchangeably. They are defined as a long-term management approach to achieve a high degree of quality while meeting customers' expectations and managing organizations towards their quest to achieving excellence.

However, some researchers are skeptical of the outcomes of adopting the total quality management approach used in manufacturing, construction, tourism, or health care into education (McCulloch, 1993; Meirovich & Romar, 2006; Zakuan, et al., 2012). Chaston (1994), they advocate that such an approach would raise issues of trust and confidence among departments, which would hinder the implementation of total quality management in educational institutions. "Under these circumstances, it does not appear that, for the foreseeable future, British universities are in a position to adopt TQM philosophy" (1994, p. 114). Nevertheless, quality management from an educational standpoint is multidimensional. This involves management, social and technical systems, contributions of students as in/outputs, supportive administration and infrastructure, and finally, faculty members. Moreover, if educational institutions, specifically the higher educational ones that introduce, teach, and research total quality management would not be credible if these institutions would not be able to embrace and apply the quality management values themselves (Zakuan, et al. 2012). In addition, total quality management is a credible universal approach, that has been tested and proven by many firms in different sectors and industries, and it should at least be considered and tried in the education sector and at higher education institutions (HEI's) in particular.

**Education in Morocco: Past vs. Present**

After the Second World War, when today's developed countries were focusing all their resources on building their nations by focusing on education, Morocco was still under the colonization of both France and Spain. In 1956 when Morocco got independent, official reports estimated the illiteracy rate between 82% and 87% (El Baggari, 2014). After almost 60 years, the situation has improved, but still alarming, as the illiteracy rate is around 28% (UNESCO, 2014). The definition of literacy in Morocco is about the ability to read and write and does not include the use of IT or technologies (UNESCO, 2006).

In fact, the first article of the Moroccan Charter for Education and Training of 1999 has determined the principles, values, and objectives of the educational system that aim at producing virtuous citizen ingrained with morals of moderation and tolerance, open to science and knowledge and endowed with the spirit of initiative, creativity, and entrepreneurship. Meanwhile, article 10 of the character focused on the

integration of information communication technologies in the Moroccan educational institutions while focusing on the importance of e-learning. Hence, the ultimate objective was to provide education for all to contribute to the development of Morocco by strengthening the country on the social, economic, and human levels in an era marked by globalization.

Nonetheless, the 2014 report of UNESCO on the quality of the world's education systems has revealed disappointing facts. First, along with other North African countries, Morocco failed to deliver strong schooling to its citizens. Second, besides the emergency plan from 2009 to 2012 aimed at reforming the educational sector, no remarkable results have been yielded. Third, almost half of primary schools' students face serious difficulties in mastering basic skills such as reading and mathematics. Finally, Morocco ranks among the 21 countries suffering from poor education.

## Education in Morocco: Globalization

The geographical location of Morocco, the free trade agreements, and globalization have made of Morocco an attracting platform for multinationals to establish their businesses. Among these multinationals, there are YAZAKI, Delphi, Renault, Bombardier, Microsoft, Dell, PSA Citroen Peugeot, and many other structures operating in different sectors. Indeed, these multinational companies are in need of qualified capital human who can act locally but think globally. Therefore, the educational sector in Morocco should follow the rhythm of the advancement of education globally.

In today's competitive environment, education is not anymore about learning, and acquiring skills, through attending educational institutions. It is a transformation process (Zakuan, et al., 2012). This transformation process is made up of inputs of students and academic & administrative personnel, the process comprises the teaching and learning methods & the administrative procedures, and the outputs embrace satisfaction & engagement in the job market. Hence, determining and understanding the critical success factors that play a great role in enhancing the end quality of this transformation process is a fundamental step that need to be undertaken. Furthermore, "due to open competition, students are becoming more customers as well as consumers and expected to pay a growing share of the cost of education" (Roffe, 1998, p 80), which implies that these students/consumers require a special attention to satisfy the current accounts and attract new ones through providing a quality product.

## Literature Review

### Quality Management

Quality is considered one of the most critical concepts to be defined (Golder, Mitra, & Moorman, 2012). The definition of quality varies depending on the perspective from which the person is defining it (Reid & Sanders, 2009). Still, the business world is said to be quality-driven since firms-manufacturers or service providers- are continuously looking forward to improve their quality to satisfy the increasing customers 'quality expectations. Consequently, which have transformed the market's structure based on quality (Golder, Mitra, & Moorman, 2012).

At present, there is no particular or distinct commonly agreed upon definition of quality as it could be defined as performance to standards or meeting the customers' needs. Moreover, quality could be defined as:

- **Conformance to specifications:** "How well the product or service meets the targets and tolerances determined by its designers" (Reid & Sanders, 2009,p 138). In fact, this definition could be interpreted as a degree of excellence of a product/service against some standards.
- **Value for price paid:** "Quality defined in terms of product or service usefulness for the price paid" (Reid & Sanders, 2009, p 138). As a point of fact, this definition is a mixture of economic sciences and matching or exceeding the customers' needs.

Coming up with one universal definition of quality is not straightforward, and over the last 30 years, quality became a decisive standard for the survival of businesses (Reid & Sanders, 2009). Accordingly, quality was the main concern of business practitioners as it was the ultimate motive behind the invention of new emerging concepts such as total quality management (Golder, Mitra, & Moorman, 2012).

**Total Quality Management**
Total quality management (TQM) is a management philosophy aiming to satisfy customers and improving the overall performance of the organization while focusing on the human capital and processes. TQM necessitates an efficient and effective management, coordination, and improvement of the business as a whole towards a full commitment and engagement to the customers 'interests. In the global competitive environment, TQM is considered a strategic way for organizations to reach excellence. TQM incorporates the values of teamwork, cooperation, participation, continuous improvement, and trust that permit organizations operate in a favorable environment.

**Critical Success Factors of TQM**
The following are the diverse factors addressed by numerous literature sources dealing with quality management in educational institutions.

**Top Management Commitment and Responsibility:**

Top management commitment of HEI's is indispensable for successful implementation of quality management, as the role of senior decision makers is considered a vital player towards an effective implementation of any new initiatives. Top management inject positive attitude vis-a-vis the understanding of quality management importance in their organization. In the United States of America, top management of HEI's has introduced 77.4% of quality management principles implementation while top management of HEI's in Malaysia has introduced 75.9% of these principles (Kanji, Tambi, & Wallace, 1999).

**Strategic Quality Planning:**
Strategic quality planning is the process of efficiently and effectively allocating tangible and intangible resources in order to decide on strategies that would guide the decisions making process (e.g. Elmuti, Kathawala, & Manippallil, 1996; Mehralizadeh & Safaeemoghaddam, 2010; Ho & Wearn, 1996). In the context of

higher HEI's, strategic quality planning requires defining the vision and the mission statement of the HEI's. The importance of the vision statement as a vital component of quality planning entails that HEI's that care about quality management principles need to have a quality management vision that should be projected in its vision statement.

**Working Environment:**
Working environment refers to the tangible and intangible conditions needed for employees to perform their tasks, and in an educational context, working environment refers mainly to teamwork environment, openness and effectiveness of communication, and hierarchy within an educational institution (Elmuti, Kathawala, & Manippallil, 1996; & Zakuan, et al., 2012). Teamwork within HEI's can tie the effort of all the staff of an institution for improving quality. Furthermore, working environment embraces open and effective communication. Not only does effective communication take place within the institution itself, but also it should be within all the stakeholders (Zakuan, et al., 2012). In fact, communicating within the institution could be problematic when horizontal communication approach is used rather than vertical since communication loses both clearness and momentum. Hence, it appears the importance of flat hierarchy and break down barriers in boosting collaboration rather than competition.

**Employee Involvement:**
Human resources are considered the most valuable assets that make the difference between an organization and another one since the produced products, delivered services, or the process could be replicated. However, great importance to the alignment of people with the organization's objectives and goals is tremendous for successful implementation of quality management principles through empowering employees to take part in the decision-making process, and the development initiatives depending on their levels within the organizations.
Such a process is described by Zakuan, et al., (2012) as a psychological process to establish confidence among the different players of any organization aiming to inject quality management principles.

**Employee Training and Development:**
Sahu, Shrivastava, & Shrivastava (2012, p 66) define employee training and development as "acquisition of knowledge, skills and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies". Indeed, Quality-related training for employees is considered a vital pillar in an effective and efficient implementation of quality management values, as it is part of the continuous process of people management.

**Infrastructure:**
In an educational context, infrastructure plays a vital role in transferring knowledge and its role consists mainly in facilitating this transfer of knowledge to students, which empowers the interaction and exchange among students, professors, and external environment. Determining the required infrastructure for achieving quality management is stochastic, as it differs depending on the nature of the educational institution itself. For instance, the needed infrastructure for technical institutions is not the same as for business institutions. However, there are some common infrastructure that are pre-requisite for achieving quality management in HEI's such as catering

facilities, internet availability, teaching supports (Boards, computers, Projectors…), nursing facility, housing, sport facility, etc. For sustainable development of the educational institution, infrastructure such as library with sufficient and adequate number of books, access to online journals, and periodicals, in addition to research and development center is a prerequisite for achieving customer satisfaction in order to reach high level of quality management in HEI's.

## Customer Satisfaction:

The focus of Customer satisfaction in HEI's should be on the expectations of the learners and stakeholders. Furthermore, Mehralizadeh & Safaeemoghaddam (2010) have classified customers of HEI's into four categories that are at the same time complementary and mutually exclusive, which are governments, academics, administrators, and the actual customers (students in HEI's, their families, and the society as a whole). On one hand, these four groups of customers of HIE's are complementary since institutions are required to come up with strategies that gratify the needs of all these four categories. On the other hand, satisfying the desires and needs of the numerous HEI's' customers could be challenging and hard to be realized, as the desires could be different.

## Cultural and Organizational Transformation Ability:

The adoption of a new philosophy driven by quality management dimension requires a cultural and organizational transformation. As discussed earlier, quality management approach in HEI's involves elements such as strategic quality planning, changing the working environment, employees' involvement, and customer's satisfaction. Meanwhile, "HEI's have deep-rooted traditions dating back several centuries, which cause them to resist change." (Sirvanci, 2004, p 383). Hence, the focus on the products should shift to the market by assessing the market needs and adapt to the continuous changes. Moreover, the cultural and organizational transformation ability is reflected as well in the re-designing the organizational structure of the higher education institution by moving from the horizontal structure to departmental structure that provide more flexibility in terms of the cooperation among departments for the benefit of the organization itself. Besides, the importance of cultural and organizational transformation ability is perceived in the ability of the higher education institution to establish an atmosphere based on cooperation rather than competition by instituting an attitude based on "us" rather than "them" (Winn & Green, 1998).

## Continuous Improvement:

Anderson, Rungtusanatham, & Schroeder (1994, p 480) define continuous improvement as "the propensity of the organization to pursue incremental and innovative improvements of its processes, products, and services". Continuous improvement could be seen as the wheels while the educational institutions as the vehicle. Hence, the effort generated by the wheels throughout continuously caring about quality would participate in making the institutions achieved quality via successfully implementing quality management principles. Indeed, continues improvement necessities the contribution of all the players to achieve good liaisons with customers and effective innovative organizational development.

**Monitor Progress:**
Monitoring progress regarding quality management systems encircles different components including self-assessment, internal audits, benchmarking, managing by process, measurement, information and analysis, and accreditation of the quality management system (O'Mahony & Garavan; 2012). Still, self-assessment is a vital measurement for monitoring progress along with various approaches such as benchmarking, or PDCA method (Plan-Do-Check-Act). Nonetheless, in the higher education framework, internal audits and constructive feedback from students and corporate leaders are considered the most valuable methods to monitor progress since it permits to have a holistic view and tackle the situation from different angles.

**Research methodology**
The Delphi Technique was employed in this study. The two-round questionnaire on Quality Management in HEI's in Morocco were administrated while interviewing 14 university professors from eight different Moroccan public universities to gather data. Corresponding statistical analyses were applied to obtain the conclusions in order to reach the research objectives.

**General description of the Delphi Method**
Delphi technique has been developed in the 1950s by RAND corporation (e.g. Anderson, Rungtusanatham, & Schroeder, 1994; Hsu & Sandford, 2007). "It is a widely used and accepted method for achieving convergence of opinion concerning real-world knowledge solicited from experts within certain topic areas" (Hsu & Sandford, 2007, p 1). Delphi method is a holistic approach to deal with multipart subjects; it operates on the principle that a number of experts' opinions are better in delivering subjective rational consensus on a given topic than one expert (Weaver W. T., 1971). Delphi is used to assemble opinions on a precise topic from a number of experts called panel until the achievement of an agreement and consensus on the researched subject. The combination of several judgments of people can increase the chances of approaching the truth (Clayton, 1997). It also helps solving complex problems and not well-defined as well as understanding social phenomena.
The following figure summarizes the different steps required for the application of Delphi technique- the classical Delphi.
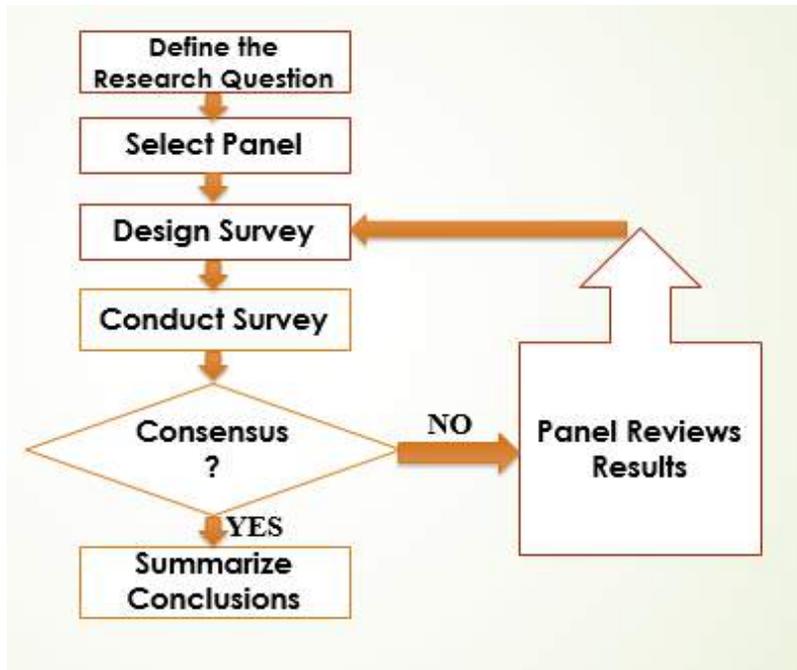
*Figure 1: Steps of Implementing of the Classical Delphi Technique*

**Participants**

The selected experts are part of the Moroccan educational system belonging to HEI's, which are university professors. The Delphi technique presents some flexibility in terms of selecting experts as there are no agreed upon characteristics for the selected panel of experts in the literature (Hsu & Sandford, 2007). Skulmoski, Hartman, & Krahn, & Krahn (2007) have come up with three different expertise requirements that each potential expert should meet in order to be eligible to participate in the study. First, the potential expert needs to have the knowledge and be familiar with the topic of the research study. In addition, the expert needs to be willing to participate and be committed to take part of the different rounds, which leads us to the third requirement that is the availability of enough time for the expert to respond to the multi-questionnaires. Similarly, Delbecq, Van de Ven, & Gustafson (1975) have categorized the eligible potential experts for the Delphi technique into three categories:

- ✓ The upper layer of management that could benefit from the endings of the Delphi study.
- ✓ "The respondents to the Delphi questionnaire whose judgments are being sought" (p. 85).
- ✓ Any member concerned with the Delphi study.

Hence, based on the above definitions, criteria derived from the literature dealing with Delphi method, and the flexibility of the technique concerning the choice of experts, another criterion has been added to determine the most appropriate and useful panel of experts in this study, which is access to the potential eligible panelists.

**Number of Participants**

Contrary to other ways of collecting data, Delphi technique does not take into consideration saturation. Still, the literature does not specify any specific number of experts, as there is no agreement on the optimal number of panelists (Delbecq, Van de Ven, & Gustafson, 1975). Hsu & Sandford (2007) stated that the upper limit of the selected sample size is thirty; however, a panel made up of four experts is undoubtedly too small, and panel of experts between ten and twenty is a rational

choice. In addition, Clayton (1997) states that the size of the panel might vary widely since there is no consensus about the number of panelists that should be included. Nonetheless, it is preferable to apply the rule of thumb of fifteen to thirteen panelists if the experts are homogeneous (Clayton, 1997). However, Ziglio (1996) claimed that ten to fifteen experts are enough to endorse the credibility of the results in a homogeneous group.

Hence, a sample size of fifteen experts is used to collect the needed data for further analysis and investigation.

**Procedure for Data Collection**

Data was collected by contacting experts in HEI's in Morocco using e-mail. The data collection phase was divided into three sub-phases, which are brainstorming, narrowing down, and finalizing the list. The figure below explains in details the administration procedures for designing questionnaires and data collection.



**Phase 1: Brainstorming**
- A review of literature would help to extract the potential critical success factors of quality managment in HEI's.
- Unify terms used by authors and remove any similarities(Dupolica).
- Experts should be treated as individuals rather than a panel.

**Phase 2: Narrowing Down**
- First quationnaire: Ask Experts to measure ten factprs on 7 likert scale.
- Recall factors that are chosen by more than eighty percent of the panelits.
- Summarize the opinins of panelists and send feedback to experts.

**Phase 3: Ranking**
- Second questionnaire: Ask expert to rank factors.
- Comminicate the ranking feedback to panelists and ask them to re-rank them if necessary.
- Reepeat the previous step until a general agreement is reached
- Communicate the final findings to experts.

*Figure 2: Administration process for Delphi method*

**Preparation of Questionnaires**

The first questionnaire was designed based on the factors derived from the literature review of quality management in educational institutions. A 7-point Likert agreement scale was chosen to measure the importance of the factor for quality management in HEI's. Meanwhile, the questionnaire of the second iteration was designed by referring to the results of the first survey. The objective of this questionnaire was to rank by importance the selected critical factors from the first round.

## Distribution of Questionnaires
The distribution and assembly of the questionnaires of both rounds were done via e-mail.

## First Questionnaire Analysis:
The analysis of the first questionnaire was done using Microsoft Excel by calculating the mean of each factor and the agreement percentage. Agreement was determined if the mean of the responses of each factor is 80% or more (Hsu & Sandford, 2007). However, The analysis of the second questionnaire was done by determining the frequency of ranking of each critical success factor.

## Findings
The table below presents the results of the two questionnaires of Delphi rounds:

| | Consensus in % | Ranking |
|---|---|---|
| Top Management Commitment and Responsibility | 82.14 | 1 |
| Working Environment | 80.10 | 4 |
| Employee Involvement | 80.61 | 5 |
| Employee Training and Development | 81.83 | 6 |
| Infrastructure | 81.63 | 2 |
| Cultural and Organizational Transformation Ability | 82.14 | 2 |
| Strategic Quality Planning | 68.37 | - |
| Customer Satisfaction | 66.33 | - |
| Continuous Improvement | 56.12 | - |
| Monitor Progress | 66.33 | - |

*Table 1: Summary of the results of the Delphi Rounds*

## Conceptual Model
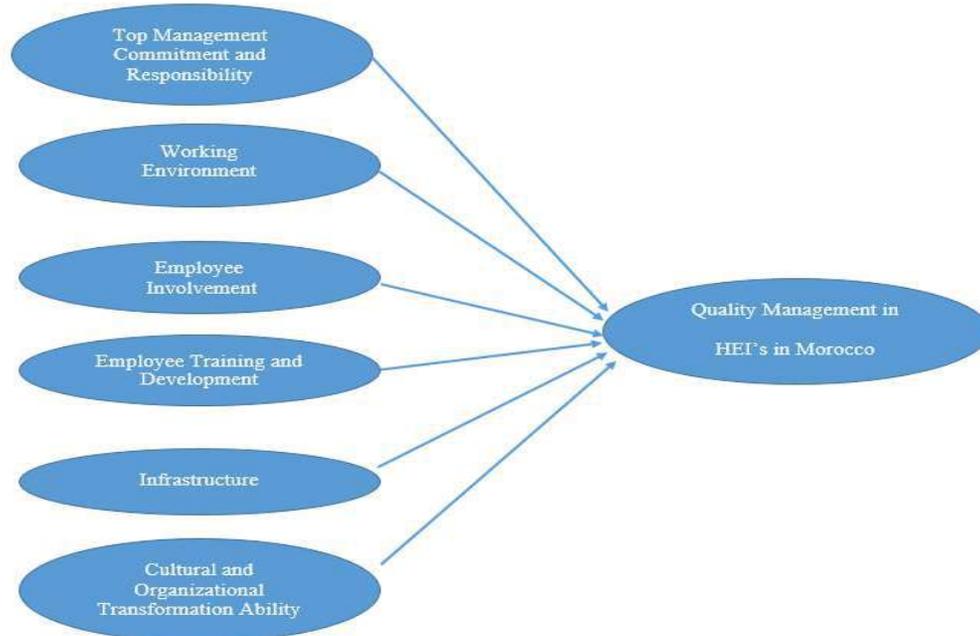


*Figure 3: Conceptual Framework*

## Discussion

First, the outcomes of this study are destined both to higher education institutions' decision makers, as well as to academic researchers. For education institutions' decisions-makers, this study will allow them to pay attention and focus on the most important factors of quality management, so as they can allocate more resources to these factors. This will, thus, enhance the quality of education in higher institutions in Morocco.

On the other hand, from an academic standpoint, this research would be a contribution in the literature review of quality management in education, and it could serve as a starting point for further researches.

Second, this study will show once and for all that education is not a one size fit all matter. For decades now, (ever since ) Morocco has gained its independence, many education changes and reforms have been implemented. While they all might look different, the one thing they have in common is that they are taking the French system and projecting it into Morocco. The focus and challenges of each system are widely different. So from this perspective, the results of this study can serve as a convincing argument for decision makers to reconsider their strategy. Education is the most intimate national matter of all, and it should be treated as such in Morocco.

## References

Anderson, J. C., Rungtusanatham, M., & Schroeder, R. G. (1994). A theory of quality management underlying the Deming management method. *Academy of Management Review, 19*(3), 472-509.

Clayton, J. M. (1997). Delphi: A technique to Harness Expert Opinion for Critical. *Educationa/ Psych%gy,, 14*(2), 373 - 386.

Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group Techniques for Program Planning: .* Illinois: Scott Foresman Company Glenview.

El Baggari, Y. (2014, 03 14). *Fairobserver*. Retrieved from Implications of Morocco's Bifurcated Educational System - See more at: http://www.fairobserver.com/region/middle_east_north_africa/implications-moroccos-bifurcated-educational-system-69841/#sthash.AJgRumEn.dpuf: http://www.fairobserver.com/region/middle_east_north_africa/implications-moroccos-bifurcated-educational-system-69841/

Elmuti, D., Kathawala, Y., & Manippallil, M. (1996). Are total quality management programmes in higher education worth the effort? *International Journal of Quality & Reliability Management, 13*(6), 29-44.

Golder, P. N., Mitra, D., & Moorman, C. (2012). What Is Quality? An Integrative Framework of Processes and States. *Journal of Marketing, 76*, 1-23.

Ho, S. K., & Wearn, K. (1996). A higher education TQM excellence model: HETQMEX. *Quality assurance in education, 4*(2), 35-42.

Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: making sense of consensus. *Practical Assessment, Research & Evaluation, 12*(10), 1-8.

Juhl, H. J., Kristensen, K., Kanji, G. K., & Batley, T. W. (2000). Quality management: a comparison of cultural differences. *Total Quality Management, 11*(1), 57-65.

Kanji, G. K., Tambi, A. M., & Wallace, W. (1999). A comparative study of quality practices in higher education institutions in the US and Malaysia. *Total Quality Management, 10*(3), 357-371.

McCulloch, M. (1993). Total quality management: its relevance for higher education. *Quality Assurance in Education, 1*(2), 5-11.

Mehralizadeh, Y., & Safaeemoghaddam, M. (2010). The applicability of quality management systems and models to higher education: A new perspective. *The TQM Journal, 22*(2), 175-187.

Meirovich, G., & Romar, E. J. (2006). The difficulty in implementing TQM in higher education instruction: The duality of instructor/student roles. *Quality Assurance in Education, 14*(4), 324-337.

O'Mahony, K., & Garavan, T. N. (2012). Implementing a quality management framework in a higher education organisation: A case study. *Quality Assurance in Education, 20*(2), 184-200.

Reid, D. R., & Sanders, R. N. (2009). *Operations Management* (4th Edition ed.). John Wiley & Sons, Inc.

Roffe, I. M. (1998). Conceptual problems of continuous quality improvement and innovation in higher education. *Quality Assurance in Education, 6*(2), 74-82.

Sahu, A. R., Shrivastava, R. R., & Shrivastava, R. L. (2012). Critical success factors for sustainable improvement in technical education excellence: A literature review. *The TQM Journal, 25*(1), 62-74.

Sirvanci, M. B. (2004). Critical issues for TQM implementation in higher education. *The TQM Magazine, 16*(6), 382-386.

Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of information technology education, 6*(1), 1-21.

UNESCO. (2006). *ALPHABÉTISATION ET ALPHABÉTISME, QUELQUES DÉFINITIONS.* UNESCO Organisation.

UNESCO. (2014). Rapport régional pour l'année 2014 sur l'Education Pour Tous dans les Pays Arabes. *Conférence Internationale sur l'Education Pour Tous.* Beirut: UNESCO Organization.

Weaver, W. T. (1971). The Delphi forecasting method. *the phi delta kappan journal, 52*(5), 267-271.

Winn, R. C., & Green, R. S. (1998). Managing Organizational Change. *International Journal of Engineering Education, 14*(1), 24-29.

Zakuan, N., Muniandy, S., Mat Saman, M., Md Ariff , M., Sulaiman, S., & Abd Jalil, R. (2012). Critical success factors of total quality management implementation in higher education institution: a review. *International Journal of Academic Research in Business and Social Sciences, 2*(12), 19-32.

Zigilo, E. (1996). *The Delphi method and its contribution to decision-making.* London: Jessica Kingsley Pblishers Ltd.

# *Fidelity and Efficacy of Implementing Universal Basic Education in Kwara State, Nigeria*

Jacob Adeyanju, University of Lagos, Nigeria
Simeon Oladipo, University of Lagos, Nigeria

**Abstract**
This study examined the fidelity of implementation and efficacy of Universal Basic Education (UBE) programme in Kwara State. It investigated the gap between policy formulation and implementation in the programme. The belief by various stakeholders in education that the huge investments made in the UBE programme had not been correspondingly compensated for by improved efficiency in basic education classes in Nigeria precipitated this study. A descriptive survey research design was used. The population for the study comprised all the 997 public primary schools and 225 junior secondary schools in nine Local Government Education Authorities (LGEAs) in Kwara State. Proportionate stratified random sampling technique was used to select samples, which consisted of 76 primary schools and 33 junior secondary schools. The respondents consisted of 76 primary school headteachers, 228 primary school teachers, 33 principals and 165 junior secondary school teachers. Two instruments were used for data collection. Three hypotheses guided the study and all the hypotheses were tested at 0.05 level of significance using Pearson Product Moment Correlation Coefficient. The study found among others that: teachers' quality of delivery in the UBE programme was dependent on the quality of post qualification trainings they receive; the efficacy of the programme was a function of the adequacy of facilities in UBE schools. The study recommended that serious attention must be given to the re-training of teachers, provision of facilities and information resource centres for the goals of UBE to be realised.

Keywords: Fidelity, Efficacy, Illiteracy, School facility

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Education constitutes the major instrument for sustainable human development as well as the fulcrum around which every other activity revolves. This accounts for the reason why development experts assert that no society can rise above its educational level. Nations which have recorded tremendous achievements in the world heavily relied on the instrumentality of education. It is on this basis and the pluralistic nature of human society that slogans like equalization of educational opportunities, education for all, open educational access, universal basic education, amongst others, become popular world-wide.

Nigerian government like other countries of the world, more than ever before, is eager to wipe out illiteracy among her citizens. The United Nations, which defines illiteracy as the inability to read and write a simple message in any language, has conducted a number of surveys on world illiteracy. In the first survey in 1957, it was revealed that 44 % of the world's population were illiterate. Further survey in 1978 and 1998 showed the rate to have dropped to 32.5 % and 27% respectively (United Nation, 2010). At the end of 20th century only a quarter of the world's children were in school, the highest being in the less developed nations of Africa, Asia and South America (United Nation, 2010). These accounted for the reason why the United Nations Development Programme (UNDP) insisted that all development review should include illiteracy reduction.

Combating illiteracy takes two forms namely: adult education, that is, extension of educational opportunities to those adults beyond the age of general public education, and the establishment of public schools with compulsory attendance for children. The United States for example, has adopted various means to reduce her illiteracy level to 1%, this include but not limited to universal public education. Soldiers have been used effectively in Turkey and Mexico as instructors for the general populace. In Ghana, complimentary education and in particular School For Life (SFL) model has been used to complement government's effort in Free Compulsory Universal Basic Education(FCUBE). The Ghanaian government has shown this commitment through policy directive and interventions like the 1992 Constitution of Ghana, the Education Strategy Plan (ESP) for 2003-2005 and the Growth Poverty Reduction Strategy (UNICEF, 2007).

In Nigeria, the government's commitment towards achieving the educational goals is reflected in several international covenants on basic education to which she has adhered. For example, the Nigerian government attended the Jomitien (1990) Declaration and Framework for Action on Basic Education for All, the New Delhi (1992) declarations on the E-9 countries, (that is, the nine countries with the largest concentration of illiterates, of which Nigeria is a member), the Quagadougou (1992) Pan-African Declaration on the Education of Girls and Women, the Amman Affirmation (1996) calling for the forceful pursuit of the Jomitien recommendations, the OAU Decade of Education in Africa (1997-2006), the Dakar Declaration and the 2002 Millennium Development Goals summit, which had as one of its goals universal education for all. In keeping with the above covenants, Nigerian government introduced the Universal Basic Education (UBE) in September, 1999, 23 years after the introduction of the Universal Primary Education (UPE).

Although the UBE programme was launched in September, 1999, there was no serious activity until 2004. This Onyene (2005) observed was due to lack of enabling law to execute some aspects of the programme. In order to give the programme a legal backing therefore, the UBE Act of 2004 was enacted. The Act apart from stipulating that every child must complete at least nine years of continuous basic education, also states that parents would be punished for not sending their wards to school. Under Section 2 (2) of the Act, every parent is expected to ensure that his child or ward attends and completes his/her primary school education by endeavoring to send such child to primary and junior secondary schools.

According to the Act published in official gazette No 66, Volume 91 on 4th August, 2004, it states:

> Any parent who contravenes Section 2 (2) commits an offence and
> is liable on first conviction to be reprimanded, on second conviction to a fine of N2000 or imprisonment for a term of one month or to both and on subsequent conviction to a fine of N5000 or imprisonment for a term of two months or both (Universal Basic Education Commission , 2004).

Section 3 of the Act further emphasizes that services in primary and junior secondary schools are free of charge. In this regard, Section 3(2) states that:

> A person who receives or obtains any fee contrary to the provision of Section 3, subsection (1) of this Act commits an offence and is liable on conviction to a fine not exceeding N10,000.00 or imprisonment for a term of three months or to both.

By this provision, it shows that no principal, headmaster, teacher or Parents Teachers Association official is allowed to charge pupils or students for any services rendered in the public schools.

**Statement of the Problem**

In the UBE implementation guidelines, the Federal Government promised to create enough awareness on the need for education in Nigeria through public enlightenment and social mobilization, train, motivate and develop professional teachers; provide appropriate quantity, size and quality of infrastructure and facilities to meet the minimum standards for promoting meaningful teaching and learning; review curriculum in order to meet the 21st century generation; improve funding through the establishment of Universal Basic Education Fund among others. The government went further to outline the sequential implementation to commence the first set of basic education class in 2000/2001 and graduate them in 2008/2009, that is, over a period of nine years.

However, the government seems to be committed to the basic education programme, but experts (Olori, 2005 and UNICEF, 2007) argue that the UBE programme may collapse due to inadequate funding, poor infrastructure, politicisation of the programme, ethnicisation of the supervisory committee and the current academic qualification discrepancies for the teachers participating in the scheme to mention but

few. This situation, however, shows an apparent paradox between government intention and the seeming unameliorated and pitiable conditions of our primary and junior secondary schools, the focus of UBE. If the government seems to be committed to the programme by enacting policy and workable implementation guidelines, one begins to wonder where the problem of unsuccessful result lies. Could it be that there is no fidelity of implementation in the programme? To what extent does fidelity of implementation impact on the efficacy of the UBE programme? Has Nigeria been able to achieve and sustain universal access to quality basic education? All these are the thrust of this study.

## Hypotheses
1. There is no significant relationship between training and re-training received by basic education teachers and their ability to deliver the goals of the UBE.
2. There is no significant relationship between adequacy of facilities in the UBE schools and the efficacy of UBE programme.
3. There is no significant relationship between headteacher management skills and performance efficacy.

## Scope of the Study
The study focuses attention on public primary and junior secondary schools which are the components of UBE in Kwara State, Nigeria. The choice of Kwara State was borne out of the fact that it is one of the educationally disadvantaged States with a literacy level of less than 40% (Federal Ministry of Education, 2011).

## Methodology
The design adopted for this study was the survey research design which was suitable for the study because it helped in collecting data and describing in systematic manner of the situation that existed.

## Population of the Study
The study population consisted the three Senatorial districts in Kwara state namely, the North, the South and the Central Senatorial districts. The North Senatorial district had five Local Government Educational Authorities (LGEAs). These were Baruten, Kaiama, Moro, Patigi and Edu LGEAs. In the South Senatorial district, there were seven LGEAs namely: Ifelodun, Irepodun, OKe-Ero, Oyun, Offa, Isin and Ekiti LGEAs. Lastly, there were only four LGEAs in Kwara Central Senatorial district comprising Asa, Ilorin South, Ilorin East and Ilorin West LGEAs (Kwara State Ministry of Education, Science and Technology, 2013). From the North, South and Central Senatorial districts, three, four and two LGEAs respectively were randomly selected for the study. All these LGEAs had 997 primary and 225 junior secondary schools.

Proportionate stratified random sampling technique was used to select samples for the study, while purposive sampling technique was used to choose the subject. Location, year of establishment and type of settlements (that is, rural and urban) were the major strata used for the stratification. The entire population was stratified into three on the basis of zones, that is, Kwara North, Kwara South and Kwara Central. The primary and junior secondary schools in each zone (stratum) were arranged alphabetically and assigned identifiable numbers beginning with 01. The year of establishment as well as the ownership status of the schools were also considered before the final selections were made. Schools established after 2007 were not included in the list. This was

because they were considered too young for the realization of the UBE goals at the ime of this study. Private schools were not included because they were fee paying schools. Using a table of random numbers, 32,27 and 17 primary schools were chosen from the North, South and Central zones respectively. This gave a total of 76 primary schools in all. At the JSS level, 7, 18 and 8 schools were chosen in each of the Kwara North, South and Central respectively. In all, a total of 33 JSS were chosen.

### Research Instruments
Two instruments were used for data collection. They were the Headteachers' Management Skills and Efficacy of UBE Questionnaire (HMSEUQ) and Teachers' Self-report Checklists (TSC).

### Results
### Hypothesis One
There is no significant relationship between training and re-training received by basic education teachers and their ability to deliver the goals of the UBE.
To test this hypothesis, the Pearson Product Moment Correlation Statistical tool was used and the result is presented in Table 1.

**Table 1: Teachers' Training and Ability to Deliver the Goals of UBE Programme**

| Variable | $N$ | $\overline{x}$ | SD | df | r-cal | r-crit |
|---|---|---|---|---|---|---|
| Teacher's training | | 35.8 | 3.937 | | | |
| | 382 | | | 380 | .236 | .095 |
| Quality of delivery | | 12.55 | 2.163 | | | |

Level of significance =0.05

Table 1 shows a calculated r-value of .236 and critical value of .095 at 0.05 level of significance at 380 degrees of freedom. Since the calculated value of r is greater than the critical value (that is .236 > .095), the hypothesis which says that there is no significant relationship between teachers' post-qualification training and ability to deliver the goals of UBE is therefore rejected. This means that teachers' ability to deliver the goals of UBE is dependent on the level and quality of post-qualification training such teachers received.

### Hypothesis Two
There is no significant relationship between adequacy of facilities in the UBE schools and the efficacy of UBE programme.
To test this hypothesis the Pearson Product Moment Correlation Coefficient Statistical tool was used and the result is presented in Table 2.

**Table 2: Adequacy of Facilities and Efficacy of UBE Programme**

| Variable | $N$ | $\overline{x}$ | SD | df | r-cal | r-crit |
|---|---|---|---|---|---|---|
| Adequacy of facilities | | 12.58 | 2.163 | | | |
| | 102 | | | 100 | .182 | .164 |
| Efficacy of UBE | | 25.17 | 4.717 | | | |

Level of significance =0.05

Table 2 shows a calculated correlation coefficient value of .182, and a critical value of .164 at 100 degrees of freedom and 0.05 level of significance. Since the calculated value of r is greater than the critical value (i.e. .182 > .164), then hypothesis two that says there is no significance relationship between availability of facilities and efficacy of UBE is hereby rejected. This means that availability of facilities and UBE programme efficacy are significantly related.

**Hypothesis Three**

There is no significant relationship between head teacher management skills and performance efficacy.

This hypothesis was tested using Pearson Product Moment Correlation Coefficient statistical tool and the result of the analysis is presented in Table 3.

**Table 3: Head Teacher Management Skills and Performance Efficacy**

| Variable | N | $\overline{x}$ | SD | df | r-cal | r-crit |
|---|---|---|---|---|---|---|
| Head Teachers' Management Skills | 102 | 27.46 | 3.425 | 100 | -.099 | .164 |
| Performance Efficacy | | 25.17 | 4.717 | | | |

Level of significance = 0.05

Table 3 shows the correlation coefficient for the two variables, that is, head teachers' management skills and performance efficacy. The calculated value of r is -.099 while the critical value is .164 at 0.05 level of significance and 100 degrees of freedom. Since the calculated value of r is less than the critical value (that is – .099 < .164), hypothesis three is therefore accepted. This means that head teacher management skills and the efficacy of UBE programme are not significantly related.

**Discussion**

**Post–Teacher Training and Ability to Deliver the Goals of UBE**

The results of the analysis of hypothesis one show that there was a significant relationship between teachers' post qualification training and their abilities to deliver the goals of UBE. This implies that the UBE teachers' abilities to participate in the implementation of the programme and deliver its goals is a function of the post-qualification trainings they acquire. These trainings may be in the form of conferences, seminars, workshops, refresher courses and so on. This position and the vital role teachers play in the overall development of the students had earlier been recognised by the Federal Government. This explains the reason why the government maintains in the UBE Implementation Blue Print that teachers would always be an integral part of the process of the conceptualization, planning and execution of UBE programme (Federal Ministry of Education, 2000). This is also in agreement with the provision of the National Policy on Education (Federal Republic of Nigeria, 2004) Section 8 Sub-section 75 that in–service training shall be developed as an integral part of continuing teacher education.

This finding agrees with that of Jamil, Atta, Alli, Baloch and Ayaz (2011) which found a positive correlation between on–the-job training and teachers job performance. Nakpodia (2001) maintains that if teachers are exposed to post-qualification tainings in the form of induction or orientation programme, instructional supervision, workshops, and so on, there is likelihood that such teachers would be abreast of the dictates of the new trend. Nakpodia's finding could be said to be true

because knowledge is dynamic. There are new innovations and inventions every day and for teachers to fully embrace these, they must be re-trained continually.

Unfortunately, answer to research question one showed that the number of post-qualification training given to basic education teachers was not enough for them to deliver the goals of UBE programme. Although, basic education teachers have been exposed to different types of post qualification trainings in the areas of : the use of continuous assessment, effective use of instructional materials in the teaching of various subjects, among others, it was found that, the percentage of teachers that attended such training was very low and insignificant. For example, in 2010 only 27.6% of the total number of teachers in the 16 LGEAs in Kwara State attended training, in some LGEAs (like Kaiama and Oke-Ero), no teacher was sponsored for training in 2010. This situation was not only ugly but also inimical to the achievement of the UBE goals. This is because as new innovations are introduced in the curriculum (in the forms of subjects and topics) there is the need for teachers to be updated. Where this is not done, there is every tendency that the teachers would find it difficult if not impossible to interpret the changes. Such teachers are described as dangerous teachers by Fafunwa's diary (as cited in Jekayinfa, 2006). The interview conducted with a  junior school Principal revealed that it was difficult for some teachers to understand the structure of the new curriculum. Some of these teachers were conservative and stuck to their old ideas, ideologies and methods. For instance, some teachers argued the reasons for changing the names of some subjects like Introductory Technology to Basic Technology, Integrated Science to Basic Science and even the introduction of new ones. This conservative idea made it difficult for such teachers to fully grasp the objectives of UBE programme. This problem may be one of the reasons for the low quality of teachers in the state as identified by Ijaiya (2004).

Zuzovsky (2003) asserts that post qualification training enables the teachers to update their knowledge of contents and teaching skills in order to meet the requirements of the new curricular. It also helps them in their professional growth as well as assisting them to network with their counterparts within and outside the country (Nakpodia, 2004).

Wokocha (2007) and Nwadiani (1995) had also argued that previous policies in education had failed partly because teachers do not possess adequate knowledge about them. Nwadiani (2007) further expatiates his position that the problem of reform implementation in Nigeria is always lack of understanding of the policy, especially, by the major actors. This may be true, as majority of UBE teachers do not understand what the UBE scheme is all about. Notably, many of the teachers confuse the scheme with the system of education, as they erroneously believe that the system of education in Nigeria has changed from 6–3–3–4 to 9–3–4 when the programme was first introduced in 1999. This erroneous belief is not surprising as Odili, Ebisine and Ajuar (2010) found that teacher's knowledge of the policy and their perception of the adequacy and achievability of its contents may be influenced by their level of academic qualifications, teaching experience, number of workshops attended and the type of employer. By implication, it means that the basic education teachers who are employees of the government are expected to attend workshop under the sponsorship of the State Government. However, this was not the case in Kwara State as teachers were not regularly sponsored for seminars and workshops, the few that were sent on training were sometimes selected based on politics. It is therefore clear that the 2015 set as target for the full realization of UBE goals is a mere statement of illusion and not realistic.

**Adequacy of Facilities and Efficacy of UBE Programme**

The results of the analysis of hypothesis two show that adequacy of facilities and the efficacy of UBE programme are significantly related. This means that for the goals of UBE programme to be fully achieved, schools must be fully equipped in the areas of classrooms, toilet facilities, sick bay, chalkboards, seats, portable water, fans, electricity. The importance of all these facilities had been highlighted by Edwards (1992), Cash (1993), Ehiametalor (2001), Ahunanya and Ubabudu (2006) and Adegbesan (2007).

Adegbesan (2007) observes that meaningful training and necessary skills cannot be acquired in schools without adequate facilities. This is not different from the findings of Ifeyinwa (2007) who also found that school facilities and students' capacity to learn are positively related. This had earlier been realised by the federal government, hence, the inclusion of the need to provide those facilities in schools in the UBE implementation guidelines. The guidelines expatiate that those facilities must be in appropriate quantity, size, and quality to meet the minimum standards for promoting meaningful teaching and learning. This therefore, shows that if students must acquire appropriate levels of literacy, numeracy, manipulative, communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for life-long learning, the teaching/learning environment must be conducive.

Empirical evidence indicates that none of the facilities (that is, classrooms, seats, chalkboards, portable water, toilets, electricity, fans and sick bay) in the UBE schools in Kwara State was adequate. Although, the level of the inadequacies varied among the LGEAs, none of the LGEAs had adequate facilities. It was observed that these inadequacies hampered the performance of students in external examinations like the Junior Secondary School Certificate Examinations. This finding is in harmony with Oku and Chikwendu (2010) who observe the dismal state of school facilities as a sign of rapid deterioration of educational system in Nigeria. In a situation where classes are held under shades or where more than 95 students occupied a classroom meant for 40 students, where heat forces the students and teachers to either pull of their shirts or look for a local hand fan, one begins to doubt whether meaningful teaching/learning can really take place.

One of the mid-term strategies for effective implementation of the UBE programme as contained in the implementation blue print is that by the end of 2008, 50% of the UBE schools should have conducive teaching and learning environment. This strategy is appropriate as experts (Bello, Issa and Jimoh, 2009; and Abdulllahi and Onasanya, 2010) observe that for education in schools to be effective, the environment needs to be conducive for learning, giving the pupils sufficient space and time to interact in the teaching and learning process. They further advised that in order to create and maintain stimulating and conducive environment in the school, there should be effective classroom organization, interactive and whole school display, and of course, a climate of innovation. In reality, conducive learning environments do not just happen, they are result of effective classroom management that establish and maintain work systems for pupils to engage in their learning. This is in agreement with the earlier position of Sanford, Emmar and Clements (2003) who believe that a conducive learning environment is one that is task–oriented and predictable, where pupils know what is expected of them and how to succeed. The Florida Department of Education (2010) gave some indicators of conducive learning environment, these include:

- classrooms that are inviting to students, clear of cluster, and consistently used as a resource to promote learning;
- where classroom furniture and physical arrangements are conducive to learning and modified as appropriate to learners exit activity;
- where classrooms display/contain literacy–rich, instructional–based visual aids and resources like interactive word walls, content posters, process posters, classroom libraries, student-produced work, and project displays, etc.

All these presuppose that an effective school needs to create an atmosphere that is conducive for learning. The school campus should be safe and secure from external interference. Unfortunately, the pitiable condition of UBE schools in Kwara State shows that the teaching/learning environment in those schools was far from being conducive. If the target year for 50% attainment of conducive teaching/learning environment was set at 2008, and as at 2013 this objective was far from being realized, it shows that there was no fidelity of implementation in the UBE programme in Kwara State. This may hinder long term goal achievement.

**Head Teacher Management Skills and Performance Efficacy**
The results of the analysis of hypothesis three show that the head teachers' management skills has nothing to do with the outcome of UBE programme. This implies that professional training in educational management is not significantly related to the achievement of UBE goals. The reason for this position may be because the study did not find any significant difference between schools managed by professional educational administrators and those that were not. It may also be due to the insignificant number of such trained administrators in UBE schools in Kwara State. Generally, this study found that only about 17.6% of the head teachers in the sampled schools had professional qualifications in Educational Management. This number is too low to have any significant impact. Implicitly therefore, majority of those teachers in leadership position were groomed for teaching profession and not for managerial work. This incompetency was obvious in the inability of these so-called head teachers to harness the human, material and financial resources at their disposal for the attainment of the school goals. This finding is not surprising as Ijaiya (2004) had earlier lamented the poor quality of both head teachers and classroom teachers in Kwara State schools. It is important to note that for a school head to perform well as a school manager, he/she needs leadership, managerial and teaching skills especially in this era of globalization. Abdullahi and Onasanya (2010) faulted the selection process into headship position in Kwara State secondary schools. They observed that the highest qualified teacher in the school is mostly made the principal, irrespective of whether the person has leadership or managerial training. It is important to note that the head teacher acts as the leading professional in a school and an officer of the local authority. He/she provides appropriate vision, leadership and direction to ensure high standards of education for all the children and young people in his/her care so that they can become successful learners, confident individuals, responsible citizens and effective contributors. To achieve this, the head teacher works with and is accountable to others to ensure that the school is organized and managed to meet its aims and targets, and is a creative, disciplined learning environment.

It is obvious that the federal government recognizes the important position the head teacher occupies in the educational system, hence, the need for their retraining was included in the UBE implementation blue-print. It was targeted that by the year 2008, 60% of the head teachers and their assistants should have undergone training in school management. As at 2013, this goal has not been realized as the number of the head teachers that had gone for training at one time or the other was less than 30%. The training programmes that have been organized for these few head teachers were not even related to school management, a very shocking and disturbing discovery. Most of them stepped into offices unprepared for their new roles and have little or no opportunity for further management training. Sad to say, some of these head teachers could not fully understand the objectives, contents and other intricacies of the UBE policy. They could not differentiate among the various funds available for UBE programme (like counterpart fund, matching grant, UBE intervention fund and consolidated revenue fund) neither were they able to access them. Worse still, they found it difficult to interpret the curriculum and the sequential implementation of different curriculum at different levels.

The facts that the head teachers are not being trained and re–trained in the act of school management, and that they are not participating fully in the overall decision making process as stipulated in the implementation guidelines showed that the implementation of UBE programme in Kwara State is without fidelity. Hence, it is not realistic that the 2015 set as target for 100% literacy level in Nigeria will be achieved.

**Conclusion**

The need for Nigeria to provide all-round education for her citizens and improve her level of literacy was expected to be achieved with the introduction of Universal Basic Education. This was her own way of complying with the second goal in the Millennium Development Goals which aspires to achieve basic primary education for all by 2015. The government, through the Universal Basic Education Commission (UBEC), has shown her commitment to the policy in different areas like regular disbursement of funds, review of curricular at both primary and junior secondary schools, enactment of laws to give the policy a legal backing, among others. It is sad to conclude that the implementation of the various components of the UBE policy was without fidelity. There were lots of  lacuna between government intentions (that is, UBE policy) and implementation. This means that the achievement of the goals of the policy within the targeted time frame is not realistic.

Lots of gaps were also found between the formulation of UBE policy and its implementation. The most conspicuous areas were the provision of facilities in schools, retraining of teachers, public enlightenment, monitoring and poor attention given to the non–formal aspect of basic education. All these areas were not given adequate attention. This is contrary to the  emphasis in the policy document.
 It is obvious that the formal education sector alone cannot give the intended result of achieving 100% literacy level in Nigeria because majority of illiterates in Nigeria have passed the school-going age. It is high time the government implemented all components of basic education with high level of fidelity. The inclusive education, education for the special groups like the *Almagiris* should be given serious attention, the recent stride by the government in building schools for this group is in the right direction. This is very important, especially, if one considers the fact that the neglected group of today can be dangerous to the peaceful existence of the country

tomorrow. For example, the 'Boko Haram' oppressive attack against public peace in Nigeria could be traced to the criminal neglect of the school-age children in the past in Northern Nigeria.

## References

Abdullahi, O. E. and Onasanya, S. A. (2010). Effect of teacher effectiveness on Kwara State secondary school students' achievement in Mathematics. *The Social Sciences*, *5*(4), 286 – 292.

Adegbesan, S. O. (2007). Adequacy of school facilities in Nigerian vocational and technical colleges: An empirical study. *Nigerian Journal of Educational Administration and Planning*, *7*(2), 170 – 177.

Adeyemi, T. O. (2009). Enrolment analysis and teacher requirements for the universal basic education programme in Kwara State, Nigeria. *Journal of Economic Theory*, (1), 15-22.

Ahunanya, S. I. & Ubabudu, M.C.M.(2006). Enrolment, facilities and financial allocation in Lagos State higher education: Implication for quality graduates. *Nigerian Journal of Educational Administration and Planning, 6*(1), 153 – 164.

Ajayi, K. (2006). The Local Government Council and effective implementation of the UBE in Nigeria. In Adesina, Segun (Ed.), *Universal basic education in Nigeria: Prospects and challenges* (pp. 67-93). Imeko: African University Institute Education Series.

Arhedo, P. A., Adomeh, Ilu O. C. & Aluede, O. (2009). School counsellors' roles in the implementation of universal basic education (UBE) scheme in Nigeria. *Edo Journal of Counseling, 2*(1), 58 – 65.

Babalola, J. B. (2006). Overview of educational management. In J. B. Babalola, A. O. Ayeni, S. O. Adedeji, A. A. Sulieman and M. O. Arikewuyo (Eds.), *Educational management: Thoughts and practice* (pp. 1-16). Ibadan: Codat Publications.

Bello, R., Issa, A. O. & Jimoh, R. A. (2009). *A survey of school libraries' facilities and resources in Offa Local Government Area of Kwara State*. Retrived from www.unilorin.edu.ng/publication

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy*. New York: Addison Wesley Longman, Inc.

Cash, C. (1993). *A study of the relationship between school building condition and student achievement and behaviour* (Unpublished doctoral dissertation). Virginal Polytechnic Institute and State University, Blacksburg, V.A.

Durosaro, D. O. (n.d.). *Management functions, principles and leadership styles in Kwara State public primary schools*. Retrieved from ilorin.info/.../management-functions.

Edwards, M. M. (1992). *Building conditions, parental involvement and student achievement in the D.C. public school system* (Unpublished master's degree thesis). Georgetown University, Washington, D.C.

Ehiametalor, E. T. (2001). School facilities: Management practice in Nigeria. In N. A. Nwagwu, E. T. Ehiametalor, M. A. Ogunu, & M. Nwadiani (Eds.), *Current issues in educational management in Nigeria* (pp. 305 – 319). Benin City: NAEAP.

Federal Ministry of Education (2000). *Implementation guidelines for the universal basic education (UBE) programme*. Abuja: FME.

Federal Ministry of Education (2000). *Implementation guidelines for the universal basic education (UBE) programme*. Abuja: FME.

Federal Republic of Nigeria (2004). *National policy on education.* Abuja: NERDC Press.

Federal Republic of Nigeria (1999). *Ensuring access and equity in basic education for nomads in Nigeria.* A presentation to the Association for the Development of Education in Africa (ADEA).

Hines, E. (1996). *Building condition and student achievement and behaviour* (Unpublished doctoral dissertation). Virginal Polytechnic Institute and State University, Blacksburg, V.A.

Ifeyinwa, F. (2007). *Availability and utilization of school facilities as correlate of students' academic performance in secondary schools in Enugu* (Unpublished doctoral thesis). Enugu State University, Enugu.

Ijaiya, N. Y. S. (2004). Re–engineering educational management for quality education in Kwara State, Nigeria. *International Journal of Educational Management* (IJEM), 3, 1 – 13.

Jamil, A., Atta, M. A., Ali, U., Balcoch, J. & Ayaz, M. (2001). Effect of in–service training in meliorating teachers' performance at secondary level. *International Journal of Academic Research, 3*(2), 625 – 629.

Jekayinfa, A. A. (2006). Government preparedness in the provision of primary school teachers for the universal basic education in Nigeria. In S. Adesina (Ed.), *universal basic education in Nigeria: Prospects and challenges.* Imeko: African University Institute Education Series.

Kakkar, S. B. (2001). *Educational psychology*. New Delhi: Prentice – Hall of India Kwara State Ministry of Education Science and Technology (2013). *Annual school census report.* Ilorin: Kwara State Ministry of Education, Science and Technology.

Lyons, J. B. (2002). The learning environment: Do school facilities really affect a child's education? *Learning By Design*, 11, 10 – 13.

Nakpodia, E. D.(2004). The role or educational administrators in the promotion of in-service teacher education for primary school teachers in Nigeria. In N. A. Nwagwu, E. T. Ehiametalor, M. A. Ogunu, and M. Nwadiani (Eds.), *Current issues in educational management in Nigeria* (pp. 377 – 396). Benin City: NAEAP.

Nwadiani, M. (2007, October). *Education and reforms*. Keynote address presented at the 25th annual national conference of Philosophy of Education Association of Nigeria (PEAN), DELSU, Abraka.

Odili, J. N. Ebisine, S. S. & Ajuar, H. N. (2010). Teacher's involvement in implement- ting the Basic Science and Technology Curriculum of the 9 – year basic education. In B. G. Nworgu and G. O. Obioma (Eds.), *Universal Basic Education* (pp. 143 – 156). Abuja: NERDC.

Oku, O. O. and Chikwendu, A. (2010). Implementation of universal basic education in Imo State: An appraisal of human and material resources commitment. In B. G. Nworgu & G. O. Obioma (Eds.), *Universal basic education* (pp. 143 – 156). Abuja: NERDC.

Olori, T. (2005). *Lack of resources threatening UBE*. Retrived from www.newsfromafrica. org

Onyene, V. E. (2005). Universal basic education: A focus on the girl child. *Journal of Educational Thought, 1*(2), 99-127.

Onyene, Virgy (2000*). Dynamics of institutional management: Towards strategic administrative competence.* Lagos: Sam Orient Publishers.

Robbins, S. P. (2001). *Organizational behaviour.* New Delhi: Prentice Hall.

Sanford, E. A. Emmer, T. O. & Clements, R. A. (2003). Creating a conducive learning environment for the effective integration of ICT: Classroom management issues. *Journal of Interactive Learning Research*, 14, 405 – 423.

Sorenson, H., (1984). *Psychology in education.* New York: Mc Graw – Hill Book Company

UNICEF (2007). *Achieving universal primary education in Ghana by 2015: A reality or a dream?* Working Papers.

UNICEF (2007). *Achieving universal primary education in Ghana by 2015: A reality or a dream?* Working Papers.

United Nations (2010). *Human Development report, 2010.*

Wokocha, A. M. (2007, October). *Education and reforms in Nigeria: The present scenario.* Presidential address presented at the 25th annual conference of Philosophy of Education Association of Nigeria. DELSU, Abraka.

Zuzovsky, R. (2003). *Teachers' qualifications and their impact on student achievement: findings from TIMSS (Trends in International Mathematics and Science Study) 2003 data for Israel.* AVIV (Israel): Centre for Science and Technology Education.

**Contact:**
**Jacob ADEYANJU**
Email address: jacobadeyanju@ymail.com
**Simeon Adebayo OLADIPO**
Email address: bayoladipo2000@yahoo.com

# Meta-Analysis of the Relation between Study Time and Academic Achievement

Chiungjung Huang, National Changhua University of Education, Taiwan

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

This meta-analysis of 49 studies examines the relation between study time and academic achievement. Seventy-seven independent samples were obtained, yielding a total sample of 19,219 participants. The mean correlation between study time and academic achievement was $r = .12$. The moderating effects of publication type, participant gender, participant age, scale for measuring study time, and the academic achievement measure were not significant. The effects of the domain of study time spent and domain of academic achievement on the relation between study time and academic achievement were supported. Since most studies examined academic study in general rather than focusing on specific subjects, future investigations can examine the relation between study time and academic achievement for specific subject areas.

Keywords: study time; academic achievement; meta-analysis

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Educational researchers have long been interested in identifying determinants of academic achievement. Study time is a useful focus as study often dominates the daily routine of many students. Two different hypotheses regarding the relation between study time and academic achievement have been proposed. The first hypothesis posits that study time has a noticeable effect on academic achievement because student knowledge increases with time spent practicing and reviewing class material. This argument was supported by Culler and Holahan (1980), who sampled 65 freshmen with high test anxiety and found that the correlation between GPA and study time was moderate at $r = .30$. Similarly, a moderate correlation ($r = .387$) existed for 164 high school students (Saito, 1999).

The second hypothesis states that the positive effect of study time on academic achievement is minimal. The most important study was the Michigan Project, which was conducted over a 12-year period (Schuman, Walsh, Olson, & Etheridge, 1985). Despite using various research designs and methods to measure study time, the Michigan Project found that the correlation between study time and academic achievement was low. Delucchi and Rohwer (1987) also determined that study time had only a minimal effect on academic achievement ($r = .08, .06,$ and $.01$). Credé and Kuncel (2008), who conducted a meta-analysis, found that mean correlations between study time and freshman GPA were low at $r = .19, .15$ for study time and overall GPA, and $.01$ for study time and course-specific achievement. Nevertheless, some researchers have found that study time negatively affected academic achievement (Mavis, 2000; Nonis, Philhours, & Hudson, 2006; O'Connor, Chassie, & Walther, 1980). That the correlation between study time and academic achievement is not consistent may be explained by the fact that study time is not equated with "quality" study time. Plant, Ericsson, Hill, and Asberg (2005) suggested that study time spent on deliberate practice promotes performance in several academic domains. On the other hand, study time without high concentration levels may not improve academic achievement.

In a meta-analysis of college students, Credé and Kuncel (2008) examined the relations between study habits, skills, and attitudes and academic achievement. However, their study had at least two significant limitations. First, their meta-analysis was narrow in scope as it focused specifically on college students while neglecting younger students. Second, their analysis neglected potential moderator effects (such as participant age, participant gender, study domain, and domain of academic achievement) on the relation between study time and academic achievement.

As several studies have obtained inconsistent results for the relation between study time and academic achievement, drawing clear conclusions from these studies is problematic. For example, literature contains mixed findings regarding the magnitude and direction of the correlation between study time and academic achievement. Given the inconsistent magnitude and direction of this correlation, deriving meta-analytic estimates of this relation will prove valuable. Such estimates can provide insights into the impact of study time on academic achievement. This meta-analysis has two primary objectives: to estimate the magnitude and direction of the relation between study time and academic achievement; and to identify the moderators of this relation.

**Moderators**

Moderator effects were examined to determine whether they influenced prior conflicting findings for the relation between study time and academic achievement. Moderator variables included participant gender, participant age, the measurement scale for study time, the domain of study time spent, domain of academic achievement, and measure of academic achievement and study features (publication type) of included studies.

Primary research generally ignored gendered differences in the relation between study time and academic achievement. Dickinson and O'Connell (1990), who sampled 91 female and 22 male undergraduate students, found that the correlation between study time and test score was .25 for males and .19 for females. Similarly, Lee (1986), who surveyed 118 Grade 8 boys and 119 Grade 8 girls, found that the correlation between reading study time and reading achievement was weak at .246 for the boys and weak at .288 for the girls. The correlation between math study time and math achievement was weak at .165 for the boys and weak at .211 for the girls. As primary research rarely explored the gender effect on the relation between study time and academic achievement, this study addressed this issue.

The second moderator tested was participant age. The role of study time may be less certain for college students as test scores and GPA (Kuncel, Credé, & Thomas, 2007; Kuncel, Hezlett, & Ones, 2001) are used to determine college and graduate school admission; thus, undergraduate and graduate students are more academically homogeneous than elementary and high school students. Since a correlation coefficient reduces under a range of restriction, the correlation between study time and academic achievement should be weaker for undergraduate and graduate students than for elementary and high school students. Few studies have examined the effect of age on the relation between study time and academic achievement. However, Delucchi and Rohwer (1987) utilized a cross-sectional analysis to determine whether age moderates the relation between study time and academic achievement. They sampled 284 college students, 536 senior high school students, and 420 junior high school students, and found a weak correlation between study time and grades of .10 for college students, a weak correlation of .06 for senior high school students, and a weak correlation of .08 for junior high school students. Their study did not support the moderating effect of age on the relation between study time and test performance for college students. Due to a lack of primary studies examining the effect of age on the relation between study time and academic achievement, a meta-analysis can quantitatively summarize the age effect and thereby determine its significance.

Schuman et al. (1985) suggested that the absence of a strong correlation between study time and academic achievement can be attributed to the method used to measure study time. To date, self-reported study time has been the dominant measurement method. Self-reported study time can be measured on a ratio scale using an open-ended question, or on an ordinal scale such as a Likert scale. Likert scales commonly provide a range for responses to a given statement (e.g., 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). On the other hand, a ratio scale is continuous scale and can be on a wide range of values. Hence, variability of the Likert scale is commonly smaller than that of the ratio scale. Despite the well-known range restriction effect, researchers still use Likert scales to measure study time. However,

this leads to an underestimation of the strength of the relation between study time and academic achievement. The effect of range restriction is assessed by comparing mean correlations between ratio and ordinal scales.

The relation between study time and academic achievement seemed to be consistent across domains in terms of study time spent. For example, Fuligni and Stevenson (1995), who surveyed U.S., Taiwanese, and Japanese Grade 7 students, compared correlations between overall study time and math study time. The correlations between overall study time and math test score was .22 for U.S. students and .13 for math study time and math test score; for Taiwanese students, the corresponding correlations were .36 and .24, respectively; and for Japanese students, the corresponding correlations were .34 and .24. Lee (1986) assessed study time for reading and math, respectively, and found noticeable differences in the relation between study time and academic achievement across different domains in terms of study time spent.

Empirical findings indicate that the domain of academic achievement had little effect on the relation between study time and academic achievement. For instance, Adair (2009), who examined this relation using a sample of 130 undergraduate students, found that the correlation between weekly hours of study and math test score was strong at .68, while that between weekly study hours and GPA was strong at .78. Similarly, the effect of domain of academic achievement on the relation between study time and academic achievement seemed small in Federici and Schuerger (1976). In that study, the correlation between study time and test score in psychology was low at .15, while that between study time and GPA was also low.02. Because few investigations have examined the effect of the academic achievement domain on the relation between study time and academic achievement, one must consider the moderating effect of the academic achievement domain.

This study examines the effect of the academic achievement measure on the relation between study time and academic achievement to determine whether previous conflicting findings are attributable to the measure of academic achievement. Since grades (i.e., final grades for a specific course or GPA) can be determined by test performance, class participation, or attendance, the relation between study time and grades is weaker than that between study time and test score.

**Method**

**Literature search**

To locate potential studies, extensive searches were undertaken, starting with the ERIC, PsycINFO, and ProQuest Dissertations and Theses Databases, using different combinations of search terms related to study time and achievement (i.e., achievement, performance, attainment, grades, and test). The literature included studies published in journals, conference papers, book chapters, theses, and dissertations. The reference list of previous meta-analysis (Credé, & Kuncel, 2008) was subsequently examined for additional studies not identified in computer searches.

A meta-analysis can be meaningless if it compares apples with oranges. Thus, studies of homework and academic achievement were excluded. Furthermore, Cooper et al. (2006) mainly examined the relation between homework and academic achievement.

To be considered relevant, included studies had to report sufficient statistics to calculate an effect size. Second, studies using a pre-selected sample, such as students with a learning disability, were excluded. Third, studies involving an intervention or manipulation were also excluded. Finally, only studies in English were considered.

**Analysis**

Effect size in this meta-analysis was represented by the Pearson product-moment correlation coefficient *r*. A positive correlation coefficient indicates a conducive effect resulting from long study time being associated with high academic achievement. Each *r* value was weighted by sample size to calculate mean correlations.

To examine the effects of the study domain, academic achievement domain, and academic measure, all correlations between study time and academic achievement were coded. For instance, if two study time domains (e.g., English and Math) and two academic achievement measures (i.e., grades and test scores) were examined for a single sample, four correlation coefficients were coded: the correlation between time spent studying English and grades; the correlation between time spent studying English and test score; the correlation between time spent studying math and grades; and the correlation between time spent studying Math and test score. The independence issue occurs when multiple measures of study time and academic achievement are derived from a single sample of participants. When multiple measures of study time and academic achievement were used for a single participant, mean effect size was computed. To analyze effects of moderators, such as study time spent on specific academic domains and academic achievement measures, effect sizes were disaggregated and estimated independently.

**Results**

**Description of Included Studies**

This meta-analysis included 49 studies involving 19,219 participants. Six studies had two samples, three studies contained three samples, two studies contained four samples, and one study contained 11 samples, yielding 77 independent samples. Of these 49 studies, 25 were journal articles, 15 were dissertations, four were master's theses, three were conference papers, and two were book chapters. Table 1 lists the mean age, sample size, gender, scale for measuring study time, study time spent on specific domains, domain of academic achievement, scale of academic achievement, and the correlation between study time and academic achievement. Average sample size was 249.60 participants (range, 22–2,078). Five studies used female samples only, four employed male samples only, and 68 had samples with both genders. Three studies did not report mean participant age. The mean age of students in the remaining 74 independent samples was 19.28 (range, 13–30). Information for the scale used to measure study time was not available in 21 data points. For the remaining 56 data

points, study time was measured using a ratio scale for 48 points and using an ordinal scale for eight data points.

After coding multiple effect sizes for various study time domains, the academic achievement domain, and academic achievement measures from the same participant sample yielded 84 effect sizes. In terms of study time domains, five data points were for study of language arts, 10 were for math, two were for science, 11 were for the social sciences, 46 were for general academics, and ten for other. In terms of the academic achievement domain, five data points measured academic achievement in language arts, 11 measured math achievement, two measured science achievement, nine measured social sciences achievement, 48 measured general academic achievement, and nine measured that in other domains. Twenty-six data points used test scores to index academic achievement and 58 data points used grades.

## Mean Effect Sizes and Homogeneity Tests

Under fixed-effects assumptions, all studies are assumed to have the same true effect sizes. Variation in observed effect size is due to sampling error. Because this assumption is implausible, the random-effects model, which assumes both sampling error and random components are causes for variation in effect sizes, was used. Mean correlation between study time and academic achievement was weak at $r = .12$ with a 95% confidence interval of .08–.16. Homogeneity analyses indicate that the set of 77 independent effect sizes was not statistically significant, with $Q = 66.40$ ($p = .78$). No heterogeneity was observed, as $I^2 = 0$ and $\tau^2 = 0$.

## Moderator Analysis

### Publication type

Table 2 lists sample number, mean correlation, the confidence interval, and homogeneity statistics for the moderators of publication type, participant gender, participant age, scale for measuring study time, time spent studying specific domains, the academic achievement domain, and indicator of academic achievement. The most common publication type was journal article ($k = 46$) with a mean effect size of $r = .11$. For doctoral dissertation, mean effect size was $r = .16$. For these two publication outlets, mean effect sizes were positive and differed significantly from zero, indicating that study effort exerted a positive effect on the relation between study time and academic achievement.

### Participant gender

According to $Q_B$, effect sizes did not vary with sample gender. The lack of gendered differences in relations between study time and academic achievement may result from the small number of studies included in this meta-analysis. Thus, caution is necessary when interpreting the influence of gender on relations between study time and academic achievement, since the female sample was based only on five studies and the male sample was based only on four studies. Consequently, findings related to the gendered effect should be considered suggestive, not definitive.

**Participant age**

Weighted regression analysis using age as a continuous variable was employed for hypothesis testing. The regression coefficient $b = -.01$ ($p = .09$) was non-significant, indicating that age did not significantly affect the relation between study time and academic achievement. Mean age of samples was also classified based on school grades and categorized into the following age groups: 10–13 (middle school), 14–17 (high school), 18–21 (college), and >22. Four samples used middle school students, 11 samples used high school students, 52 samples used college students, and seven samples used adults. The effect size for age groups 14–17 and 18–21 were significantly different from zero (Table 2). The 95% confidence intervals for age groups 10–13 and >22 included zero, indicating that no correlation exists between study time and academic achievement for these two age groups. The largest effect size was for the group aged 14–17; however, the effect size was small to moderate at .17 using the guidelines by Cohen (1988). The between-group homogeneity statistic was non-significant at $Q_B = 2.37$ and $p = .50$.

**Measurement scale for study time**

To examine the effect of the measurement scale for study time, multiple effect sizes were coded from the same participant sample, yielding 84 effect sizes. Study time was frequently measured on a ratio scale ($k = 50$), with a mean effect size of $r = .10$, which differed significantly from zero. Based on $Q_B$, the effect of the measurement scale for study time on the relation between study time and academic achievement was not statistically significant.

**Specific study domain**

The most commonly assessed study domain was general academics ($k = 46$), with a mean effect size of $r = .12$. Effect size was .26 for language arts and .23 for math. For these three study domains, mean effect sizes were statistically significant. The relation between study time and academic achievement differed among domains in terms of study time spent with $Q_B = 10.43$ ($p < .05$).

**Academic achievement domain**

The results for the academic achievement domain were similar to those for the specific study domains. Specifically, effect sizes for language arts, math, and general academics differed significantly from zero, and the effect of the academic achievement domain on the relation between study time and academic achievement was significant with $Q_B = 10.77$ ($p < .05$)..

**Academic achievement measure**

This study examines whether the relation between study time and academic achievement varied as a function of academic achievement measures. Mean effect sizes for both grades and test scores differed significantly from zero. Most studies used grades to index academic achievement, with a mean effect size of $r = .12$. Studies using test scores yielded a mean effect size of $r = .17$. The relation between study time and academic achievement did not differ in terms of the academic achievement measure.

## Conclusions and Discussion

Society generally accepts that study improves academic performance. Educators and parents thus encourage diligent study and hard work (e.g., Delucchi & Rohwer, 1987). However, the relation between study time and academic achievement is weak. Analytical results obtained from examining 49 studies containing 77 independent samples (N = 19,219) indicate that the mean correlation coefficient between study time and academic achievement is weak at .12. This small effect size is consistent with a previous meta-analysis by Credé and Kuncel (2008), reporting that the relation between study time and academic achievement was small to moderate at best. In conclusion, studying did not strongly affect academic achievement.

Beyond overall trends, moderator analyses were introduced to explain the systematic variability in effect sizes. The effects of study time on a specific domain and the academic achievement domain were significant, indicating that the influence of study efforts varies among domains. Notably, the effect of study effort was relatively strong for language arts and relatively weak for social sciences. However, these associations were based on a small number of data points (five correlation coefficients for language arts and 11 for the social sciences). Most literature to date has simply examined academic study in general and, thus, research focusing on specific subject areas is required.
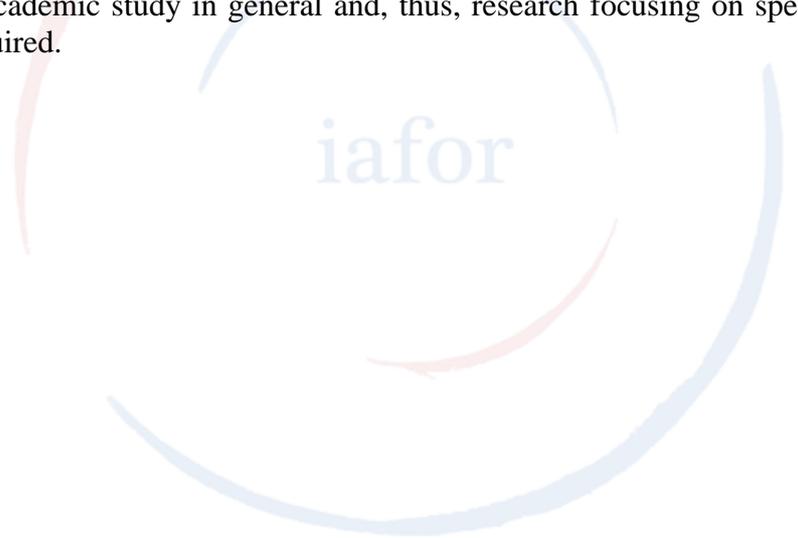
# References

Adair, M. (2009). *Examining mathematics achievement among non-traditional students  in a TRIO Student Support Services program.* Unpublished Doctoral Dissertation of Morgan State University.

Ajgaonkar, P. U. (2003). *Predicting self-reported grade point average among a sample of Southwestern college students: The role of capital in college success.* Unpublished Master Thesis of Texas A & M University.

Allen, G. J., Lerner, W. M., & Hinrichsen, J. J. (1972). Study behaviors and their relationships to test anxiety and academic performance. *Psychological Reports, 3*0, 407–410.

*Bagdan, P. J. (1999). *Relationships between learning styles, demographics, delivery methods, study times and test achievements of hospitality undergraduates.* Unpublished Doctoral Dissertation of Kansas State University.

Bell, H.M. (1931). Study habits of teachers college students. *Journal of Educational Psychology, 22*, 538–543. doi:10.1037/h0072901

Bembenutty, H. (2001). *Self-regulation of learning in the 21st century: Understanding the role of academic delay of gratification.* ED 455204.

Born, W. K. (2000). *The effect of workshop groups on achievement goals and performance in biology: An outcome evaluation.* Unpublished Doctoral Dissertation of Northwestern University.

Bradley, C. S. (2000). *Does self-esteem contribute to good grades at the college level? A sociological examination of the factors that impact academic performance in college.* Unpublished Master Thesis of Bowling Green State University.

Carver, R. P. (1970). A test of a hypothesized relationship between learning time and amount learned in school learning. *Journal of Educational Research, 64*, 57-58.

Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does Homework Improve Academic Achievement? A Synthesis of Research, 1987–2003. *Review of Educational Research, 76*, 1-62. doi:10.3102/00346543076001001

Crawford, A. B. (1929).  *Incentives to study.* Yale University Press.

Craft, S. A. (2006). *Ethnic differences in the relationship between self-efficacy, outcome expectations, and academic achievement for first-year college students.* Unpublished Doctoral Dissertation of Duke University.

Credé, M., & Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives on Psychological Science, 3*, 425-453. doi:10.1111/j.1745-6924.2008.00089.x

Culler, R.E., & Holahan, C.J. (1980). Test anxiety and academic performance: The effects of study-related behaviors. *Journal of Educational Psychology, 72*, 16–20. doi:10.1037/0022-0663.72.1.16

Delucchi, J. J., & Rohwer, W. D. (1987). Study time allocation as a function of grade level and course characteristics. *Contemporary Educational Psychology, 12*, 365-380. doi:10.1016/S0361-476X(87)80006-1

Dickinson, D. J., & O'Connell, D. Q. (1990). Effect of quality and quantity of study on student grades. *Journal of Educational Research, 83*, 227-231.

Eppler, M., & Harju, B. L. (1997). Achievement motivation goals in relation to academic performance in traditional and nontraditional college students. *Research in Higher Education, 38*, 557-573. doi:10.1023/A:1024944429347

Etcheverry, E. (1990). *Background, time use, and educational attainment: A study of undergraduate students*. Unpublished Master Thesis of University of Manitoba.

Everwijn, S.E., & Willemsen, A.J. (1984). Validity and reliability of methods measuring study time. *Educational and Psychological Research, 4*, 29–39.

Federici, L.,& Schuerger, J. (1976). High school psychology students versus non-high school psychology students in a college introductory class. *Teaching of Psychology, 3*, 172-174. doi:10.1207/s15328023top0304_4

Fuligni, A. J., & Stevenson, H. W. (1995). Time use and mathematics achievement among American, Chinese, and Japanese high school students. *Child Development, 66*, 830-842. doi:10.2307/1131953

Gallagher, M. W. (2006). *The effects of hope and theories of intelligence in a Graduate Record Examination preparation course*. Unpublished Master Thesis of the University of Kansas.

George, D., Dixon, S., Stansal, E., Pheri, T., & Gelb, S. L. (2008). Time diary and questionnaire assessment of factors associated with academic and personal success among university undergraduates. *Journal of American College Health, 56*, 706-715. doi:10.3200/JACH.56.6.706-715

Hill, L. (1990). Effort and reward in college: A replication of some puzzling findings. *Journal of Social Behavior and Personality, 5*, 151-161.

Jones, L., & Ruch, G. M. (1928). Achievement as affected by amount of time spent in study. *Yearbook of the National Society for the Study of Education , Part II*, 131-134.

Kuncel, N. R., Credé, M., & Thomas, L. L. (2007). A meta-analysis of the predictive validity of the Graduate Management Admission Test (GMAT) and undergraduate grade point average (UGPA) for graduate student academic performance. *Academy of Management Learning and Education, 6*, 51-68.

Kuncel, N. R., Hezlett, S. A., & Ones, D. S. (2001). A comprehensive meta-analysis of the predictive validity of the Graduate Record Examinations: Implications for graduate student selection and performance. *Psychological Bulletin, 127*, 162-181. doi:10.1037/0033-2909.127.1.162

Kuthy, J. (2008). *Reducing adverse impact: An investigation of the effect of additional study time on trainability test performance.* Unpublished Doctoral Dissertation of the University of Akron.

Lammers, W. J., Onweugbuzie, A. J., & Slate, J. R. (2001). Academic success as a function of gender, class, age, study habits, and employment of college students. *Research in the Schools, 8*, 71-81.

Leasure, R. W. (1996). *The relationship of accuracy of test performance predictions (ATTP) to achievement, metamemorial training, and student characteristics.* Unpublished Doctoral Dissertation of the University of Akron.

Lee, Y. (1986). *A causal modeling of psychological characteristics that determine learning achievement*. Unpublished Doctoral Dissertation of University of Missouri-Columbia.

Lehman, M. W. (1995). *An experimental study on the effect of high school accounting on student performance in the introductory financial accounting course.* Unpublished Doctoral Dissertation of the University of Mississippi.

Martin, R., & Meyers, J. (1974). Effects of anxiety on quantity of examination preparation. *Psychology in the Schools, 11*, 217–221. doi:10.1002/1520-6807(197404)11:2<217::AID-PITS2310110222>3.0.CO;2-T

Mavis, B. E. (2000). Does studying for an objective structured clinical examination make a difference? *Medical Education, 34*, 808-812. doi:10.1046/j.1365-2923.2000.00687.x

May, M. A. (1923). Predicting academic success. *Journal of Educational Psychology, 14*, 429-440. doi:10.1037/h0071717

Michaels, J. W., & Miethe, T. D. (1989). Academic effort and college grades. *Social Forces, 68*, 309-319. doi:10.2307/2579230

Nonis, S. A., Philhours, M. J., & Hudson, G. I. (2006). Where does the time go? A diary approach to business and marketing students' time use. *Journal of Marketing Education, 28*, 121-134. doi:10.1177/0273475306288400

Nuesell, C. M. (1999). *Approach and avoidance achievement goals and self-regulated learning strategy usage.* Unpublished Doctoral Dissertation of Fordham University.

O'Connor, E. J., Chassie, M. B., & Walther, F. (1980). Expanded effort and academic performance. *Teaching of Psychology, 7*, 231-233. doi:10.1207/s15328023top0704_10

Plant, E. A., Ericsson, K. A., Hill, L., & Asberg, K. (2005). Why study time does not predict grade point average across college students: Implications of deliberate practice for academic performance. *Contemporary Educational Psychology, 30*, 96-116.

Penceal, B. W. (1989). *Nonintellective factors as predictors of academic performance of nontraditional adult college freshmen.* Unpublished Doctoral Dissertation of Fordham University.

Russo, C. J. (2002). *A study of selected academic variables contributing to success on the Uniform CPA Examination in Pennsylvania.* Unpublished Doctoral Dissertation of the Pennsylvania State University.

Ryans, D. G. (1939). Some observations concerning the relationship of the time spent at study to scholarship and other factors. *Journal of Educational Psychology, 30*, 372-377. doi:10.1037/h0058770

Saito, L. T. (1999). *Socio-cultural factors in the educational achievement of Vietnamese American high school students.* Unpublished Doctoral Dissertation of University of California, Irvine.

Schreiber, J. B. (2000). *Advanced mathematics achievement: A hierarchical linear model.* Unpublished Doctoral Dissertation of Indiana University.

Schuman, H. Walsh, E., Olson, C., & Etheridge, B. (1985). Effort and reward: The assumption that college grades are affected by quantity of study. *Social Forces, 63*, 945-966. doi:10.2307/2578600

Shaffer J. M. (1986). *Unsupervised learning time and its impact on undergraduate achievement.* Unpublished Doctoral Dissertation of Northwestern University.

Simmons, A. B. (1996). *Beliefs and academic performance of low-achieving college students.* Unpublished Doctoral Dissertation of Indiana University.

Sparacino, J., & Hansell, S. (1979). Physical attractiveness and academic performance: Beauty is not always talent. *Journal of Personality, 47*, 449–469. doi:10.1111/j.1467-6494.1979.tb00626.x

Wagstaff, R., & Mahmoudi, H. (1976). Relation of study behaviors and employment to academic performance. *Psychological Reports, 38,* 380–382.

Wilhite, S. C. (1992). *Self-concept of academic ability, self-assessment of memory ability, academic aptitude, and study activities as predictors of college course achievement.* ED350308.

Williamson, E. G. (1935). The relationship of number of hours of study to scholarship. *Journal of Educational Psychology, 26*, 682-685. doi:10.1037/h0056481

Youssef, A. A. (1984). *Study time, motivation and students' achievement.* ED253067.

Zuriff, G. E. (2003). A method for measuring student study time and preliminary results. *College Student Journal, 37*, 72-78.

Table 1: *Studies of the relationship between study time and academic achievement*

| study | age | N | gender | Scale of ST | Study Domain | Domain of AA | AA measure | ES |
|---|---|---|---|---|---|---|---|---|
| Adair (2009) | 18 | 130 | Mixed | NA | M | M, G | Grades | .73 |
| Ajgaonkar (2003) | 23.32 | 695 | Mixed | Ratio | G | G | Grades | .28 |
| Allen et al. (1972) | 19.5 | 122 | Mixed | Ratio | SS | G | Grades | .16 |
| Bagdan (1999) | 19.5 | 211 | Mixed | Ratio | O | G | Grades | .07 |
| Bell (1931) | 19.5 | 127 | Mixed | Ratio | G | G | Grades | .32 |
| Bembenutty (2001) | 19.5 | 102 | Mixed | Ratio | M | G | Grades | .03 |
| Born (2000) | 19.5 | 158 | Mixed | Ratio | S | S | Grades | .07 |
| Bradley (2000) | 19.5 | 751 | Mixed | Ordinal | SS | SS | Grades | .05 |
| Carver (1970) | 19.5 | 48 | Mixed | Ratio | SS | SS | Test | .07 |
| Craft (2006) | 18 | 191 | Mixed | Ratio | G | G | Grades | .01 |
| Crawford (1929) #1 | 19.5 | 221 | Mixed | Ratio | G | G | Grades | .00 |
| Crawford (1929) #2 | 19.5 | 264 | Mixed | Ratio | G | G | Grades | .17 |
| Crawford (1929) #3 | 19.5 | 367 | Mixed | Ratio | G | G | Grades | -.05 |
| Crawford (1929) #4 | 19.5 | 314 | Mixed | Ratio | G | G | Grades | -.01 |
| Culler et al. (1980) #1 | 18 | 65 | Mixed | Ratio | G | G | Grades | .30 |
| Culler et al. (1980) #1 | 18 | 31 | Mixed | Ratio | G | G | Grades | -.10 |
| Delucchi et al. (1987) #1 | 13 | 380 | Mixed | Ordinal | O | O | Grades | .08 |
| Delucchi et al. (1987) #2 | 16 | 461 | Mixed | Ordinal | O | O | Grades | .06 |
| Delucchi et al. (1987) #3 | 19.5 | 160 | Mixed | Ordinal | O | O | Grades | .10 |
| Dickinson et al. (1990) #1 | 19.5 | 91 | Female | Ratio | SS | SS | Test | .19 |
| Dickinson et al. (1990) #2 | 19.5 | 22 | Male | Ratio | SS | SS | Test | .25 |
| Eppler et al. (1997) | 29.8 | 50 | Mixed | NA | G | G | Grades | .20 |
| Eppler et al. (1997) | 19.2 | 212 | Mixed | NA | G | G | Grades | .02 |
| Etcheverry (1990) | 24.098 | 308 | Mixed | Ratio | G | G | Grades | .23 |
| Federici et al. (1976) | 19.5 | 114 | Mixed | NA | SS | G, SS | Grades | .09 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Fuligni et al. (1995) #1 | 16.5 | 204 | Mixed | NA | G, M | M | Test | .18 |
| Fuligni et al. (1995) #2 | 16.5 | 222 | Mixed | NA | G, M | M | Test | .30 |
| Fuligni et al. (1995) #3 | 16.5 | 152 | Mixed | NA | G, M | M | Test | .29 |
| Gallagher (2006) | 21.7 | 41 | Mixed | NA | G | G | Test | -.04 |
| George et al. (2008) | 23.1 | 231 | Mixed | Ratio | G | G | Test | .20 |
| Hill (1990) #1 | 19.5 | 60 | Mixed | NA | G | G | Grades | .15 |
| Hill (1990) #2 | 19.5 | 335 | Mixed | NA | G | G | Grades | .14 |
| Jones et al. (1928) | 19.5 | 130 | Mixed | Ratio | G | G | Grades | -.28 |
| Kuthy (2008) | NA | 2078 | Mixed | NA | O | O | Test | .48 |
| Lammers et al. (2001) | 21.7 | 366 | Mixed | Ratio | G | G | Grades | .12 |
| Leasure (1996) | 29 | 226 | Mixed | Ratio | M | M | Grades | -.18 |
| Lee (1986) #1 | 13 | 118 | Male | Ratio | L, M | L, M | Test | .21 |
| Lee (1986) #2 | 13 | 119 | Female | Ratio | L, M | L, M | Test | .25 |
| Lehman (1995) | 19.5 | 157 | Mixed | Ratio | O | O | Grades | .11 |
| Martin et al. (1974) | 19.5 | 100 | Female | Ratio | SS | SS | Test | -.15 |
| Mavis (2000) | 25.9 | 113 | Mixed | Ratio | O | O | Test | .07 |
| May (1923) | 18 | 450 | Mixed | Ratio | G | G | Grades | .32 |
| Michaels et al. (1989) | 19.5 | 676 | Mixed | Ordinal | G | G | Grades | .18 |
| Nonis et al. (2006) | 23.8 | 264 | Mixed | Ratio | G | G | Grades | .05 |
| Nuesell (1990) | 14 | 127 | Mixed | NA | G | G | Test | -.10 |
| O'Connor et al. (1980) | 19.5 | 90 | Mixed | Ratio | SS | SS | Test | -.39 |
| Plant et al. (2005) | 19.82 | 88 | Mixed | Ratio | G | G | Grades | .02 |
| Penceal (1989) | NA | 215 | Mixed | Ordinal | G | G | Grades | .03 |
| Russo (2002) | NA | 165 | Mixed | Ratio | O | O | Grades | .38 |
| Ryans (1939) | 20 | 40 | Mixed | Ratio | G | G | Grades | .37 |
| Saito (1999) | 17 | 172 | Mixed | Ratio | G | G | Grades | .389 |
| Schreiber (2000) | 17 | 1839 | Mixed | Ordinal | M | M | Test | .08 |
| Schuman et | 19.5 | 424 | Mixed | Ratio | G | G | Grades | .11 |

| al. (1985) #1 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Schuman et al. (1985) #2 | 19.5 | 113 | Mixed | Ratio | S | S | Grades | .12 |
| Schuman et al. (1985) #3 | 19.5 | 273 | Mixed | Ratio | G | G | Grades | -.02 |
| Schuman et al. (1985) #4 | 19.5 | 64 | Mixed | Ratio | G | G | Grades | .02 |
| Schuman et al. (1985) #5 | 19.5 | 300 | Mixed | Ratio | G | G | Grades | .17 |
| Schuman et al. (1985) #6 | 19.5 | 256 | Mixed | Ratio | G | G | Grades | .04 |
| Schuman et al. (1985) #7 | 19.5 | 370 | Mixed | Ratio | G | G | Grades | -.01 |
| Schuman et al. (1985) #8 | 19.5 | 394 | Mixed | Ratio | G | G | Grades | .07 |
| Schuman et al. (1985) #9 | 19.5 | 423 | Mixed | Ratio | G | G | Grades | .08 |
| Schuman et al. (1985) #10 | 19.5 | 345 | Mixed | Ratio | G | G | Grades | .08 |
| Schuman et al. (1985) #11 | 19.5 | 298 | Mixed | Ratio | G | G | Grades | .17 |
| Shaffer (1986) #1 | 19.5 | 102 | Mixed | Ratio | O | O | Test | -.09 |
| Shaffer (1986) #2 | 19.5 | 35 | Mixed | Ratio | O | O | Test | .20 |
| Simmons (1996) | 19.5 | 580 | Mixed | Ordinal | G | G | Grades | .15 |
| Sparacino et al. (1979) #1 | 19.5 | 55 | Male | NA | G | G | Grades | .24 |
| Sparacino et al. (1979) #2 | 19.5 | 65 | Female | NA | G | G | Grades | -.07 |
| Sparacino et al. (1979) #3 | 19.5 | 50 | Male | NA | G | G | Grades | .12 |
| Sparacino et al. (1979) #4 | 19.5 | 87 | Female | NA | G | G | Grades | .25 |
| Wagstaff et al. (1976) | 19.5 | 190 | Mixed | NA | G | G | Grades | .32 |
| Wilhite (1992) | 19.5 | 196 | Mixed | NA | SS | SS | Grades | -.01 |
| Williamson (1935) | 18 | 105 | Mixed | Ratio | G | G | Grades | -.06 |
| Youssef (1984) #1 | 15.5 | 27 | Mixed | NA | L | L | Grades | .36 |
| Youssef (1984) #2 | 15.5 | 32 | Mixed | NA | L | L | Grades | .56 |
| Youssef (1984) #3 | 15.5 | 38 | Mixed | NA | L | L | Grades | -.10 |
| Zuriff (2003) | 19.5 | 24 | Mixed | Ratio | SS | SS | Test | .02 |

Scale of ST = Scale of study time measure; study domain: L = language arts, M = math, S = science, SS= social science, G = general academics, O = other domains; domain of AA = domain of academic achievement; AA measure = academic achievement measure; ES = correlation between study time and academic achievement.

Table 2
*Moderator Analyses*

| Moderator | $k$ | Mean | 95% CI Lower | 95% CI Upper | $Q_B$ |
|---|---|---|---|---|---|
| Publication type | | | | | 5.02 |
| Journal | 46 | .11 | .06 | .17 | |
| Dissertation | 17 | .16 | .07 | .25 | |
| Thesis | 4 | .15 | -.13 | .43 | |
| Conference | 5 | .12 | -.13 | .38 | |
| Book chapter | 5 | -.03 | -.24 | .18 | |
| Gender | | | | | .65 |
| Female | 5 | .10 | -.14 | .34 | |
| Male | 4 | .20 | -.14 | .54 | |
| Mixed | 65 | .11 | .07 | .16 | |
| Participant age | | | | | 2.37 |
| 10-13 | 4 | .11 | -.13 | .34 | |
| 14-17 | 11 | .17 | .07 | .27 | |
| 18-21 | 52 | .09 | .05 | .14 | |
| More than 22 | 7 | .12 | -.01 | .25 | |
| Quality of study time measure | | | | | .00 |
| Ratio scale | 48 | .09 | .05 | .13 | |
| Ordinal scale | 8 | .09 | -.01 | .19 | |
| Domain study time spent for | | | | | 10.43[*] |
| Language arts | 5 | .26 | .02 | .50 | |
| Math | 10 | .23 | .11 | .34 | |
| Science | 2 | .09 | -1.37 | 1.56 | |
| Social science | 11 | .02 | -.10 | .14 | |
| General academics | 46 | .12 | .07 | .17 | |
| Domain of academic achievement | | | | | 10.77[*] |
| Language arts | 5 | .26 | .02 | .50 | |
| Math | 11 | .21 | .11 | .32 | |
| Science | 2 | .09 | -1.36 | 1.54 | |

| | | | | | |
|---|---|---|---|---|---|
| Social science | 9 | .01 | -.13 | .14 | |
| General academics | 48 | .12 | .07 | .16 | |
| Academic achievement measures | | | | | 1.33 |
| Grades | 58 | .12 | .07 | .16 | |
| Test scores | 26 | .17 | .09 | .24 | |

*<.05

*Eliminating the Educational Structural Defects Constraining Effective Guidance and Counselling Services Delivery in Secondary Schools in Edo State, Nigeria*

Agatha Ojeme, University of Benin, Nigeria

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

The purpose of this study was to determine the educational structural defects constraining the effective guidance and counselling services delivery in secondary schools in Edo State of Nigeria.

In the conduct of this study, four research questions were generated to guide the study as follows:

(i)  Is there an enabling environment, working materials and tools designed for guidance and counselling services?
(ii) Are professional counsellors assigned non-counselling roles in the schools represented?
(iii) Is the School curriculum and instructional programme planned to include counselling periods in the school time table and outside of the school time table?
(iv) What is the school counsellors' rating of statutory provision of funds for guidance and counselling programmes?.

The sample for this study consisted of 35 school counsellors, who were purposively selected from Secondary Schools in three senatorial districts of Edo State in Nigeria. A survey research instrument, containing 15 relevant items to the research questions, which were properly validated and tested for reliability were used to collect the data of the study.

A reliability co-efficient of 0.79 was obtained using test-retest method. The findings of the study indicated no adequate provision of enabling environment and working materials for counselling services. Furthermore, counsellors are predominantly assigned non-counselling duties, school curriculum and instructional programs do not include counseling sessions in the school timetable, and statutory funds are not provided to facilitate the services.
Based on these findings, some recommendations were made as contained in the study to improve counselling services in Edo State Secondary Schools in Nigeria.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Since the period of political independence in Nigeria, in 1960, Nigerian education has been recognized as a key factor of nation building and development. It is in the light of this fact that the Federal Government of Nigeria, has continuously enabled educational policies to provide systematic guidelines for the growth and development of education in Nigeria. The 1977 educational policy became the first indigenously crafted policy instrument in Nigeria education. As stated in this policy, guidance and counselling is expected to assist many young people in making career choices and also assist school children with personality problems to overcome their challenges. Subsequent editions have emerged in quest of quality standards of school learning and practices (see 1981, 1998, 2004 and 2013 editions).

In all of these documents, guidance and counselling services remain a factor highly recognized for its important role in the achievement of the successful education of school children. It is also to be noted that whereas guidance and counselling services sector is pidgeon holed as a key element in Nigerian educational policies, there is unfortunately a huge gap between policy prescriptions and practices, particularly at the primary and secondary school levels of education in Nigeria.

The school curriculum is notoriously saturated with instructional activities aimed at preparing the learners for their examinations. In addition, Oramah (2014) opined that school counselling in Nigeria, in recent times, appears to have been immersed in controversy regarding the unequivocal roles of school counsellors within the school environment.

Guidance and counselling suffers severe neglect inspite of policy provision. The burden of this paper is to undertake a critical analysis of visibly identifiable structural defects through an empirical investigation of structural defects, which obstruct guidance and counselling services in Nigerian Schools and which as a result obstruct its positive contributions to the holistic success of Nigerian Education.

**Statement of the Problem**

In Nigeria, it is observed that there are many challenges militating against effective guidance and counselling services delivery in schools, inspite of the recognition of its relevance in the National policy on Education in 1977 and the subsequent editions of 1981, 2004 and 2013. These constraining challenges of counsellors in the Nigerian school system as suspected by Mammam (2002), Denga (2004) Bukoye (2012) and Oramah (2014) include issues as inadequate funds for the service delivery efforts of schools counsellors, provision of an enabling environment and work tools for counsellors, schedule of counselling session on the school time table and the assignment of non-counselling duties to school counsellors by school principals. There is a further need for empirical verification of the foregoing factors as a means of ensuring that concrete efforts towards improvement of counselling services in schools is based on empirical evidence. This would be the most reliable way of unveiling the educational structural defects of counselling services in Nigerian Schools.

**Purpose of the Study**
This study was designed to examine the educational structural defects militating against effective guidance and counselling services delivery in Secondary Schools in Edo State of Nigeria.

**Research Questions**

The following research questions guided the study.
1. Is there an enabling environment and adequate working materials and tools for school counsellors to effectively discharge their professional roles in Secondary Schools in Edo State of Nigeria?
2. Are professional counsellors assigned non-counselling roles in Secondary Schools in Edo State of Nigeria?
3. Is the school curriculum and instructional programme planned to include counselling session in the school time-table and outside of the school time-table?
4. What is school counsellors' rating of statutory provision of fund for guidance and couselling programmes?

**Methodology**

**Research Design**

This study adopted the expo-factor research design. As a descriptive and survey study, the expo-factor research design is assessed as adequate in conducting the study, as it enables the establishment of the data concerning the subject matter under investigation as they exist, without any manipulation of the subjects.

**Instrument for Data Collection**

The instruments for data collection was a structural questionnaire. It consists of fifteen items designed to elicit responses from school guidance cousellors in schools in the three senatorial districts in Edo State of Nigeria. The instrument was validated by two experts in the field of guidance and counselling. Their inputs were applied to prepare the final draft. A reliability co-efficient of 0.79 was obtained using the test-retest method.

**Sample and Sampling Technique**

Purposive sampling procedure was used in selecting thirty one schools. Only schools with professional counsellors were used. Four schools had more than one counsellor. Both counsellors in such schools were used for the study, bringing the total of subjects, who participated in the study to thirty-five professional school counsellors.

**Technique of Data Collection**

A total of thirty-five questionnaire were personally administered to the respondents by the researcher to ensure high response rate. The completed questionnaire were collected on the spot and 100% return rate was achieved.

**Technique of Data Analysis**

The data collected were analyzed using frequency counts and percentage of responses in the dual categories by the respondents.

**Presentation of Results**

**Research Question 1**

Is there an enabling environment and adequate working materials and tools for school counsellors to effectively discharge their professional roles in Secondary Schools in Edo State of Nigeria?

The data for this research question are presented in tables 1a and 1b attached in Appendix 1 of this paper. From table 1a, it is observed that 65.71% of school counsellors are not provided an enabling environment to perform their counselling duties in schools. 71.43% of school counsellors disagreed that they are provided with comfortable office table and chair, while 94.29% of respondents indicated that students are not provided with desks and chairs for counselling session.

The data presented in Table 1b showed that 28.57%, and 22.86% of respondents agreed that they are provided with counselling books and stationeries respectively while 71.43% and 77.14% of respondents disagreed. The table also showed that 100% of respondents disagreed in the area of provision of computer/internet facilities.

**Research Question 2**

Are professional counsellors assigned non-counselling roles in school?

The data for this research question are presented in table 2 below attached in Appendix 1 of this paper. Table 2, showed 68.57%, 62.86% and 80% of respondents agreeing that they are assigned to teach, register new students and perform the role of a disciplinarian respectively while 31.43%, 37.14% and 20% disagreed on the performance of these roles.

**Research Question 3**

Is the school curriculum and instructional programme planned to include counselling session in the school time-table and outside of the school time-table?.

The data for this research question are presented in table 3 below attached to Appendix 1 of this paper. The data in Table 3 showed that 34.29% of respondents agreed that they have counselling session on their school time-table as against 65.71% of respondents, who disagreed. The table also showed 85.71% and 91.43% of respondents disagreeing on the extension of counselling services beyond school hours and to non-school settings respectively as against 14.29% and 8.57% agreeing on these issues.

**Research Question 4**

What is school counsellor's rating of provision of funds for guidance and counselling programmes?

The data for this research questions are presented in table 4 attached to Appendix 1. From the data presented in Table 4, it is observed that 91.43%, 94.29% and 94.29% of respondents disagreed on the provision of fund for orientation of new students, counsellors' attendance at seminars/workshops and organizing career day and excursion respectively as against 8.57%, 5.71% and 5.71% of respondents who disagreed on these issues.

**Discussion of Findings**

The results presented in Table 1 showed that regardless of the recognition of the relevance of guidance and counselling in Secondary Schools as stressed in the National Policy on Education (1977) and the subsequent editions of 1981, 1998, 2004 and 2013, many school counsellors are not satisfactorily provided with the required enabling environment, working materials and tools to effectively discharge their professional duties as indicated by 65.71% and 77.14% of respondents. The data are in line with other scholars, who have the popularly held views concerning the neglect of the needs of school counsellors. This means that there is still much to be done in terms of meeting the needs of school counsellors. This should be an issue of great concern to Government and all stakeholders. The future of counsellors in the schools and the professional services incumbent upon them, remain bright if adequate enabling environment and work tools are provided for the sake of improving the quality of education of Nigerian children.

The finding of the second research question on the issue of performance of non-counselling services by school Counsellors indicated that 68.57% and 62.86% of school Counsellors are predominantly deployed to teach and perform clerical duties respectively. While 80% of school Counsellors in Edo State, Nigeria, are assigned to perform the role of a disciplinarian. The finding is in consonance with the finding of Ojeme (2010) and Bukoye (2012) in their studies. This report also aligns with the opinion of Adeyemo, Daodu and Elegbede (2012), Egbochuku (2008) and Oramah (2014) that school Counsellors are assigned teaching and clerical duties. It is observed that many school principals believed that appropriate task for professional Counsellors include many roles and functions not recommended by Counselling Association of Nigeria (CASSON), many of which are clerical task. This is, however, contrary to the professional expectation of school counsellors. Using school Counsellors to teach and perform clerical duties such as registration and scheduling of all new students and the role of a disciplinarian, could be a distraction from the effective conduct of professional Counselling roles. The relentless deployment of counsellors to perform clerical duties adds more responsibilities to the already over-loaded counsellor's professional schedule. The performance of non-counselling functions in addition to core professional roles may be over burdening of the Counsellors in the schools. If non-counselling activities were eliminated or redirected to other staff, Counsellors would have more time for student Counselling, which would lead to greater job satisfaction and student productivity.

In table 3, the study revealed that many schools do not have Counselling session on their school time-table and Counselling services are not usually extended beyond instructional hours. This amount to a very constricted time to interact with students. This finding agrees with the finding of Bukoye (2012), from her research on non-inclusion of Counselling session in school time-table that 66.67% of the participating Counsellors indicated non-inclusion of Counselling session in school time-table. This implies that many school administrators do not recognize the need for Counselling sessions in schools. Perhaps they believed that both school administrators and teachers could do the work of school Counsellors. Obviously this is not good for the school Counselling profession, Counsellors and ultimately students in schools. The study also found out that Counselling Services are not extended to non-educational settings. This finding agrees with the views of Tor-Anyim (2014), Mulak (2014) and Ojeme and Iyamu (2014) that Counselling Services are not extended beyond school confinement to non-educational settings. This is not surprising because the general perception of the Guidance Counsellors in terms of their roles mostly focused on the educational system. This is a big challenge to the Counselling Association of Nigeria. Just as in educational institutions, where Guidance and Counselling fulfils the enabling role of enhancing teaching and learning effectiveness, it is conceivable that Guidance and Counselling in its occupational and vocational concerns, could also facilitate successful implementation and conduct of the programme of non-school settings, to maximize their goal attainment. This implies that the basic principles of Guidance and Counselling could be applied in other social institutions.

The result of the fourth research question showed that funds for the implementation of Guidance and Counselling programmes are grossly inadequate. 91.43% of Counsellors disagreed that statutory fund was provided for orientation programme. While 94.29% disagreed that fund was made available for Counsellors to attend seminars and workshops. The study also showed that the same 94.29% of respondents disagreed that fund was provided for the planning of career day and excursion. The finding aligns with the finding of Abanihe and Adeniyi (2011), who reported that 83.7% of Counsellors studied indicated that fund was not allocated to Guidance and Counselling programme. The finding of the study of Bukoye (2012) is also in consonance with the result of this study. The study which revealed that 86.67% of school Counsellors indicated lack of statutory fund for Guidance and Counselling programme, has confirmed a problem investigated by this study. Alao (2005) noted that the lack of adequate financial support for Guidance and Counselling activities, could frustrate the genuine efforts of school counsellors in the discharge of their legitimate duties. This problem of lack of statutory fund, needs to be addressed by the government and education stakeholders, if Guidance and Counselling is to strive in schools. Lack of proper funding of Guidance and Counselling could inhibit the rapid growth and spread of Counselling activities and thereby, result in the failure of achieving the education aims and objectives as stated in the National Policy on Education 1981.

## Conclusion

The following conclusions were reached from the findings of the study.

1) Secondary schools in Edo State, Nigeria, are not satisfactorily provided with an enabling environment, working materials and tools for effective Counselling Services delivery in schools.

2) Professional Counsellors are predominantly assigned teaching role and clerical duties in the Secondary Schools.

3) The Secondary School curriculum and instructional programmes do not satisfactorily accommodate Counselling sessions in the school time-table, thus, making systematic service delivery very challenging.

4) There is insufficiency of statutory funds to facilitate the conduct of Guidance and Counselling programmes in Edo State Secondary Schools in Nigeria.

## Recommendations

Considering the ever ascending relevance of the school Counsellor in the successful implementation of Nigeria's educational initiatives as captured by the National Policy on Education, there is need for the following:

1) Government, Parents' Teachers Associaton (PTA) and all stakeholders should be persuaded to provide enabling environment and work tools through the school principals for the school Counsellors to properly execute their legitimate professional roles in the schools.

2) Organize re-orientation programme for school principals through workshop on the need for a change of attitude towards improving Counselling duties of school Counsellors.

3) There is need for a review of the school curriculum and instructional programme to include Counselling session on the school time-table and beyond the school confinement to non-educational settings.

4) The Counselling Association of Nigeria (CASSON) need to show more interest in interfacing with school operator as a professional pressure group to secure better attention for the needs of Counsellors in the school system.

5) School counsellors should at all times establish a cordial and collaborative working relationship with the school principals as a basis for effectiveness.

6) School principals should be dissuaded from using their position to assign non-counselling duties to school counsellors.

## References

Abanihe .I.M. & Odeniyi .O.A. (2011). Evaluation of Guidance and Counselling Resources in Secondary Schools in Oyo State. Counselling Association of Nigeria Conference proceedings.

Adeyemo, D.A, Daodu, M.A & Elegbede (2012). Principal Leadership Styles and School Climate as correlates of school Counsellors' Effectiveness in Lagos State Secondary School. THE COUNSELLOR 31 (2) 24 - 34

Bukoye, R.O. (2012). Issues and Challenges Facing Counsellors in Six Geo-Political Zone in Nigerian Schools Setting. THE COUNSELLOR. 31 (1) 46 – 58

Denga, D.I. (2004). Guidance and Counselling in school and non-school settings. Calabar Rapid Publishers

Egbochuku, E.O. (2008). Guidance and Counselling: A Comprehensive Text. Benin City. University of Benin Press.

Federal Republic of Nigeria (1977). National Policy on Education (NPE) 1st edition. Yaba, Lagos: NERDC Press.

Mamman, A.M. (2002). Guidance and Counselling for schools (2nd Ed). Yola Paraclete Publishers. Pp. 10 – 30.

Mulak, W.N.K (2014). Counselling in the Industrial Setting: A Panacea for Sound Pollution. Journal of Counselling Psychology on the Plateau. 1 (1) 101 – 108

Ojeme, A.I. (2010). Critical Incidents facilitating Secondary School Counsellor-Principal Relationship in Edo and Delta States. Unpublished Ph.D Thesis. University of Benin, Benin City, Nigeria.

Ojeme, A.I. & Iyamu, F.I. (2014). Entrenching Guidance Programme in the organized private sector: Possibilities and Benefits. Journal of Counselling Psychology on the Plateau. 1 (1) 171-178

Oramah, E.U (2014) Boundaries in School Counselling: Conceptual, Theoretical and Risk-management Dimensions. THE COUNSELLOR. 33 (2) 141-150

Tor-Anyiin, S.A. (2014). Imperatives of Counselling in Non-School Setting. Journal of Counselling Psychology on the Plateau. 1 (1) 9-27

Conatct: agathaojeme@yahoo.com

**Appendix 1**

**Table 1a: Provision of Enabling Environment**

| S/N | VARIABLES | NUMBER AGREEING (YES) | NUMBER DISAGREEING (NO) |
|---|---|---|---|
| 1. | Does your school have a counsellor's office designed for counselling only? | 12 (34.29) | 23 (65.71) |
| 2. | Is there a comfortable table and chair for the school counsellor? | 10 (28.57) | 25 (71.43) |
| 3. | Are there desks and chairs for students in the counsellors' office? | 2 (5.71) | 33 (94.29) |

Figures in parenthesis represent percentage distribution of responses.

**Table 1b: Provision of working materials and tools**

| S/N | VARIABLES | NUMBER AGREEING (YES) | NUMBER DISAGREEING (NO) |
|---|---|---|---|
| 1. | Are there books for counselling? | 10 (28.57) | 25 (71.43) |
| 2. | Are the computer/internet facilities for the school counsellors? | 0 (0) | 35 (100) |
| 3. | Are there stationeries for the school counsellors? | 8 (22.86) | 27 (77.14) |

Figures in parenthesis represent percentage distribution of responses.

**Table 2: Assigning non-counselling roles to school counselors**

| S/N | VARIABLES | NUMBER AGREEING (YES) | NUMBER DISAGREEING (NO) |
|---|---|---|---|
| 1. | Counsellors are assigned to teach in school | 24 (68.57) | 11 (31.43) |
| 2. | Counsellors are assigned to register all new students | 22 (62.86) | 13 (37.14) |
| 3. | Counsellors are assigned to perform the role of a disciplinarian | 28 (80) | 7 (20) |

Figures in parenthesis represent percentage distribution of responses.

**Table 3: Inclusion of counselling session on school time-table and outside of the school time-table.**

| S/N | VARIABLES | NUMBER AGREEING (YES) | NUMBER DISAGREEING (NO) |
|---|---|---|---|

| 1. | Does your school have a counselling session on the school time table? | 12 (34.29) | 23 (65.71) |
|----|----------------------------------------------------------------------|------------|------------|
| 2. | Counselling services are extended beyond school hours | 5 (14.29) | 30 (85.71) |
| 3. | Counselling services are extended to non-school settings | 3 (8.57) | 32 (91.43) |

Figures in parenthesis represent percentage distribution of respondents.

**The data for this research questions are presented in table 4 below**

| S/N | VARIABLES | NUMBER AGREEING (YES) | NUMBER DISAGREEING (NO) |
|-----|-----------|------------------------|--------------------------|
| 1. | Fund is provided for the orientation of new students | 3 (8.57) | 32 (91.43) |
| 2. | Fund is provided for school counsellors to attend seminars and workshops | 2 (5.71) | 33 (94.29) |
| 3. | Fund is provided for planning of career day and excursion | 2 (5.71) | 33 (94.29) |

Figures in parenthesis represent percentage distribution of responses.

## Transition of Students with Autistic Spectrum Disorders from Primary to Post-Primary School: A Framework for Success

Evelyn Deacy, St. Angela's College, Ireland
Fiona Jennings, St. Angela's College, Ireland
Ailbhe O Halloran, St. Angela's College, Ireland

**Abstract**

Students with Autistic Spectrum Disorders (ASD) have specific difficulties which impact on the transition between primary and post-primary school (Steady and Roberts, 2013). As an increasing number of students with ASD are now accessing mainstream education due to Irish Government policy on inclusion (NCSE, 2013), this has led to increased challenges for schools in providing appropriate support for students with ASD during the transition process.

The purpose of this research was to investigate best practice in relation to the planning, process and strategies that support the transition of students with ASD from primary to post-primary school. A purposive sample was chosen for the research. A questionnaire survey was sent to graduates of the Post Graduate Certificate/Diploma in SEN (ASD) from St. Angela's College, Sligo, Ireland who were working in primary and post-primary schools. This sample of participants was identified as having experience and qualifications in the field.

Key findings included: strong oral communication between schools, the presence of transition programmes in many post-primary schools, the use of a wide variety of generic and ASD specific strategies in place in both primary and post-primary schools and a large number of personnel involved in the transition process. Analysis of findings and current literature enabled the researchers to propose a framework that the Department of Education and Skills, support agencies and schools may use to examine practice in order to enhance the transition programmes based on student's needs, the profile of the school and its community.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder associated with a Dyad of Impairments that is Social Interaction-Social Communication deficits and Restricted and Repetitive Behaviours (Ousley & Cermak, 2013). Difficulties with Social Interaction/Social Communication can be evident in difficulties communicating with others in social contexts, non-verbal communication and initiating and maintaining social relationships. The Impairment of Restricted and Repetitive Behaviours may be characterised by stereotypical behaviour, need for routine, intense special interests and sensory issues (American Psychiatric Association (APA), 2013).

In Ireland, Government Acts, the Report of the Task Force on Autism (Department of Education and Science, 2001), litigation, and circulars provide evidence that the Department of Education and Skills (DES) has moved towards a policy of inclusion for students with special educational needs (SEN) and, specifically, students with ASD (Parsons, Guldberg, MacLeod, Jones, Prunty, & Balfe, 2009). This has led to an increasing number of students with ASD accessing mainstream education, including students accessing resource support and specialised ASD classes (National Council for Special Education (NCSE), 2010, 2013). To illustrate this change, there has been a dramatic growth in ASD classes in the post-primary sector from 36 in 2008 to 119 in 2013 (NCSE, 2013). These developments have challenged schools on a number of fronts in particular the transition of students with ASD from primary to post-primary school.

Research evidence indicates that the transition from primary to post-primary school is a critical milestone in the lives of all children (Sirsch, 2003; Hughes, Banks & Terras, 2013; Barnes-Holmes, Scanlon, Desmond, Shevlin & Vahey, 2013). The changes that occur physically, mentally and emotionally during adolescence have an impact on a young person's ability to adapt to and embrace the momentous step to post-primary school (O' Halloran, 2008). Hargreaves et al., (1996, cited in O' Brien, 2003) identified the simultaneous occurrence of a triple transition: the move from one school to another, from one peer group to new peer groupings and the important succession of childhood into adolescence. Lerner (2006) has found that transition from primary to post-primary school is especially hard for teenagers with learning difficulties and related disorders. Maras and Aveling (2006) propose that young people with ASD may find transition particularly difficult since adapting to change or unusual situations are a particular feature of ASD.

Understanding the Dyad of Impairments sheds light on the specific difficulties faced by students with ASD in transition. The transition to post-primary presents the student with ASD with a large number of new relationships with whom (s)he has to interact appropriately. Potentially, the student can meet up to nine or ten teachers a day (Dann, 2011; Steady & Roberts, 2013). Linked to the Impairment of Social Interaction/Social Communication, the student may become separate from the peer group and be misunderstood by teachers (Humphrey and Lewis, 2008). Related to the Impairment of Restricted and Repetitive Behaviours, students may display stereotypical behaviour and intense special interests (Boucher, 2009). While these behaviours may have been accommodated in a smaller primary school, they may increase due to the anxiety of the move and may mark the student out as different in their peer group (Stobart, 2012). The transition itself is a break in the familiar routine of primary school which may lead to heightened anxiety in anticipation of the change in routine (Steady & Roberts, 2013). Sensory issues may also impact on transition. The post-primary school is a complex environment. Movement between classes, in common areas and

in practical classes may be overwhelming for the student with ASD at first, without support (McGillicuddy & O' Donnell, 2013).

In general, students with ASD are at greater risk of a negative transition experience in comparison with their peers (Hannah and Topping, 2013). As a result of these difficulties, it is extremely important to successfully manage their transition between primary and post-primary school. How students adapt at this time of transition has implications throughout the rest of their time in post-primary school and into adulthood (West, Sweeting & Young, 2010). Support is needed in three particular areas in order to facilitate successful transition of students with ASD: preparation, a programme of transition activities, and relationships (Hannah & Topping, 2013).

**RESEARCH METHODOLOGY:**
The purpose of this research was to investigate best practice in relation to the planning, process and strategies that support the transition of students with ASD from primary to post-primary school. A purposive sample (n=52) was chosen for this research. These were graduates of the Post Graduate Certificate/Diploma in SEN (ASD) from St. Angela's College, Sligo, who were working in primary and post-primary schools throughout Ireland. This sample of participants was identified as having experience and qualifications in the field. An email directed the potential participants to a website (www.surveymonkey.com) at which the survey questionnaire was located. This instrument was chosen as it has been demonstrated to reduce cost and time in the gathering and processing of data. It enabled the researchers to access a nationwide population under the cover of anonymity (Cohen et al., 2011). The response rate was 57% (n=30) which was very favourable given that the response rate for internet surveys is typically lower than paper based survey (Reips, 2002). Quantitative data was analysed using SPSS (IBM Cork, 2011). Qualitative data was thematically analysed. Key themes were identified on the basis of a repeated pattern across the data and relevance to the study (Braun and Clarke, 2006).

**FINDINGS**
63% (n=19) of respondents taught in primary schools and 37% (n=11) taught in post-primary schools. 77% (n=23) had an ASD class in their school and 70% (n=21) had taught more than 12 students with ASD. 90% (n=27) of these teachers were currently teaching students with ASD and 73% (n=22) had supported students with ASD in transition from primary to post-primary school. Respondents were in agreement that difficulties relating to autism affected transition between primary and post-primary school. 90% (n=27) of respondents indicated that sensory difficulties and more than 80% (n=24) agreed that social communication skills and challenging behaviour were important factors in the process. The research found a range of challenges facing students with ASD in transition (Figure 1).

**Challenges facing Students with ASD in Transition**
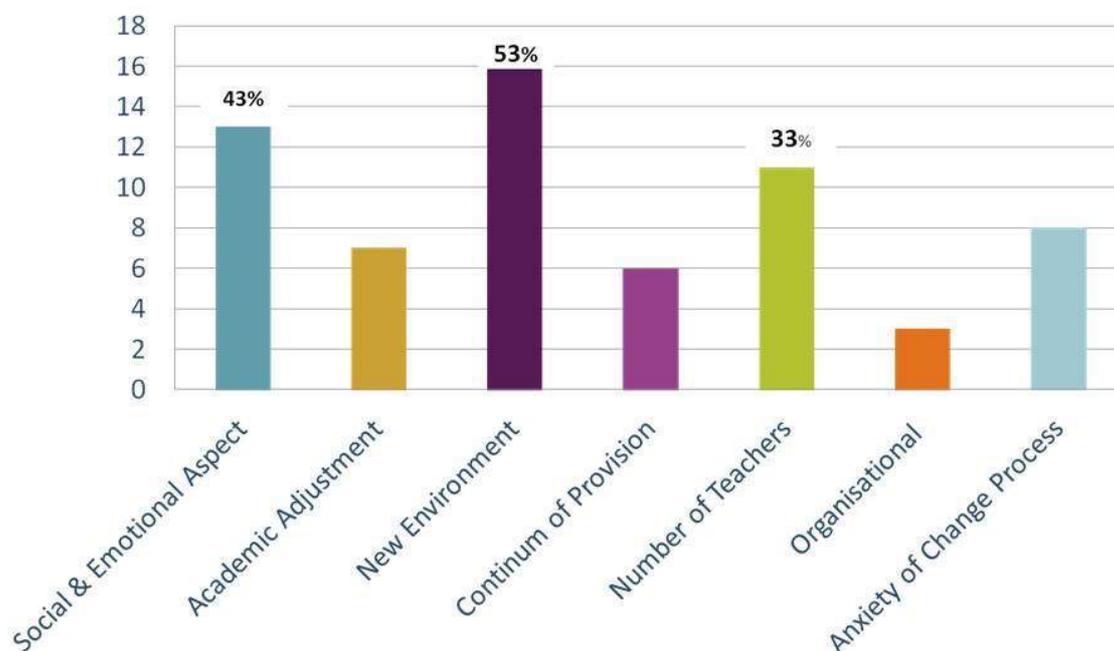
*Figure 1:* Challenges facing students with ASD in Transition

Three areas were identified as particular challenges. 53% (n=16) of the respondents indicated that the new environment was one of the greatest difficulties. 43% (n=13) of respondents indicated that students with ASD are challenged by the social and emotional aspect of transition. 33% (n=10) of the respondents felt that the number of teachers that the student with ASD encountered in the post-primary school was a significant factor in the transition process. Findings were analysed and presented under the themes of preparation, a programme of transition activities, and relationships (Hannah and Topping, 2013).

**Preparation**
The literature indicates that preparation can be a key to successful transition (Hannah and Topping, 2013). 87% (n=26) of the respondents in this study agreed that the opinion of the student with ASD should be sought during the preparation and transition period. 97% (n=28) agreed that there needs to be a close liaison and communication between the teachers. It emerged that schools use a variety of means of passing on information. 90% (n=27) passed on information through formal meetings, 73% (n=22) through oral means and 66% (n=20) of respondents passed information through parents. 74% (n=22) felt that the IEP should transition with the students with ASD. Reasons provided by respondents included that the IEP provides crucial and insightful information about the student that has been gathered over their primary school years. However, 20% (n=6) of the respondents were unsure about the transfer of the IEP. Respondents felt that by transferring the IEP schools may be working

towards targets that may no longer be appropriate and that it may slow the development of relationships as the profiling and assessment phase may be delayed.

**A Programme of Transition Activities**

Stobart (2013) suggests that transition programmes are important and have a significantly positive impact on a students' ability to settle in and adjust to post-primary school. Transition programmes can be commercially produced or an individualised menu of strategies designed to meet specific needs. In this research 37% (n=7) of primary teachers were using transition programmes in comparison with 63% (n=7) of post-primary teachers. More than 70% (n= 21) of primary and post-primary schools used social stories with approximately two thirds of both sectors using visual supports. Visiting the post-primary school was an established practice at primary level (74%, n=14) and all (n=11) post-primary schools visited their primary feeder schools. Strategies that were most commonly used in the post-primary sector were providing a map of the school (91% n=10), colour coded timetables (82%, n=9), and inductions day/s (82% (n=9) (Figure 2).

Identified challenges for students with ASD in transition are difficulties with social and communication skills, cited by 83% (n=25) of the respondents. Strategies utilised to support socialisation and formation of relationships included buddy systems (55%, n=6) and lunch time activities (64%, n=7) in post-primary schools. This contrasted with primary schools where 21% (n=4) used buddy systems and only one school used lunch time activities. Circle of Friends (27%, n=3) and video priming (36%, n=4) were the strategies used least in the post-primary sector concurring with results from the primary sector with 11% (n=2) using Circle of Friends and only one school using video priming.
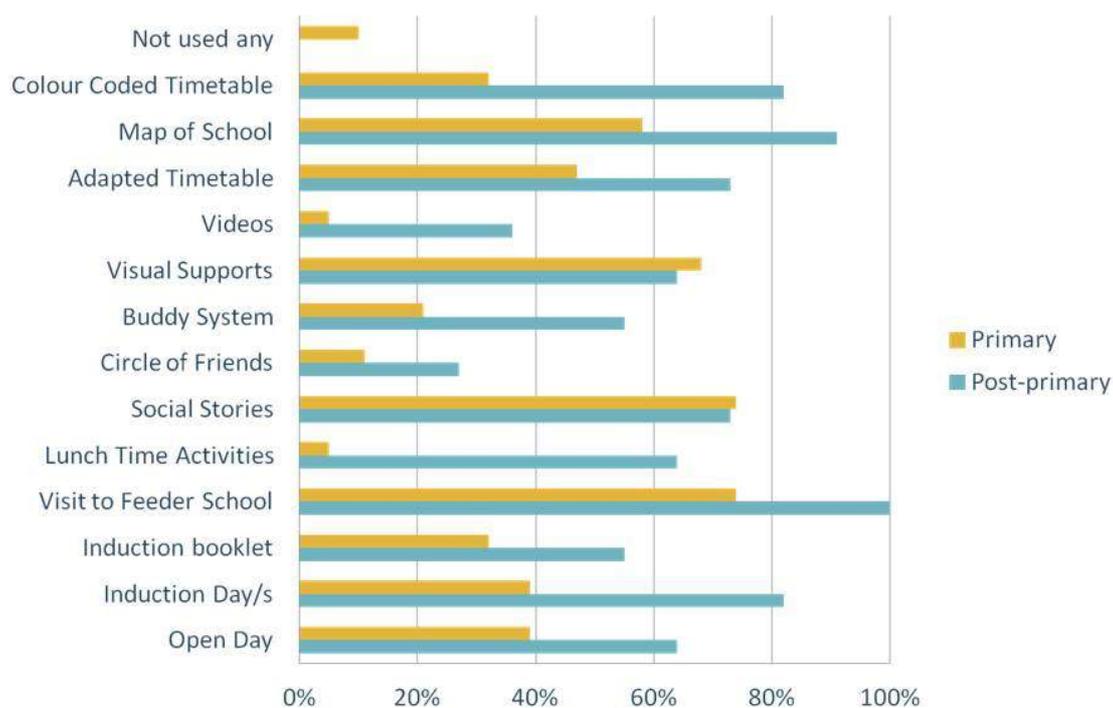


**Figure 2:** Transition Activities and Strategies

**Relationships**

Preparation for transition and a programme of transition activities and strategies require working relationships between all involved. The importance of these relationships can be recognised by schools by the formation of transition teams. Three schools (16%, n=6) at primary level had a transition team in their school while 55% (n=6) of post-primary schools had a transition team. However, it is possible that schools are successfully using a team approach without formally naming it, '*While we don't have a transition team or have it included in our policies we put a lot of effort into the process: ...link with multi-disciplinary team... meet with parents and student prior to transition, visit to the primary school and link with Principal, Resource teacher, Class teacher, SNA*' (Post-primary Teacher).

90% (n=27) agreed that the relationship between the student with ASD and a key staff member is crucial for successful transition. At primary level, it was the class teacher, (47%, n=9) followed by the SEN teacher (42%, n=8) and the principal (37%, n=7) who provided the support for transition. At post-primary level, this was provided by the SNA (63%, n=7), the ASD class teacher (54%, n=6) and the SEN teacher (45%, n=5).

The importance of relationships between and within schools was recognised by respondents, '*I think the more communication between the primary and post-primary the better. A good relationship between the resource teacher primary and the resource teacher in the secondary is very helpful*' (Primary Teacher).

In terms of building relationships, 90% (n=27) of the respondents indicated that communication with parents is necessary. During transition, schools engage with a number of different outside agencies. 42% (n=14) of schools were supported by the National Education Psychological Service (NEPS) and 45% (n=15) by their Special Education Needs Organiser (SENO). Some teachers identified the value of the outside agencies involved, '*Input from ASD services with the post primary school is very beneficial*' (Post-primary Teacher). Another identified the need for more support from these services, '*This area is very underdeveloped in our school with little guidance from outside supports. I feel there should be more input from professionals to help the teacher ensure that transitions are made with minimum distress to the child*' (Primary Teacher).

**DISCUSSION**

This research reflects the literature which states that students with ASD have specific difficulties which impact on the transition between primary and post-primary school (Dann 2011; Stobart, 2013; Steady and Roberts, 2013). Sensory issues were highlighted by this research as a significant factor impacting on transition. This reflects the inclusion of sensory issues in the revised diagnostic criteria Diagnostic Statistical Manual V (APA, 2013). This is a key area for consideration when planning for transition (Stobart, 2013)

Results from this research illustrate that schools recognised the importance of preparation for successful transition. Literature suggests that preparation for transition for students with ASD begins up to two years in advance of transition in order to address the challenges for students with ASD (Barnes-Holmes et al., 2013; Stobart, 2013). This preparation for transition needs to be a supportive and a collaborative process between the students, home, schools and outside agencies (Dann, 2011). This research showed strong evidence of a reliance on oral communication and, while valuable, the importance of the transfer of documents has been highlighted (NCCA, 2014). While a fifth of respondents were unsure about transferring the IEP between schools, literature suggests that IEPs are significant in the transition process because they facilitate a continuum of support (Barnes-Holmes et al., 2013).

This research outlined a wide variety of activities within a transition programme used in schools to address difficulties associated with ASD. There was widespread use of social stories and visual supports such as colour coded timetables and school maps. This concurs with literature (Frith, 2003; Dann, 2011) advocating activities and resources related to the structure and organisation of the school. The value of structured lunch time activities as part of a transition programme was highlighted by Stobart (2013) but this was used by more post-primary schools than primary. While the importance of activities such as Circle of Friends to support transition was highlighted in literature (Jendal Snape, 2005; Stobart, 2013), this was not used widely by schools in this research. The use of video priming as advocated by Sterling-Turner & Jordan (2007) could be extended by both sectors to prepare students for changing environments and routines (Ennis and Manns, 2004; Bowen and Plimley, 2011).

The importance of relationships in transition is emphasised in literature (Thorpe, 2003; Stobart, 2013). According to Dann, (2011) the sharing of information across staff groups, with pupils knowing key members of staff in order to build relationships with them is a key feature of positive transition experiences.This research demonstrated that schools recognise the importance of sharing information across sectors and with outside agencies. There were a number of individuals in each sector who supported the student in transition although these may not have formally recognised themselves as a transition team. The transition team is highlighted in literature as crucial in supporting the student (Hughes, Banks & Terras, 2011; Barnes-Holmes et al., 2013) so the formalising of systems in schools may need to be considered. According to Barnes-Holmes et al., (2013) it is also important that a key individual is designated to support the student in transition. In the current reframing of the role of the SNA (DES, 2014), it was interesting to note that 63% (n=7) of teachers in post-primary schools named the SNA as the support person to the students with ASD in the transition process. Whereas the presence of the SNA had been welcomed (Humphrey and Lewis, 2008), others have stated that this support emphasises the difference between students with ASD and their peers (Rutherford, 2012). This may be particularly significant at the time of transition. In light of the changing role of SNAs in post-primary schools reflection is needed on the most appropriate personnel to fulfil the role of the key individual for the student with ASD. In line with recommendations from literature (Dann, 2011; Hannah and Topping, 2013; Steady and Roberts, 2013), this research outlined the role of parents as crucial in supporting the student with ASD in transition from primary to post-primary school.

The challenges posed by ASD have an impact on the student with ASD in transition from primary to post-primary school. It is important that these difficulties are recognised and ameliorated so that negative long term effects are avoided. Preparation, a programme of transition activities, and the building of relationships between all involved in the transition process contribute to its success. This current study found that schools were appropriately engaged with the transition process but have potential to further incorporate evidence based practice in their work.


## RECOMMENDATIONS

We are proposing a framework that Departments of Education, support agencies and schools may use to examine and support practice during the transition process for all students including those with ASD (Figure 3). This is aligned to recommendations in literature for the transition of students with ASD from primary to post-primary (Dann, 2011; Hannah and

Topping, 2013). This framework recommends structuring the transition programme over a three year time period starting two years before the transition.
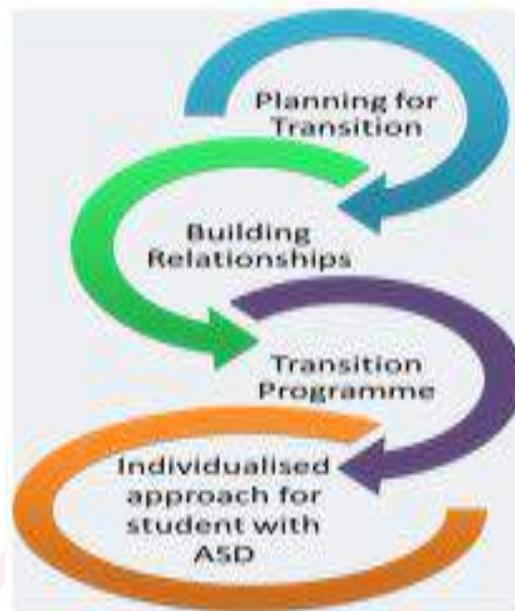


**Figure 3:** A Framework for Transition for Students with ASD in transition from primary to post-primary school

In the Planning for Transition stage, the primary school should update the IEP focussing on the skills that will be necessary over the transition period. Primary and post–primary schools need to devise oral and written communication systems which commence in the years before transition and which continue throughout the transition period. It is important the IEP transfers with the student and that IEP targets are reviewed, updated and implemented as appropriate in the new setting.

The importance of Building Relationships needs to be recognised through the creation of a transition team in both schools. A key member of staff who is part of the transition team should be identified. This person will collaborate and communicate with parents on behalf of the transition team. They will have responsibility for liaising with staff within and between schools. This person will act as a point of contact for the student with ASD. Through the development of a supportive relationship this individual will ease the transition of the student with ASD.

Transition Programmes are important and have a significantly positive impact on a students' ability to settle in and adjust to post-primary school. Many of the aspects of a generic transition programme will support the student with ASD and, for the purposes of inclusion, should be part of any plan for the student with ASD.

Each student with ASD will need an Individualised Approach, which is based on assessment and identification of individual strengths and challenges. The use of evidenced based practices is necessary to address the specific needs of the individual with ASD in transition.

The following limitations should be considered. The findings as presented are restricted to the purposive sample used and may not be generalisable. A wider sample may be necessary to confirm these findings. The research, as described, is reflective of the Irish education system and there may be distinct characteristics and outcomes compared to the systems in other countries.

The aim of this research project was to investigate best practice in relation to the planning, process and strategies that support the transition of students with ASD from primary to post-primary school. Challenges experienced by students with ASD as they transition from primary to post-primary school were explored. There were many examples of good practice in schools as they supported students with ASD in transition. However, the transition process needs to be structured in a more formal and consistent manner. This research has implications for educational policy and practice in relation to the transition of students with ASD from primary to post-primary schools. Schools should be encouraged to plan for transition over a three year period and to use the framework presented as the basis for this process.

# References

American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders* (5th ed.) Arlington, VA: American Psychiatric Publishing.

Barnes-Holmes, Y., Scanlon, S., Desmond, D., Shevlin, M., & Vahey, N. (2013) A Study of Transition from Primary to Post-primary School for Pupils with Special Educational Needs. Trim: NCSE.

Boucher, J. (2009) *The Autistic Spectrum - Characteristics, Causes and Practical Issues.* London: Sage.

Bowen, M. & Plimley, L. (2011) Oh No Not Big School; Information and Ideas for Everyone Involved in Transition Planning with Autism Spectrum Disorders Moving to Secondary School. Cardiff: Welsh Assembly Government. Available from: http://www.awares.org/pkgs_files/librarydoc_905.pdf

Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology.* Vol. 3 No. 2, pp. 77-101.

Cohen, L., Manion, L. & Morrison, K. (2011) *Research Methods in Education (7th Edition)* Oxon: Routledge.

Dann, R. (2011) Secondary transition experiences for pupils with Autistic Spectrum Conditions (ASCs). *Educational Psychology in Practice* Vol. 27, No. 3, pp.293–312.

Department of Education & Science (2001) *Educational Provision and Support for Persons with Autistic Spectrum Disorders: the Report of the Task Force on Autism.* Dublin: The Stationary Office.

Department of Education & Skills (2014) *Circular 0030/2014 The Special Needs Assistant (SNA) scheme to support teachers in meeting the care needs of some children with special educational needs, arising from a disability.* Available from https://www.education.ie.

Ennis, D. & Manns, C. (2004) *Breaking down barriers to learning: practical strategies for achieving successful transition for students with autism and Asperger Syndrome.* Surrey: The National Autistic Society, Surrey County Council's Children's Service, Partnership with Parents, South East Region SEN Partnership.

Frith, U. (2003). *Autism: Explaining the enigma (2nd Edition).* Oxford: Blackwell Publishing.

Hannah, E. & Topping, K. (2013) Anxiety levels in students with autism spectrum disorder making the transition from primary to secondary school. *Education and Training in Autism and Developmental Disabilities*, Vol 47, No.2, pp.198-209.

Hargreaves, A., Earl, L, & Ryan, J. (1996) *Schooling for Change.* London: Falmer Press, cited in O' Brien, M. (2003) Girls and Transition to Second Level Schooling in Ireland: Moving On and Moving Out. *Gender and Education*, Vol. 15, No. 3, pp.249-267.

Hughes, L., Banks, P. & Terras, M. (2013) Secondary school transition for children with special educational needs: a literature review. *Support for Learning* Vol. 28, No.1, pp. 24-34.

Humphrey, N., & Lewis, S. (2008). "Make me normal": The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism,* Vol. 12, No.1, pp.23–46.

IBM Corp. (2012) *IBM SPSS Statistics for Windows, Version 21.0.* Armonk, NY: IBM Corp.

Jindal-Snape, D., Douglas, W., Topping, K., Kerr C. and Smith, *E.* (2005) Effective Education For Children With Autistic Spectrum Disorder: Perceptions Of Parents And Professionals. *The International Journal of Special Education* Vol 20, No.1, pp.77-87.

Lerner, J. & Kline, F. (2006) *Learning disabilities and related disorders: characteristics and teaching strategies (10th Ed).* London: Houghton Mifflin.

Maras, P. and Aveling, E. (2006) Students with Special Educational Needs: Transitions from Primary to Secondary School. *British Journal of Special Education*, Vol. 33, No.4, pp.196-203.

McGillicuddy, S. & O' Donnell, G. (2013) Teaching students with autism spectrum disorder in mainstream post-primary schools in the Republic of Ireland. *International Journal of Inclusive Education*. Available from http://dx.doi.org/10.1080/13603116.2013.764934.

National Council for Special Education. (2010) NCSE statistics on resource allocations. August 2010. Available from http://www.ncse.ie/uploads/1/NCSE_Statistics_Summary.pdf.

National Council for Special Education. (2013) NCSE 13/14 full list of special classes attached to mainstream schools. Available from http://www.ncse.ie/uploads/1/specialschoolsmainstreamschoolslist02122013.

National Council for Curriculum and Assessment (2014) *Transfer of pupil information from primary to post-primary: Report on consultation and materials for transfer.* Dublin: Liffey Press

Ousley, O. & Cermak, T. (2014) Autism Spectrum Disorder: Defining Dimensions and Subgroups. *Current Development Disorders Reports* Vol. 1, No. 20, pp.20-28.

Parsons, S., Guldberg, K., MacLeod, A., Jones, G., Prunty, A. & Balfe, T. (2009) *International Review of the Literature of Evidence of Best Practice Provision in the Education of Persons with Autistic Spectrum Disorders.* Trim: NCSE.

Reips, U.D. (2002) Internet-based psychological experimenting: five dos and don'ts. *Social Science Computer Review,* 20(3), pp.241-249.

Rutherford, G. (2012) In, out or somewhere in between? Disabled students' and teacher aides' experiences of school. *International Journal of Inclusive Education* Vol.16, No. 8, pp. 757–74.

Sirsch, U. (2003) The impending transition from primary to secondary school: challenge or threat? *International Journal of Behavioural Development* Vol. 27, No. 5 pp. 385-395.

Steady, A. & Roberts, R. (2013) *Moving on up - Supporting Transitions from primary to secondary school for pupils on the autism spectrum. Resource pack for parents and carers.* Available from http://www.leics.gov.uk/autism_transitions_parents_pack.pdf.

Sterling-Turner, H. & Jordan, S. (2007). Interventions addressing transition difficulties for individuals with autism. *Psychology in the Schools* Vol.44, No. 7, pp.681-690.

Stobart, A. (2012) *Transition toolkit: Helping you support a child through change.* Autism Education Trust. Available from http://www.autismeducationtrust.org.uk/resources/transition%20toolkit.aspx.

Thorpe, P. (2003) *Moving from Primary to Secondary School: supporting students with an autistic spectrum disorder.* London: National Autistic Society

West, P., Sweeting, H. & Young, R. (2010) Transition matters: pupils' experiences of the primary–secondary school transition in the west of Scotland and consequences for well-being and attainment. *Research Papers in Education*, Vol. 25, pp.21–50.

iafor

# Who am I? Omani English Language Teachers' Professional

*Identities* Fawziya Al Zadjali, Leeds Beckett University, United Kingdom

The European Conference on Education 2015
Official Conference Proceedings 2015

## Abstract

This article examines the concept of teacher professional identity within the context of a centralized and prescribed curriculum in Oman. Focus group interviews with English language teachers and semi-- structured interviews with authorities have been analysed to explore how teacher professional identity develops within such a context. The preliminary findings from this ongoing qualitative research reveal the importance of certain factors that contribute to the development of teacher professional identity, such as teacher beliefs, their social life, emotions and past experiences.

Keywords: teacher professional identity, curriculum, teacher education.
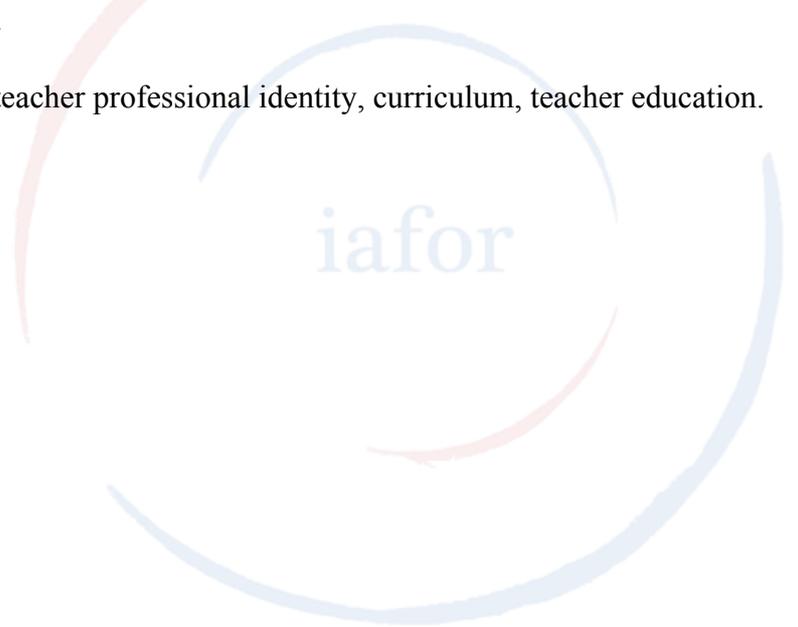
iafor

The International Academic
Forum www.iafor.org

**Introduction**

The concept of teacher professional identity has merged in literature since the last two decades and has been researched in various disciplines such as sociology, philosophy, anthropology, psychology and education. The researches done on teacher professional identity agree on similar characteristics that could contribute to reach a definition for teacher professional identity. It is seen as a concept that is dynamic and on-- going which develops over time across teachers career lives and is affected by both internal and external factors (Beijaard, Meijer, & Verloop, 2004; Beauchamp & Thomas, 2009). Research on teacher professional identity focused on more than one element of this concept. The most researched elements are its characteristics and the kind of influences that effect teacher professional identity.

Research shows that teachers personal and professional histories, their biographies, their pre-- service teacher training programmes, the school culture in which they work, the kind of leadership they have in schools and the interaction they have with their context, all of these influences play a role in shaping and reshaping teacher professional identity (Flores & Day, 2006; Beijaard, Verloop, & Vermunt, 2000; Korthagen, 2004). Thus, the external and internal influences on teacher professional identity seem to have been researched comprehensively in literature. The curriculum that teachers teach could be considered as one of the external influences that impact upon teacher professional identity.

In addition to the research carried out on the influences that effect teacher professional identity, some other research focused on the components or factors that indicate teacher professional identity. These components or factors are related to how teachers see themselves as teachers (self –image), self -- efficacy, self -- esteem, job satisfaction, motivation, future perspectives, task perception, beliefs and values, professional development, teaching and learning, occupational commitment and knowledge (Kelchtermans, 1993; Hong, 2010; Canrinus, Helms-- Lorenz, Beijaard, Buitink, & Hofman, 2011; Mockler 2011; Cheung 2008). This study locates itself within a theoretical framework that relate to the work on the identity theory and some other relevant theoretical concepts. The concepts of self and society in the identity theory by Mead (1934) includes the concept of roles and how individuals act according to the roles assigned to them in the society, such as the role of a mother, teacher, professor…etc. The discursive identity is based on dialogue and talk and how individuals are recognised by others and the affinity identity is about being part of a group that have distinctive experiences and practices in a shared culture by Gee (2000); Giddens (1991) concept of identity relates to being reflexive and the negotiation an individual has within their society and how this identity is affected by the interaction that occurs in a certain context and Erikson (1968) who points out that identity develops and changes across one's life. These concepts form the theoretical framework for this research as teacher professional identity is recognized by the role they undertake in the school culture and the society and how they and others see them as professionals. The extent to which this professional teacher self is affected by external factors such as the curriculum they teach forms

the focus for this study. Although the concept of teacher professional identity has been researched intensively, literature still lacks research that links this concept with the curriculum teachers teach. This research tries to fill in that gap and contribute to the field of research by adding to the little research carried out on the impact of the prescription of curriculum on teacher professional identity.

**Impact of prescribed curriculum on teacher professional identity**

The term curriculum is wide and involves all of the aims and objectives ought to be achieved, the principles, methodology and philosophy that underpin the curriculum, the content, the teaching methods and the assessment procedures that need to be implemented. As studying all of the curriculum elements is broad, this research confines itself to the content ought to be taught to the learners and to the teaching procedures that teachers use; this is referred to as curriculum in this research. The prescription of curriculum means that all of the above listed areas within the curriculum are decided on beforehand externally and is given to the teachers by authorities. The teachers within the prescribed curriculum context are required to implement the curriculum according to the instructions given to them by the policy makers. Based on the literature review, there has been much research on the impact of the prescription of curriculum on learners but less on teachers.

The research findings on the impact of curriculum prescription on teachers vary; where some teachers find it beneficial, others think that it controls and limits their thinking. Ball and Cohen, (1996) state that as prescribed curriculum is appreciated for being able to support and shape student learning, this type of curriculum can de--professionalise teachers because of the amount of control over their work that doesn't leave much space for decision making from the teachers side. The qualitative study carried out by Shkedi, (2009) on teacher implementation of an externally written and prescribed curriculum in the classroom showed that teachers did not follow the prescription of curriculum and created their own tasks for their learners. The teachers in this study saw the prescription of curriculum as a source that stems, stimulates and inspires their ideas rather than something to follow and stick to. Another study that focused on teacher learning from scripted instructions or prescribed curriculum done by Reeves, (2010). The findings from this ethnographic and descriptive study identified the benefits the two teachers involved got from this type of curriculum. The teachers learned about language and language learning as there was one-- sided dialogue with the teachers book. This means that the scripted instruction has added to the teachers' subject and pedagogical knowledge. Although the findings from this study seem positive, Reeves, (2010) claims convincingly that within the sociocultural perspective, scripted instruction does not support teacher development as it controls teacher talk and thinking because it follows the behaviorism theory. In line with the previous studies, a study conducted by Kauffman, (2005) on the prescription of curriculum took place in the USA and examined how curriculum control can affect the support teachers receive. The findings from this large scale quantitative study revealed that on average teachers were satisfied with the support they got from the prescribed curriculum, although the level of support differed according to school and teacher comfort when teaching

language arts. This study also showed that while the teachers who appreciated the prescribed curriculum saw it beneficial for their learners, yet they thought that prescription of curriculum affected their creativity and freedom by taking it away from them. The other teachers in the same study thought that they could still be creative even with a highly prescribed curriculum. The new teachers in this study seemed to be satisfied with the outsider control of curriculum content and methodology. This explains that prescribed curriculum is more suitable for new teachers as they still lack confidence and teaching experience unlike the more experienced teachers who are supposed to be more confident and can make use of their experience while teaching.

In relation to how teacher experience, their beliefs and knowledge can influence their teaching, Blignaut, (2008) carried out some research to explore the way teachers understand, interpret and apply a new curriculum that is highly prescribed in its policy and instructions. The findings of this research support the findings from previous research that teachers practice is influenced by their beliefs and prior experiences. The teachers in this research did not teach the new curriculum as it was expected of them, rather they modified it and implemented the teacher centered approach and summative assessment which they feel comfortable with. This is because teachers adhered to their beliefs and prior experiences; something that is referred to as a core self in the identity theory according to Mead, (1934). The core identity or the " Me" is strong and does not allow for adaptation to new contexts and in the teachers case for example they don't accept educational reforms easily as the picture of who a teacher is, has grown up with them since their childhood; this is called the apprenticeship of observation (Lortie, 1975). However, according to the identity theory the self has another identity called the "I". According to Mead, (1934) the "I" is the active self that acts creatively to the "Me". This supports the fact that teacher professional identity is influenced by the internal and external factors that they face in different contexts and explains why some teachers respond positively to educational change and others don't. Whether or not the implementation of the prescribed curriculum supports the development of teacher identity forms the focus of this research.

**Research aims**

This research aims to explore how teacher professional identity develops within a context of prescribed curriculum. Thus, it tries to answer the following main and specific research questions

How does teachers' professional identity develop within the context of a prescribed curriculum?
- How has the English language teachers' professional identity developed?
- How is the development of teachers' professional identity influenced by the prescribed curriculum?
- What are the factors that impact upon or influence the development of the professional identity of teachers'?

- What is the policy context for teacher professional identity in the Omani curriculum?
- What are the implications for practice and policy development?

This research targets the Omani English language teaching context.

## Research context

This research takes place in Muscat the Omani capital area. It involves a number of male and female English language school teachers from a range of experiences. It also involves authorities from the departments of curriculum, supervision and training. This qualitative explanatory research adopts the socio-- cultural approach to its theory as it is about the role of context and culture in shaping teachers  professional identity. The data for this research  at this stage is collected from only two  focus group interviews with teachers whose teaching experiences ranges  between 5-- 15 years and some semi-- structured interviews with the authorities.

The analysis of the focus groups has been based on the four factors indicated for teacher professional identity bearing in mind the theoretical concepts and the empirical studies that this research is based on. These are teacher beliefs and values about themselves as teachers and about teaching and learning, teacher knowledge and skills, teacher professional commitment and teacher professional autonomy. Each of these factors will be discussed separately in the next section.

## Discussion and findings

The preliminary findings from this research are grouped according to the four factors indicated for teacher professional identity.

### 1. Teacher beliefs and values

**Teachers (Self-- image)**

This section talks about the image that teachers hold for themselves as teachers; in other words, they answer the "who am I?" question. This section also considers the role the prescribed curriculum played in shaping their teacher image. When asked about the type of teacher they think they are, the responses of the target teachers emerged from their personal, social and pre-- service experiences. The male teachers described themselves as a person who "cares", "encourages" and "communicates" with their learners.

"actually I am the type of teacher that Communicate with a student as a father, as a brother, a big brother advisor at the same time".

Those teachers think the reasons for this image go back to their social life experiences, emotions, pre-- service experiences and to some cultural reasons as well as their personality and beliefs. This shows the influence of the environment and social context on the beliefs of these teachers about their self-- image and how they

see themselves. This matches Mead, (1934) ideas on the social aspects of the self or the identity. The caring, encouraging and communicating image has been affected by those teachers social life such as when they were school children and their siblings. Thus the teacher self-- image seems to be emotionally and socially driven. Hargreaves and Goodson, (1996) in Hargreaves, (2000) say that teachers are emotionally driven. While the male teachers were emotionally and socially driven, some of the female teachers showed a more practical and profession related image of the self. The female teachers saw themselves as someone who loves the teaching profession and is interested in doing it as well as being a creative person. These images of the female teachers seem to be very practical and relevant to the job of teaching yet emotional. When asked about the reasons behind having this image, the result provides evidence that teacher self is very much affected by the social context they experienced. The female teachers said that their love for the teaching job goes back to their childhood experiences when they were children and played the role of the teacher then. Also as being the first child at home seems to match with the nature of being a teacher. Also the teachers mentioned that their personality of helping others and wanting to know about new things and exploring has helped shape their self-- image. One of the female teachers described her-- self as being active and creative and her rationale for this was based on her personality. Also, all of the teachers interviewed believed that they are more experienced, confident, possess more ideas and knowledge about curriculum and school environment and manage their classes well unlike when they first started teaching. Some of the female teachers saw themselves as being more motherly than when they first started teaching. They say that they are now more relaxed and friendly with their learners and that they can accept their mistakes unlike before. Thus, the male and female teachers self-- image seems to be socially and emotionally bound and is effected by the context in which they grew up, their family experiences and the school context in which they teach. These finding is keeping with the previous research findings in this matter (Flores & Day, 2006; Beijaard, Verloop, & Vermunt, 2000; Korthagen, 2004).

**Role of the prescribed curriculum in shaping the teachers' self-- image**

The extent to which the prescribed curriculum played a role in giving teachers that self-- image differs between the teachers according to their gender. While the male teachers did not see any role of the curriculum in shaping their teacher self-- image and making them who they are today apart from giving them some ideas, knowledge and skills, the female teachers thought differently. The female teachers say that curriculum did play a role in shaping their teacher self and making them who they are today. For example, it gave them some ideas to be creative, they learned from the variety of the curriculum tasks and the lack of certain issues in the curriculum has helped them to adapt and become creative in order to fill in the gaps in curriculum such as lack of writing tasks. Thus, it seems that the role played by the prescribed curriculum in shaping teachers self-- image exist, but it does not exceed the level of adding to their knowledge and skills with teaching methods and ideas. This echoes previous studies findings in this matter such as Reeves, (2010).

**Teachers' beliefs about the prescribed curriculum**

Teachers believe that the prescribed curriculum is a good guide for them especially in their first years of teaching. It gives them some ideas about teaching methods and refreshes their minds about those methods. They also said that they learn new vocabulary and new knowledge about language when they teach higher grades and change the level they used to teach. Teachers also think that they learned from their adaptation of the lessons. Only one teacher mentioned that they feel confident when they teach this type of curriculum because it has been written by experts and they feel that they are doing something right

" I go to class I feel look at more confident   I know what to do  I am following something right". Another teacher though that they don't need a prescribed curriculum because "You know your students, their  level, their personalities,  so  when you know these things  no need to use and follow teachers book"

 Thus, it seems that the teachers feel comfortable and secured using the prescribed curriculum as it is written externally by authorities. It also seems that the prescribed curriculum equips teachers with subject and pedagogic knowledge, something that the teachers consider as a source for their ideas and knowledge as previous research has shown (Shkedi,  2009; Reeves, 2010). However, this might indicate that teachers became passive and dependent on the prescribed curriculum. They did not mention the need for becoming knowledge creator as they are more interested in adaptation rather than creation of knowledge. This is inevitable as the knowledge is given in such curriculum, so teachers do not dare to think about creation.

## 2.  Teacher knowledge

Teacher knowledge in this research is based on the knowledge that Shulman, (1987) stated as essential. These are content knowledge which is about the subject teachers teach, pedagogical content knowledge which refers to knowledge about teaching methods, knowledge about  learner development, knowledge about schooling system and the knowledge that relate to the values, principles and aims of the educational system. The two types of teacher knowledge this research is concerned about are the subject knowledge and the pedagogical content knowledge, as they coincide with the research focus and definition of curriculum. This research is only concerned about what ought to be taught to leaners and how. Thus, the other types of teacher knowledge will not be referred to in this research. Teacher knowledge is inferred from the focus group interviews.

Content knowledge about subject was hard to infer as the teachers rarely referred to this in the focus group interviews. They mentioned grammar items such as "present continuous, past simple, argumentative language", however, that does not indicate whether teachers have a professional level of this knowledge or not. Only one teacher referred to the grammar translation method and their description of it does not seem to match the theory. The teachers seemed to be clear about the pedagogical content knowledge as they referred to their teaching methods that relate to learners being active, constructing knowledge and learning by doing, such

as working in group to construct their own text, questions or answers, reading in focus groups and doing debates Generally, the teachers in this research saw themselves as subject experts; this matches the findings reached by Beijaard, Verloop, & Vermunt, (2000).

### 3. Teacher autonomy

Teacher professional autonomy refers to teachers' ability to make proper decisions regarding the teaching and learning process that they are part of. In this research teacher autonomy is at the level of individual autonomy, which refers to the teachers' ability to take decisions inside their classroom and school context. Teacher autonomy is inferred from the teachers explanations of the lessons they taught recently and the kind of decisions they made when adapting elements of it and why. All of the interviewed teachers said that they adapted their lessons from the teachers' book and that they did not follow the instructions given to them in the teachers' book exactly. This goes in line with previous research findings such as Shkedi, (2009). Also this is an indication of teachers' ability to adapt and take decisions regarding how to deliver their lessons. The question that imposes itself here is what kind of decisions did these teachers made and why. This is explained in the table below,

| Target taught | Reasons for adaptation |
|---|---|
| Language focus: use of so, therefore and consecutive and the use of because | "No time in class" <br> "I asked them to do it at home" |
| Reading a story | "I felt that I should use something that my students can manage" |
| Reading | "I prepared some questions that are not included in curriculum to make sure they read and understood the text" |
| Grammar present continuous | "It's an old method about the grammar rule I think it works with my students" |
| It was in curriculum read and match <br> I changed it to speaking and writing | "coz they don't have writing in grade 7 at all and in each lesson I give them writing" |
| Argument camping project in Jabal Akhdar ( a mountain in Oman) They learned argumentative techniques , they gave their views | "I made a debate for and against" <br> "So I was discussing with them from Muslim point of view so girls outside sleeping in a tent" |
| Famous people | "I gave them variety and chance to give more sentences I don't allow them time as it said in curriculum to search on the internet and write coz they might just copy". |

Thus, it is clear from the table above that teacher adaptation to the curriculum instructions was based on their knowledge of their learners needs and on their assessment of the teaching situations. Although not all of the adaptations were

managed properly as some of them changed the whole focus of the lesson and the other decisions were inappropriate such as doing it at home, yet the teachers proved to be autonomous to some extent with the prescribed curriculum and managed to adapt it. These findings support the fact that teachers practice and decisions in the classroom is guided by their professional identity; something that reflects their beliefs, knowledge, experiences and epistemology (Blignaut, 2008).

Regarding the authorities views on teacher autonomy, there seems to be an agreement amongst authorities that teachers become more autonomous with experience. However, their opinions differ regarding the level of autonomy that's available for teachers. For example, some believe that autonomy is limited and that teachers cannot exceed boarders

"we are not against it but of course there are some boarders which they cannot exceed which they need to stick to but at the same time we encourage teachers to be innovative to be autonomy and to think creatively". This means that teachers are only allowed to add to what already exit in the curriculum in their free time or at the school activity level. "Autonomy is still there every now and then within the school year or a semester".

Also, some other authorities think that curriculum is being neutral about autonomy; it neither says it explicitly nor denies it. Another authority says that the curriculum does not support teachers to be autonomous; it doesn't tell them how to adapt their lessons.

"It doesn't say or promote autonomy doesn't give strategies for how to become creative and autonomous teachers".

Thus, autonomy seems to be a loose concept that authorities quietly call for.

## 4. Teacher commitment

Teacher commitment has been discussed in relation to teacher's role using the prescribed curriculum and the key responsibilities of a teacher.

Teachers' role using the prescribed curriculum varies between authorities and teachers. While authorities think that new teachers are required to stick to the curriculum and follow it and that adaptation is only allowed when they get more experienced, teachers think that they should adapt the curriculum in order to meet the needs of their learners regardless their experience. Although teachers said that they benefited from the prescribed curriculum in their early years of teaching and that it was like a guide for them, it seems that teachers do not follow the prescribed curriculum as it is.

Authorities and teachers agree that learners come first and that they should work hard to help them learn better and improve their levels. Teacher professional development does not seem to appear as a key role or responsibility of a teacher

neither for the teachers nor authorities. Surprisingly only a few of the authorities and teachers mentioned the development of teacher knowledge and skills as their responsibility. Only one authority mentioned teacher beliefs and said that teachers need to believe in themselves and work according to the ethical act.

## Implications for policy and recommendations practice

Based on the initial findings of this research, teacher professional identity development seems to be effected by their social and emotional backgrounds and experiences. This goes in line with previous research findings regarding the characteristics of teacher identity. It matches it in terms of being dynamic, on-- going and develops with time as well as being affected by both internal and external factors (Beijaard, Meijer, & Verloop, 2004; Beauchamp & Thomas, 2009). Teacher professional identity also seems to guide their practice. The prescription of curriculum does not seem to have played a big role in shaping teacher professional identity apart from equipping them with some professional knowledge and skills. This would become clearer as this research goes further. The image that teachers hold for themselves seems to be socially and emotionally based. This is not surprising as the interaction one has with their context shapes who they are (Flores & Day, 2006). Although the teachers did not show a big favour of the prescribed curriculum in the interviews, all of their actions and the lessons they taught prove that they adhere to it and that they do not want to leave it. This means that they do not see themselves as a source of change in the educational system. This is simply because the prescribed curriculum is there for them to guide their practice and acts as a safe guard for them. Teachers did not see themselves as knowledge producers, rather they located their role in the adaptation part and saw themselves as adapters only. Thus, it is crucial to work on the importance of teachers becoming aware of and  know their professional identity. For this to happen, pre-- service teacher education needs to explicitly cater for this concept and have courses that focus on the concept teacher professional identity through teacher education programmes. Also, curriculum documents and policy needs to bring up the concept of teacher professional identity and promote it so that teachers know who they are and think about the decisions they take inside their classroom. In-- service teacher education programmes need to consider teacher professional identity and talk about it and help teachers deal with the curriculum in order to help them make use of their knowledge, skills and experience.

## References

Ball, D. L., & Cohen, D. K. (1996). Reform by the Book: What Is or Might Be the Role of    Curriculum Materials in Teacher Learning and Instructional Reform? *Educational Researcher*, *25*(9), 6–14. http://doi.org/10.3102/0013189x025009006

Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, *39*(2), 175–189. http://doi.org/10.1080/03057640902902252

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, *20*(2), 107–128. http://doi.org/10.1016/j.tate.2003.07.001

Beijaard, D., Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions professional identity: an exploratory study from a personal knowledge perspective. *Teaching and Teacher Education*, *16*(7), 749–764. http://doi.org/10.1016/s0742-- 051x(00)00023-- 8

Blignaut, S. (2008). Teachers' sense-- making and enactment of curriculum policy. *Journal of Education*.

Canrinus, E. T., Helms--    Lorenz, M., Beijaard, D., Buitink, J., & Hofman, A. Profiling teachers' sense of professional identity. *Educational Studies*, *37*(5), 593–608. http://doi.org/10.1080/03055698.2010.539857

Cheung, H. Y. (2008). Measuring the professional identity of Hong Kong teachers. *Journal of In-- Service Education*, *34*(3), 375–390. http://doi.org/10.1080/13674580802003060

Erikson, E. H. (1968). *Identity, youth, and crisis* (1st ed.). New York: W. W. Norton, [1968].

Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new identities: A multi-- perspective study. *Teaching and Teacher Education*, *22*(2), 219–232. http://doi.org/10.1016/j.tate.2005.09.002

Gee, J. P. (2000). Identity as an Analytic Lens for Research in Education. *Review Research in Education*, *25*. http://doi.org/10.2307/1167322

Giddens, A. (1991). *Modernity and self-- identity: self and society in the late modern age* (1st ed.). United States: Stanford University Press.

Hargreaves, A. (2000) Four Ages of Professionalism and Professional *Teachers and Teaching*, 6 (2). 151-- 182. http://doi.org/10.1080/713698714

Hong, J. Y. (2010). Pre-- service and beginning teachers' professional identity and relation to dropping out of the profession. *Teaching and Teacher Education*, *26*(8), 1530–1543. http://doi.org/10.1016/j.tate.2010.06.003

Izadinia, M. (2012). A review of research on student teachers' professional identity. *British Educational Research Journal*, 1–20. http://doi.org/10.1080/01411926.2012.679614

Kauffman, D. (2005). The effects of curriculum prescription on second-- year elementary teachers' sense of support from language arts curriculum materials. NGT Working paper. Cambridge, MA: Project on the Next Generation of Teachers. Retrieved 15 May 2013, from http://www.gse.harvard.edu/ngt

Kelchtermans, G. (1993). Getting the story, understanding the lives: From career stories to teachers' professional development. *Teaching and Teacher Education*, *9*(5-- 6), 443–456. http://doi.org/10.1016/0742--

051x(93)90029-- g Korthagen, F. A. J. (2004). In search of the essence of a good more holistic approach in teacher education. *Teaching and Teacher Education*, *20*(1), 77–97. http://doi.org/10.1016/j.tate.2003.10.002

Lortie, D. C. (1975). *Schoolteacher: a sociological study*. Chicago: Chicago, University of Chicago Press [1975].

Mead, G. H. (1934). *Mind, Self, & Society*. Chicago: University Of Chicago

Press. Mockler, N. (2011). Beyond 'what works': understanding teacher practical and political tool. *Teachers and Teaching*, *17*(5), 517–528. http://doi.org/10.1080/13540602.2011.602059

Reeves, J. (2010). Teacher learning by script. *Language Teaching Research*, 241–258. http://doi.org/10.1177/1362168810365252

Shkedi, A. (2009). From curriculum guide to classroom practice: teachers' narratives of curriculum application. *Journal of Curriculum Studies*, *41*(6), 833–854. http://doi.org/10.1080/00220270902927030

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform.*Harvard educational review*, *57*(1), 1-- 23.

# An Emergent Model of the Current State of Leadership Preparation and Development of New Head Teachers for Primary Schools in Mexico

Manuel Lopez Delgado, Autonomous University of Ciudad Juarez, Mexico

## Abstract

Preparation and development of school leaders is a priority in high achieving educational systems since evidence from research has repeatedly demonstrated the positive effects of effective leadership. This study presents the findings of a research carried out aiming to explore the preparedness for the role of newly appointed school heads in Mexican primary schools. Semi-- structured interviews were conducted as the  method for data collection with twelve new heads, five teachers seeking headship, and four administrators of the promotion system. This research found that newly appointed Mexican school heads at primary level are assigned to the post with a managerial identity. This identity has been acquired during their time as classroom teachers influenced by the area of knowledge they focus on their professional preparation, the meaningful opportunities or otherwise to engage in the practice of leadership, and the assessment criteria in the established system of promotion to headship. A typology of the new appointed school heads emerged: a Potential Developed Manager, a Practical Manager, a Theoretical Manager, and a Limited Manager. This research also found that the managerial identity is perpetuated during their incumbency in headship since the legal framework dictating the functions and roles of school heads in Mexico prioritises administrative and organisational functions. The study concludes that the managerial identity, the importance given to administrative functions in their incumbency, and the little attention given to offer proper preparation for the post before their appointment do not enable them to progress and develop professionally as pedagogical and instructional leaders.

**Keywords**: Leadership Preparation and Development, School Leaders, Identity

**Introduction**

School leaders play a key role in the way education is delivered because they are in a position to positively influence teaching and learning. The idea that leadership matters is conventional wisdom not only in education but in many organisations (Watson, 2005). Several studies on school effectiveness show that excellent leadership is invariably one of the main factors in high performing schools (Reynolds, 1991). There are some reviews of empirical research that address the relationship between school leadership and student achievement (Bell et al., 2003; Witziers et al., 2003; Leithwood et al., 2004; Marzano et al., 2005; Leithwood et al., 2006). These include the ways in which leaders directly participate in curriculum design and implementation; support and promote effective teaching and assessment practices; and adapt their leadership to address the needs of teachers, students, and other stakeholders (Waters et al., 2003). This has enabled that leadership preparation and development have been strengthened in many countries before appointment to leadership posts and during their time in these roles as key strategies to improve the quality of education offered to children and young people. In Mexico, on the other hand, the areas of leadership preparation and development have not yet received the attention given at international level since the appointment to leadership posts does not require prior specific preparation or certification for these roles, and during their time as school leaders the developmental opportunities are limited. The purpose of this research was to explore the preparedness of new appointed school heads for their role based on their graduate preparation and professional experiences before their appointment to headship. The research questions that guided this study were the following: Why types of school heads regarding professional preparation can be identified in newly appointed primary school heads in Mexico? How does their professional preparation before promotion enable or limit them to enact their role as school heads effectively? And, What influences the appointment of prepared school heads in Mexican primary schools?

**Literature Review**

**Leadership Preparation and Development**

There is general consensus among practitioners, researchers and policy makers that professional training and development of aspiring and incumbent heads is positive since participants improve their knowledge, skills and dispositions (Pont et al., 2008). This contributes to more competent and effective leadership and eventually leads to improvements in teaching and learning (Davis et al., 2005; Darling--Hammond et al., 2007) given that the relationship between high quality leadership and students' outcomes is well documented. Since the mid-- 1990's training and development for school leaders have been introduced or strengthened in many countries either as preparation for entry to the post or to further develop the skills of in-- service heads (Huber, 2008). Researchers point to the need for training to school leaders to provide leadership and management skills not included in their teacher training (Devos and

Tuytens, 2006). Bush (2010) points out "that headship is a specialist occupation that requires specific preparation" (p. 113). Thomas and Bainbridge (2002) acknowledge that effective educational leadership emanates from school leaders demonstration of knowledge. Moorosi and Bush (2011) found that not focusing on leadership preparation means that there is a chance schools are placed in the hands of unqualified personnel. Regarding effective preparation Davis, Darling-- Hammond, Meyerson, and LaPointe (2005) identified seven key features of effective leadership preparation programmes. These are: a) clear focus and values about leadership and learning around which the program is coherently organised, b) standards-- based curriculum emphasising instructional leadership, organisational development, and change management, c) field-- based internships with skilled supervision, d) cohort groups that create opportunities for collaboration and team-- work in practice-- oriented situations, e) active instructional strategies that link theory and practice, such as problem based learning, f) rigorous recruitment and selection of both candidates and faculty, and g) strong partnerships with schools and districts to support quality field-- based learning.

**Methodology**

This study sought to explore the experiences and perceptions regarding the professional preparation profiles of newly appointed heads, their leadership development, and the preparedness to perform effectively their function. Extended, semi-- structured interviews were undertaken with twelve newly appointed school heads, identified alphabetically in this study as participants A to L, nine teachers seeking headship, identified as participants M to R, and four administrators of the promotion system, also identified as participants S to W. Teachers pursuing headship and headteachers that participated in this study are all assigned to urban schools in the city of Chihuahua Mexico. Interviews were undertaken on school premises for the first two types of participants, and in their offices for the administrators and lasted for 50-- 70 minutes. Interviews were recorded and transcribed prior to analysis. Commonalities, differences and emergent themes were sought with respect to professional preparation and development for the post of newly appointed heads. All participants fully and enthusiastically participated in the research and valued the opportunity to voice their perceptions.

**Findings**

The responses shared by the participants enabled to identify the type of newly appointed heads in Mexican primary schools being influential on the creation of this typology the system of promotion that set the criteria for promotion to headship, the professional qualifications chosen by aspirant heads during their accession phase, and their meaningful or lack of leadership experiences during their time as classroom teachers. The emerging model (See Figure 1) is based on two axes, relating respectively to an emphasis on school management preparation (high to low) and leadership experiences (high to low) of newly appointed heads. There are four possible categories

emanating of the type of heads appointed: a potential developed manager, a practical manager, a theoretical manager, and a limited manager. They were defined as managers instead of leaders since the legal framework dictating the functions and role of headteachers prioritises managerial, administrative, and organisational functions. Seemingly as they accumulate years in their post they do not progress further than their roles as managers, and their initial drive to focus their attention on leadership for learning gradually vanish since they remain disconnected from classrooms and teaching practices for the attention that must be given to the managerial aspects of their role. It is important to point out that the administrators of the promotion system were essential in identifying the type of heads given that they are constantly in contact with applicants to headship, and they are responsible for reviewing their professional profiles. Moreover, four of the incumbent heads regarded as influential and useful a master programme on school management for their current role as school leaders offered by the National Pedagogical University this is why this preparation was also considered important on building this typology.

**A Potential Developed Manager**

Two heads and a teacher currently seeking headship, Participants E, J and N were considered in this group. These types of school heads by the time they are appointed had graduate preparation on school management, and also during their accession time had meaningful opportunities in the practice of leadership. This enables them to understand the implications of leading and managing a school both from a theoretical perspective due to the specific preparation they had on school management and from a practical perspective for their opportunities in making decision positions before their appointment to headship. These leaders might not follow an identical path towards headship however there are some similarities amongst them. They may have started to develop their leadership skills and discovered their leadership potential in practice. They were exposed to situations in which they were appointed to different leadership positions at the same time that they were teaching. There are many possible scenarios in which they assumed leadership positions. For instance, it is typical that new teachers start their career in rural areas, and some are appointed as teaching heads. Another possibility in urban schools could be a teacher invited by the zone supervisors (equivalent to a school district in other contexts) to assist them with managerial and training functions. It is common for exemplary classroom teachers being invited by the zone's supervisors for these functions. Other possibilities could be acting headships or posts in the teacher union, even parliament candidates since the teachers union is a political party. There are also teachers who could have had multiple leading positions of the mentioned above during their accession phase.

A common thing for those teachers is that they held a decision-- making position that gave them practical experiences and the development of managerial and organisational skills. After or during these experiences, they enrolled in masters programmes focused on school management. It is in this part where they complete the other part of the

quadrant by enrolling in a master programme in management and complementing with theoretical knowledge the already gained practical experiences and developed managerial skills. The comments from Participant E encapsulate the experiences of these heads "I had contact with headship from my first day in education since I started my teaching career as a teaching head in a rural school. After three years I moved to Chihuahua City and I was elected the union representative of the school zone so I had teaching and political responsibilities. Those experiences influenced my decision to pursue headship that is why I completed my master in school management." However the route of being a developed manager could not be taken by any teacher aspiring headship because the practical experiences to lead a school for few months, to be a union official, or to be a supervisor's assistant do not depend on them. These positions are circumstantial and limited; something that an aspiring head cannot control or influence. This means that only few newly appointed headteachers could be placed in the quadrant of developed managers.

**A Practical Manager**

In this study two participants were identified for this type of school heads, Participants A and D. This type of newly appointed head has also developed high managerial skills due to their relevant leadership experiences before promotion to headship. The experiences are similar to those of the previous type of head; however, the differentiation is that participants identified with these types of heads did not regard their graduate preparation as influential and useful for their current post. They pursued graduate preparation with little relevance for their post as school heads. The appointment to headship in Mexico takes place on a competition based on the accumulation of points in several factors being professional preparation e.g. undergraduate, masters, and doctoral degrees one of the factors considered and recognised with points 700, 840, and 980, respectively. It is almost necessary to have a master degree to win a headship since most of the teachers competing for leadership posts have a master degree at least. The official system of appointment gives the same number of points to any kind of master degree just with the condition that the programme is related to education. These heads during their accession phase focused their preparation on programmes in educational psychology, special education, curriculum development or other areas of the broad field of education little related with the functions of headship. In the case of this study participants A and D have their graduate preparation in special education and in the teaching of music, respectively. Besides, the system of promotion does not make preparation on leadership and management compulsory or it is rewarded higher than preparation in other areas of the field of education. This enables that many teachers pursuing a headship do not seek preparation in areas related to educational leadership and management as a way to strengthen their preparation for the post. Examples of these types of leaders are teachers that before having the intention to aspire for leadership posts obtain graduate preparation in areas unrelated to school leadership and management, and later in their career are invited to collaborate in leadership positions and also decide to pursue a

headship post based on this preparation. An interesting case might be heads that pursued masters' degrees on teaching and learning since their graduate preparation in combination with their practical leadership experiences make them candidates for potential instructional leaders.

**A Theoretical Manager**

In this study were identified three heads and two teachers seeking headship with this type of heads, Participants G, K, L, M, and R. These headteachers have graduate preparation in school management however do not have the meaningful practical experiences in leadership before their promotion to headship as the previous heads. As mentioned before significant experiences in the practice of leadership for prospects headteachers are not predominant in the educational system and just few teachers benefit from them. This type of head when appointed to the post has the theoretical knowledge in school management as a result of their graduate preparation in this field. Academic programmes in educational management available in Mexico are theoretically focused. They do not offer opportunities for participants to engage in real world experiences and active learning to develop managerial and leadership skills. In other parts of the world leadership preparation programmes offer a mix of theoretical and practical knowledge supported by processes of coaching and mentoring. It is intended that participants strengthen both theoretical and practical knowledge. In the case of Mexico, participants who pursue graduate programmes with an emphasis on school management only strengthen their theoretical knowledge. An example of this was commented by participant K "I understand the concepts of strategic planning, but I also needed to know how to apply this in my professional practice." These candidates decided to pursue headship at some stage of their career, and they are also actively looking for opportunities to lead. However in comparison to the previous type of heads, the opportunities they are given are not as meaningful as those of the potential developed manager and the practical manager. Most of the opportunities these heads obtain are the organisation of events, special projects or commissions within the school. A teacher currently seeking headship commented on this "in my second year of teaching I realised that I wanted to be a headteacher […] that is why I studied my masters in educational management. I also volunteer to be responsible of the organisation of many activities in the school to put myself in the real practice of leadership; however, they are small tasks because leading a school is much more complex than organising the celebration of the mothers' day." Another difference with the previous types is the self nomination to the post since the teachers identified with this type in the study recognised their desire to pursue headship when they enrolled in the programme of school management, and the previous type of heads based their decision to apply on self convincement that they were competent to lead a group of people given that they were assigned to leading responsibilities because other persons saw their potential.

## A Limited Manager

There were identified five heads and two teachers seeking headship in this group, Participants B, C, F, H, I, O, and P. These types of heads are assigned to headship with preparation little related for the post, and also they had little opportunities to engage in the practice of leadership during their time as classroom teachers. They are referred as limited not because they are professionally incompetent but because it took them more time to enact properly the position in their learning how to lead and manage successfully a school. Participants C, F, and I commented that they "learned to lead by trail and error." The graduate preparation of this head is similar to the second type, the practical manager, however they did not have pertinent opportunities during their accession phase to engage in practical managerial experiences so that they did not develop these skills and have to develop them in their post. These types of heads during their teaching phase focused their graduate preparation in areas related to education but not specifically to school management. They at certain point in their career felt they could make a broader contribution from the position of headteacher as commented by Participant B "I decided to pursue headship because I had good results as teacher and I wanted contribute more to the education provided to our children from a more influential position; however, in the first months as headteacher I felt that my masters in research in education did not equip me theoretically and practically to lead a school." It is important not to consider their preparation in all cases as a limitation. Participant O pursued a masters degree in learning and teaching and regarded it as helpful in supporting her staff in effective teaching: "it has been helpful because I learned what means effective teaching in math, science, and social studies so that it helps me to support my teachers and give them feedback to design meaningful learning activities for our students." The limitation might be perceived by giving the same amount of points to the variety of masters' degrees even if they do not relate much and are completely useful for the post of headteacher or are closely related to the core activities of schools, learning and teaching. According to the administrators of the promotion system this type of head is the most common appointed in Mexico since the promotion system does not make mandatory preparation for the post. An administrator of the promotion system identified as Participant T commented "the majority of the applicants do not have graduate preparation in school management […] there is much variety in the preparation profiles of candidates for headship."
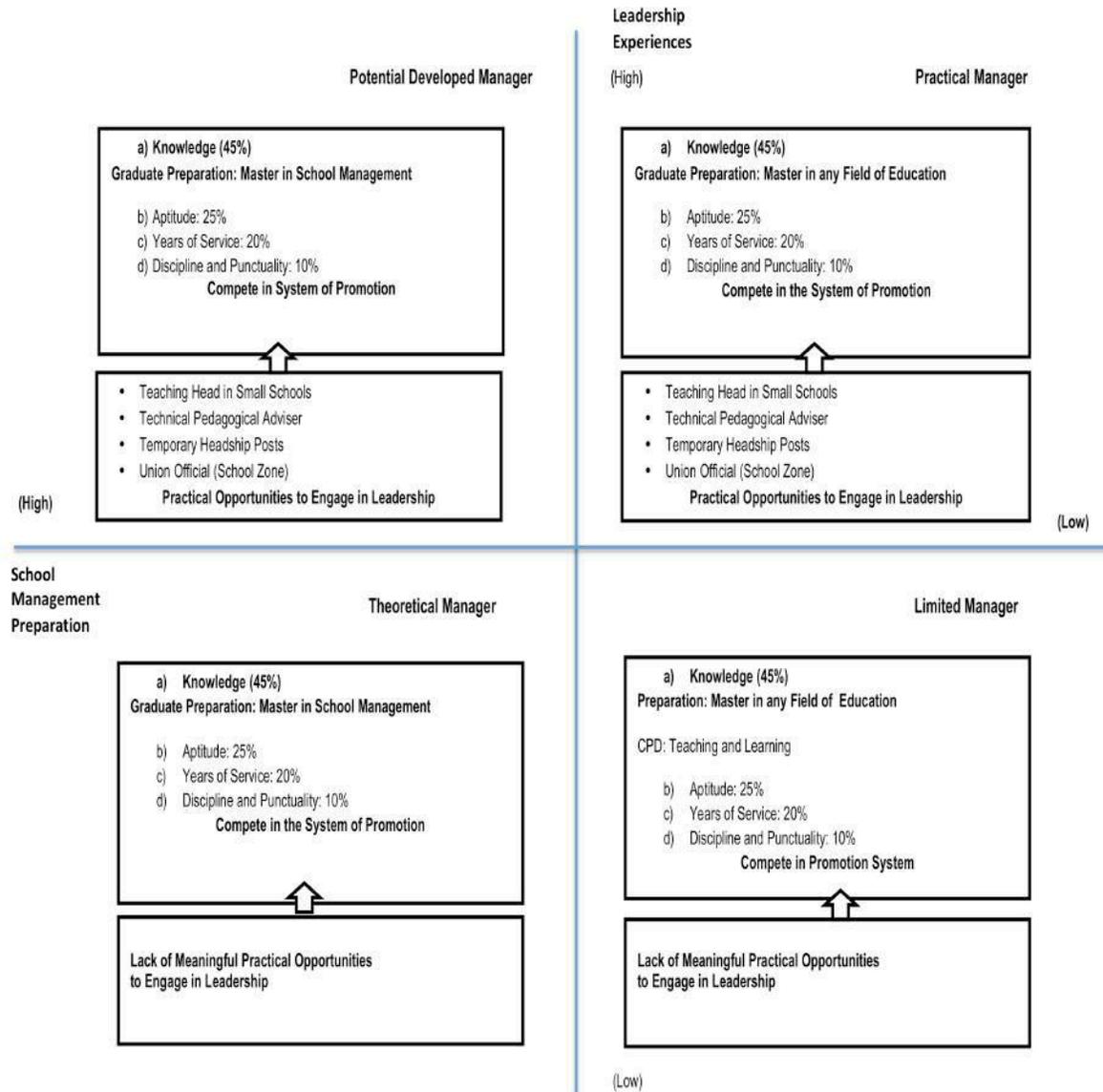
Figure 1. Emerging model of the types of heads appointed in Mexican primary schools

**Discussion**

Data obtained from the interviews of teachers pursuing headship, school heads, and administrators of the promotion system enabled to identify the professional profiles of newly appointed school heads. A model emerged indicating the types of heads promoted based on two relevant aspects: graduate preparation and a background of meaningful leadership experiences or the lacking of them prior their promotion to headship. From the explanation of the findings and also derived from the emerging typology can be identified general themes of analysis. These themes relate to leadership identity development and leadership preparation and development.

**Leadership Identity Development**

In this research seemingly most newly appointed heads arrive to the post with an extended classroom teacher identity. That is a professional identity strongly attached to the vision and role conceptualisation of headship from the perspective of a classroom teacher. And, in the cases that had meaningful leadership experiences and preparation in school management start their post with a managerial identity. Professional identity is defined as one's professional self-- concept on attributes, beliefs, values, motives, and experiences (Slay and Smith, 2011). School heads in this study did not self defined them as extended classroom teachers; however, it could be inferred from their experiences, especially from those identified as limited managers, that they learnt to lead and manage a school in the post sometimes even by trail and error. This leaves schools without effective leadership for the time their school heads enact properly the position and they feel comfortable leading and managing a school. New heads appointed with an extended classroom identity means that they are mainly professionally familiarised with the job of a classroom teacher. This seems problematic given that the role of school heads implies lead teaching and learning; develop themselves and others; lead improvement, innovation and change; lead the management of the school, engage and work with the community (Jensen et al., 2015). The transition to school principal normally requires newly appointed headteachers to 'let go' some of their identity as a teacher and embrace a new identity as a leader of others (Ibarra et al., 2014). In the case of Mexican heads progress to a managerial identity after sometime that they feel comfortable in their position.

In this study were also identified participants that are appointed with a managerial identity. There seems to be present a level of managerial identities because some heads arrive to the post with an already managerial identity developed taking into consideration their graduate preparation in management and their meaningful leadership experiences before appointment as in the case of the potential developed manager. Others arrive to the post with a partial managerial identity as the case of the practical manager and the theoretical manager. The later had just relevant experiences in the practice of leadership lacking meaningful preparation in school management, and the former arrive to the post just with theoretical knowledge of how to lead and manage a school due to their graduate preparation in school management and the lack of exposure to the practice of leadership before their appointment to headship. These partially managerial identities also progress to completely managerial identities when they feel comfortable and professionally perform as needed by their post. There seems not to be a progress to a leadership identity, especially to an instructional leadership identity, when they have been in the post for several years since headteachers have carry most of the time administrative, organisational, and paperwork related tasks. In the legal framework dictating the twenty-- four functions and duties of primary school heads eighteen focus mainly on administrative and managerial aspects. The educational system is centralised with the decisions affecting schools made mainly in the ministry of education offices. School heads do not influence the hiring and relocating of teaching,

administrative and supporting staff, the implementation of the curriculum, fund raising, budgeting management, and equipping schools. The progression to a leadership identity implies upgrading the role and functions of school heads to make the position more influential and relevant than currently is since school heads just play intermediate and managerial roles between the ministry of education and the school staff. This progression to a leadership identity also implies training and preparation before promotion and during their time in service.

**Leadership Preparation and Development**

There seems not to be recognised the importance of leadership preparation and development in Mexico. It is seemingly accepted the idea pointed out by Bush (2005) that good teachers can become effective managers and leaders without specific preparation that is prevalent in countries not giving the needed attention to school leadership. The administrators of the promotion system recognised that most of the applicants for headships have the professional profile of the limited manager. Participants in this study with preparation related to their function as headteachers in the form of the graduate programme in school management regarded it as important for their current role. On the other hand, there were other participants that their graduate preparation was partially related and others expressing that their preparation was totally unrelated. Those considering their preparation was partially related to their functions were participants with a master's degree on learning and teaching. Bush and Jackson (2002) concluded that apparently there is an international curriculum for school leadership preparation for the similarities in content across countries that are giving attention to leadership preparation being the focus on effective teaching and learning the second most important content in the components they found in their study. Robinson et al. (2008) found that "the more [school] leaders focus their relationships, their work, and their learning on the core business of teaching and learning, the greater their influence on student outcomes" (p. 637). Therefore, an essential component for school leadership preparation is to address effective teaching and learning. The difference between school heads with a master on learning and teaching and educational management is that the latter also gives importance to addressing instructional leadership by including three courses on teaching and learning plus the addressing of topics with specific relevance for school leaders.

Another important factor relevant for leadership development that was evident in this research was leadership learning through meaningful experiences in the practice of leadership before promotion to headship. Hamilton et al., (1996) found that on-- the-- job experience is a primary source of leaders' learning. Southworth (2004) recognised the importance to provide opportunities for aspirant heads when he acknowledges that "research and experience show that most school leaders believe they learn how to lead by being given opportunities to lead and through on-- the-- job learning" (p. 345). In the model identified in this research the potential developed manager and the practical manager benefited from meaningful leadership experiences in their accession time. The

opportunities mentioned by the participants were teaching headships, acting headships, district positions, union representative at district level, union official, and community leaders. According to the participants these opportunities had a determinant influence in their seeking of headship. They considered that these opportunities enabled them to gain confidence and develop their leadership abilities. Some participants had the possibility to have two or more of these experiences, and they referred to a gradual leadership learning by the increasing level of responsibilities. For instance a participant expressed that it was not the same to be a teaching head in a rural school with three teachers than to be in a similar position but in an urban school with fifteen teachers. Leithwood et al., (2004) mentioned that the work of school leaders can be conceptualised as practical problem-- solving, a type of thinking embedded in activity. Further Leithwood et al., (2004) assert that "[a] significant part of the learning required for such leaders to further develop their practical problem-- solving expertise is usefully conceptualised as "situated." Such learning is specific to the context in which it is learned and most likely to be learned in contexts exactly the same as or closely approximating the situations in which it is to be used. Therefore, these participants experienced leadership and discovered that they were competent to enact the position effectively at least from an organisational and managerial point of view. Another interesting facet to analyse this aspect would be asking other teachers that had these meaningful opportunities however did not look for headship or other leadership positions within the educational system. Perhaps succeeding when these opportunities are given is an indicator of future leadership competence; however, this also must be taken with reserve since some participants mentioned that things were not always easy since they identified areas they needed to develop and improve. Therefore, it seems reasonable to think that teachers with desire to pursue leadership in the system might start looking for leadership opportunities within their school and progress towards higher levels of responsibility either in their school or at district level. However, meaningful opportunities to engage in the practice of leadership as the mentioned above are not vastly spread in the educational system since these opportunities are circumstantial and limited.

## Conclusions

In recent educational changes in Mexico emphasis has been given on improving aspects that could improve the quality of education offered to pupils. For instance, in 2008 it was established a standardised exam to assign teaching posts for the most competent teachers in compulsory education. Another action was the reform and introduction of a new national curriculum based on a competency framework. And recently, in the school year 2013-- 2014 the establishment of collaborative cultures within schools through the school technical councils as a space in which teaching staff and school leaders dedicate a complete day per month to share effective practices, analyse the school's problems, and propose solutions to strengthen professional collaboration. However, despite these changes the development and preparation of schools heads seems to be unattended. In June 2015 a new process to appoint school leaders was established based also on a

standardised exam that evaluates participants in different dimensions concerning the role of school heads in which vacant posts are assigned to participants with the highest scores. Up to these days there are not yet results of these exams to know the scores of participants in the different dimensions assessed. Even though the introduction of this exam seems progression, it is a partial advancement given that aspiring heads are neither required specific preparation for the post nor offered opportunities for their theoretical and practical preparation and development as future heads. Moorosi and Bush (2011) concluded: "[the] less focus on [leadership] preparation means that there is a chance that schools are placed in the hands of unqualified personnel" (p.71). This approach to appoint school heads without previous preparations as in Mexico seems problematic. The reason perhaps is a waste of time in their readiness to enact headship effectively since they have to learn how to lead and manage a school when they are in the post.

## References

Bell, L., Bolam, R., & Cubillo, L. (2003). *A systematic review of the impact of school headteachers and principals on student outcomes*. London, UK: EPPI-- Centre, Social Science Research Unit, Institute of Education.

Bush, T. (2005). Preparation for school leadership in the 21st century: International Perspectives. Invited Keynote Paper given at the First HEAD Research Conference, Oslo, June. United Kingdom: University of Lincoln. Retrieved from http://www.bi.edu/cemfiles/tony%20bush%20norway%20keynote%20paper%20200 5.pdf

Bush, T. (2010). Leadership development. In T. Bush, L. Bell and D. Middlewood (Eds.), *The Principles of Educational Management Leadership and Management* (pp. 112-- 132). London, UK: Sage Publications.

Bush, T., & Jackson, D. (2002). Preparation for school leadership: International perspectives. *Educational Management and Administration*, 30 (4), 417-- 429.

Darling-- Hammond L., LaPointe, M., Meyerson, D., & Orr, M. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs*. Stanford, CA: Stanford Educational Leadership Institute.

Davis, S., Darling-- Hammond, L., LaPointe, M., & Meyerson, D. (2005). *School leadership study: Developing successful principals*. Stanford, CA: Stanford Educational Leadership Institute.

Devos, G., & Tuytens, M. (2006). *Improving school leadership -- OECD review: Background report for flanders*. Retrived from http://www.oecd.org/edu/ schoolleadership

Hamilton, D. N., Ross, P. H., Steinbach, R., & Leithwood, K. (1996). Differences in thesocialization experiences of promoted and aspiring school administrators. *Journal of School Leadership*, 6 (4), 346-- 367.

Huber, S. G. (2008). *Management and leadership development new approaches in preparing school leaders*. In B. McGaw, E. Baker, & P. P. Peterson (Eds.), *International encyclopedia of education* (3rd ed.). New York, NY: Elsevier.

Ibarra, H, Wittman, S, Petriglieri, G., & Day, D. V. (2014). *Leadership and identity: Anexamination of three theories and new research directions*. The Oxford Handbook of Leadership and Organizations. New York, NY: Oxford University Press.

Jensen, B., Hunter, A., Lambert, T., & Clark, A. (2015). *Aspiring principal preparation*. Melburne, Australia: Australian Institute for Teaching and School Leadership.

Leithwood, K., Seashore-- Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. New York, NY: The Wallace Foundation.

Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Seven strong claims about successful school leadership*. Nottingham, UK: National College of School Leadership.

Marzano, R. J., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results*. Aurora, CO: ASCD and McREL.

Moorosi, P., & Bush, T. (2011). School leadership development in Commonwealth learning across the boundaries. *International Studies in Educational Administration,* 39 (3), 1324-- 1702.

Pont, B., Nusche, D., & Moorman, H. (2008). *Improving school leadership: Volume 1 policy and practice.* Paris: OECD Publications.

Reynolds, D. (1991). School effectiveness in secondary schools: Research and its policy implications. In Riddell, S. and Brown, S. (Eds.), *School Effectiveness and its Messages for School Improvement* (pp. 21-- 34). Edinburgh: The Scottish Office, HMSO.

Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44 (5), 635-- 674.

Slay, H. S., & Smith, D. A. (2011). Professional identity construction: Using narrative to understand the negotiations of professional and stigmatized cultural identities. *Human Relations,* 64 (1), 85-- 107.

Southworth, G. (2004). A response from the National College for School Leadership. *Educational Management Administration and Leadership,* 32 (3), 339-- 359.

Thomas, M., & Bainbridge, W. (2002). Sharing the glory: Educational leadership in the future will emanate not from positions, but from knowledge, wisdom, the ability to persuade and a personal commitment to fairness and justice. *Leadership*, 31 (3), 12-- 16.

Waters, J. T., Marzano, R. J., & McNulty, B. A. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-- continent Research for Education and Learning.

Watson, L. (2005). *Quality teaching and school leadership: A scan of research findings.* University of Canberra: The Life Long Learning Network.

Witziers, B., Bosker, R. J., & Krager, M. L. (2003). Educational leadership and student achievement: The elusive search for an association. *Educational Administration Quarterly,* 39 (3), 398-- 425.

## *De-- Institutionalization in Lithuania as the Result of Social Education*

Dalia Stražinskaitė, Lithuanian University of Educational Sciences, Lithuania

The European Conference on Education
Official Conference Proceedings 2015

**Abstract**
The process of de-- institutionalization concerns children, who are deprived from parent care, elderly people and people with disabilities. The presentation seeks to estimate possibilities in alternative families, but not in Lithuanian institutional foster homes, to foster children, who are deprived of parental care, but. A proportion of foster children of all children under the age of 18 in 2012 amounted to 1.9 per cent in Lithuania and was one of the largest in Europe. Research and statistical indicators show that the process of De-- institutionalization in Lithuania is very sluggish. The question is raised whether the people of Lithuania is aware of the problems faced by children growing in institutions? The education of adults and cultural activities are recommended in order to overcome communication gap.

Keywords: De-- institutionalization, foster care, foster child, communication, social change.

iafor
The International Academic
Forum www.iafor.org

**Introduction**

An institution could be defined as any residential care where: a) residents are isolated from the broader community and/or compelled to live together; b) residents do not have sufficient control over their lives and over decisions which affect them; and c) the requirements of the organization itself tend to take precedence over the residents' individual needs (Guidelines, 2012). The process of de-- institutionalization concerns children, deprived from parent care, elderly people and people with disabilities. The case of foster children is the most sensitive one. Where the child's own family is unable, even with appropriate support, to provide adequate care for the child, abandons or relinquishes the child, the State is responsible for protecting the rights of the child and ensuring appropriate alternative care, with or through competent local authorities and duly authorized civil society organizations.

The presentation explores the case of De-- institutionalization in Lithuania. It seeks to estimate possibilities to foster children, who are deprived of parental care, in alternative families, but not in institutional foster homes in Lithuania. The question is raised whether the public is aware of the problems faced by children growing in institutions? The presentation is divided into 3 parts. The first introduces the context of Lithuanian alternative care system and statistical evidence. Second one overlooks the potential problems that face the foster children. Third explores the research of attitudes and knowledge of adult people on needs of foster children.

**De-- institutionalization in Lithuania**

The idea of de-- institutionalization in Europe is supported by large number of non-- profit organizations. In 2012 a network of organizations and individuals *Eurochild* has issued the working paper *De-- institutionalization and quality alternative care for children in Europe*. The Working Group on Children without Parental Care of the NGO Group for the Convention on the Rights of the Child initiated the document *Moving Forward: Implementing the 'guidelines for the alternative Care of Children'*. European Expert Group on the Transition from Institutional to Community-- based Care issued the paper *Common European Guidelines on the Transition from Institutional to Community-- based Care* and the *Toolkit on the Use of European Funds for the Transition from Institutional to Community-- based Care*. The European Union has put regulations in place which made it clear that EU Structural Funds should be spent on the transition from institutional to community based care.

Children without parental care in Lithuania may be fostered in state or municipal institutions, households, families or be adopted. Unfortunately, the listed alternatives must be assessed differently. In recent decades, scientists agree that even a short period spent in the institution can negatively affect children's intellectual and emotional development and need positive discrimination involving practice. Having no family history and lacking of parental support, they form a sense of inferiority, which sometimes manifests by aggressive behavior (Tsvetanska, 2010). Growing up in foster homes they live a lonely, unstable and difficult life. They form

an incredibly large part of the convicts in prisons or homeless people on the streets (Sinclair, Wilson, 2005).

In the end of 2013 the number of children in the institutional care was 3821. Currently, Lithuania has 95 child care institutions, of which: 5 infant homes; 7 state orphanages; 4 orphanages for children with disabilities; 52 municipal child care homes; 10 municipal care homes; 17 non-- governmental child care homes.   A proportion of foster children of all children under the age of 18 in 2012 amounted to 1.9 per cent in Lithuania and was one of the largest in Europe. Research and statistical indicators show that the process of De-- institutionalization in Lithuania is very sluggish.

In order to overcome social exclusion ideology the Ministry of Social Security and Labor approved 2014-- 2020 year action plan for the shift from institutional care to family and community-- based services for disabled and deprived of parental care children . The plan aims to reduce the percent of children accommodated in childcare institutions from 57 to 25 percent.

The transition from institutional care to family and community-- based services for the disabled and deprived of parental care for children 2014-- 2020 year action plan has three main goals. The first objective – to ensure a sustainable environment and conditions for each child (and a disabled child) to grow in his own family, or adoptive or foster family, and to receive community assistance (Plan, 2014: 3). For this purpose the formulated 18 challenges are grouped into three sub-- groups -- to strengthen the comprehensive assistance to communities; to support individuals and families, who adopt or foster children and provide social services for children with disabilities; and gradually reorganize the infant homes, the homes for children with disabilities and child care homes (Plan, 2014: 4). The sequence of these tasks would seem logical and consistent. It would be impossible to close immediately all the children's homes without having an adequate community infrastructure and without sufficient number of foster parents and guardians. The second objective of the plan is intended for integration of people with disabilities, the third objective -- to promote the moral values of society change, forming a positive public attitude to the system reform and to ensure the transparency of its processes . The authors of the plan believe that this would be enough to develop society's tolerance for disabled people, positive parenting skills, awareness of the institutional care and damage-- institutionalization process (Plan, 2014: 8).

**Depiction of the foster child's case**

Child care system is designed to help those children whose parents are unwilling or unable to take proper care of them. In Lithuania all parents who have abandoned their babies had addiction problems (compared with 58 percent in the UK. (Wade et al, 2011). In addition, in Lithuania we find a tendency of same risk group parents abandoning more than one child. 40 babies from home growing children are from families who had 3-- 7 children(Radzevičienė, 2003).

The children in care homes have deep and serious prenatal, postnatal problems and those caused by inadequate training and require intensive and specialized therapy, and special education. In order to describe the "typical" child who lives in care home we need to identify serious developmental, emotional, behavioral and health problems, he often has difficult or moderate cases of disability and special education needs. Among the main reasons whyadolescent child cannot grow up in the family home and is placed in care institutions, the most common is the deprivation, emotional or physical abuse or sexual abuse. The specific child may have experienced more than one form of unfair treatment, in addition, that forms self-- abandonment (Wade et al., 2011). For those cases where the child experiences trauma and post-- traumatic stress scientist Bessel A. van der Kolk (2005) introduced the term developmental trauma (Blaustein et al., 2010). It is obvious that a single traumatic experience, such as a natural disaster, do not work as hard as chronic interpersonal stress. Physically abused children are almost two times more aggressive than those who haven't experienced violence and about one-- fifth of them are prone to criminal behavior, alcohol or drug use. And these indicators have almost no impact on gender (Wade et al., 2011).

In order to evaluate Lithuanian case we suggest the data of Table 1, provided by Lithuanian child care home trade union association president V. Konovalovienė. The table shows that less than one in two children in children homes is a child with special needs and requires special therapeutic and educational support. Disabled children end up in care institutions not only and not so much because of disability, but like other children: risk due to neglect. In addition, disabled children rarely return to parent families are eligible for adoption, and more likely to care institutions. Even in the age of 18 disabled young people often remain in foster care. (Sinclair, 2005).

| PROBLEM | Number of cases | % |
|---|---|---|
| intermediate or hard disability | 606 | 17 |
| special needs | 1875 | 50 |
| mental illness | 318 | 8 |
| emotional, behavioral and social development disorders | 899 | 20 |
| medical assistance was provided to | 148 | 3 |
| Minimal care | 278 | 7 |

Table 1. The common problem of children in child care homes (Konovalovienė, 2013).

**The attitude toward children in institutions**

I want to present the results of online interview made with 176 persons in November 8-- 26, 2013. (3 questionnaires were uncompleted, 2 fully charged). The questionnaire consisted of 12 closed questions, including 7 of the scale and type 4 semi-- closed questions. I do not go through all the questions in this presentation. Objectives of the study were to determine the opinion of the respondents in relation to child care; identify potential group of foster parents, indicate their expectations of children in

care problems; assess what guided views with respect to children in care and what stereotypes prevail.

The test sample consisted of individuals from 23 to 69 years, mean age 43 years, mostly in the age group 35-- 40 years. The respondents were asked about ever considering foster child care. The results of table 2 show whether respondents of the survey considered about being foster parents. The detail analysis of answers of those who are considering about foster child reveals that most of them are families without children (8 out of 13 occurring in the sample -- 61.5 percent.), single people (17 from 51 to 33.3 percent.), families with minor children (21.3 percent) and families with adult children (7 of 24 -- 29.2 percent.).

| Had You ever considered about foster child care? | Number of cases | % |
|---|---|---|
| No | 88 | 50 |
| Yes, but I'm not sure | 49 | 28 |
| Yes, but I've decided to refuse care | 29 | 16 |
| Yes, I am or was foster parent | 10 | 6 |
| **At all:** | **176** | **100** |

Table 2. The number of respondents considering about foster care.

What makes us upset is that half of respondents do not consider about fostering a child. The Figure 3 is suggested to look at the reasons why foster parenting is refused. As we can see from it, the financial problems are not the main ones. More of them are the lack of content in that position and uncertainty for the future.
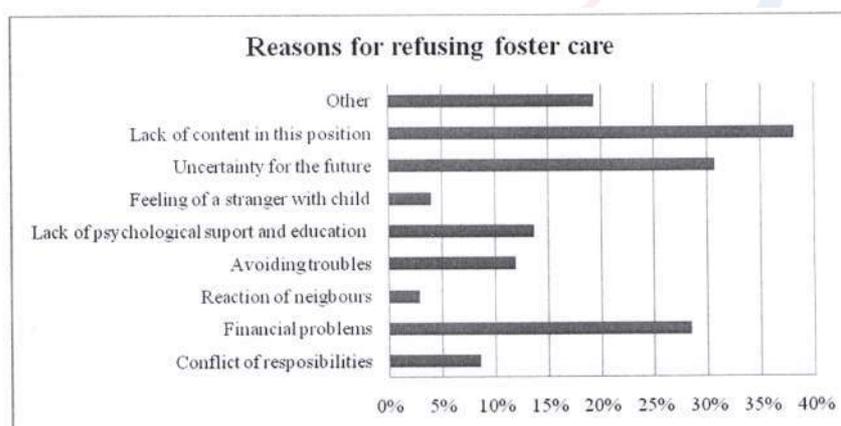


Figure 3. Reasons for refusing foster care.

In order to reveal whether the public is prepared to problems that face children in children homes let's look at the figure 4. I can find evidence that question "would you care for a child who ..." perplexed many readers of questionnaire. Full of comments, "never thought about it, yet I could not answer; we were not discussing it; I would be afraid of not being able to see these problems; I am too big egoist, I have little love; maybe I'm self-- centered, but I think I would lack the knowledge to grow a "different" child; I am afraid that I cannot give them adequate assistance,

there love is simply not enough... ;should seriously reflect on it, but it would be difficult to resolve, at one time or because it is not suitable for any conditions or pre--theoretical, psychological, lack of knowledge, or a child is made available to other alternative care perhaps better than mine, and so on. Others stressed the link between the child and guardian "should be thrust regardless of the child's shortcomings, I think it is important interrelationship." There were 13 of those who thought they could deal with any problematic situation: "I resolve to take care of the child, I would agree with all the options." However, just 72 did not agree with any option.
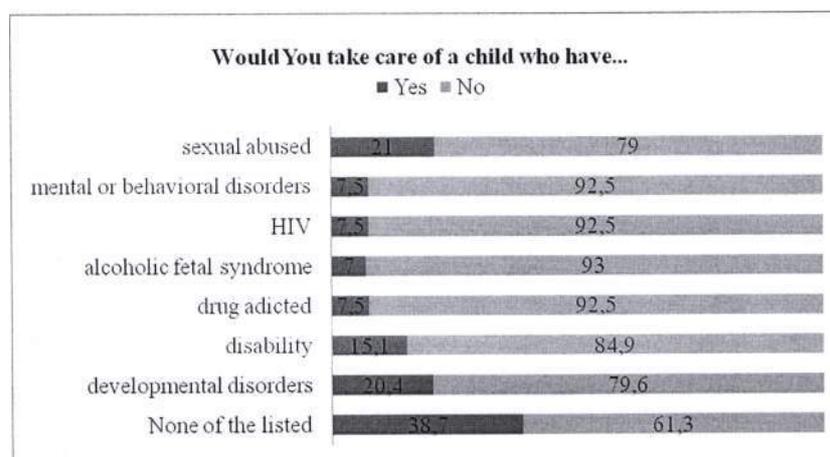


Figure 4. Preparing to care for problem child, %.

**Discussion**

The basic characteristics of public care for children in the countries of Central and Eastern Europe are: 1) increased need for care for children outside their families, 2) high proportion of children in children's institutions, and 3) weak tradition of alternative forms of childcare such as foster care and family-- like homes (Laklija, 2011). However, there are differences among them, depending on their socio-- economic policies. The socio-- economic regimes in the Visegrad countries differ from the Baltic States in some major aspects: first, they have offered more protection to population to compensate for some of the social costs of transformation; second, they have achieved better results in building complex, competitive export industries; third, they preserved a far more inclusive democracy (Towards…, 2011). The number of children in alternative care is one of the symptoms of low citizenship and responsiveness.

Neoliberal economics shapes their values. This is the world reigned by narrow, selfish interests; isolation and competing individuals; financial capital; amenities and unfounded "inherent" free-- market fundamentalism. Freedom in the neoliberal worldview is merely the freedom to choose the most understandable abstract concept to market, cleansed of power, politics and social welfare issues (Giroux, 2013). This procedure has an important socio-- educational component. Through the games, reality TV, celebrity culture, television news, radio and other media influence and create a virtual environment, such things, wishes and desires which reflect the

"free market" corporate worldview (Giroux, 2013). Social responsibility is accompanied by organized infantilism and distancing themselves from responsibility (Giroux, 2013). The individual in existing neo-- liberal social order is without commitment, disdainful of social responsibility and has lost contact with the public good (Giroux, 2013: 87).

Speaking about social responsibility and ethics, E. Levinas referred to "silent appeal of another face ". Sigmund Bauman tells us another thing: present society "is getting bigger areas of human behavior clearly released from the social modeling, maintenance and administration, shifting an increasing proportion of previously public responsibility to individual men and women" (Bauman, 2007). Transferred to individuals, this task becomes insurmountable (Bauman, 2007). Foster care system in Lithuania gives an example of privatization of social responsibility. The system of de-- institutionalization doesn't work if determination to care for abandoned or disadvantaged children, as opposed to institutional care with alternating adult cases, lies on the shoulders of a specific person. Therefore, community cooperation networks are necessary. But neoliberalism opposed forms of collective identity and the curricular practices, which is based on an identity (Apple 2013: 9). It is necessary to form a new cultural and political vocabulary, develop a citizenship that is able to identify the corporate and academic interests, which creates a coercive apparatus (Giroux, 2013: 86). Effective de-- institutionalization process cannot be realized solely on peaceful dialogue. It intertwines different interests, such as employment, buildings, power, desire to show off profiting on child's fate and the impact on society. Conflicting approaches outdoors require additional effort to wrest the location and uncommitted life potential guardians and foster parents, transform individualistic and consumerist society values.

**Conclusion**

The process of deinstitutionalisation is one of the most significant events in Europe in the next seven years.

Previous research claims and home care workers' testimony shows that a large number of problems occur for children in foster care, e. g. bad health, special needs or disabilities. The results of online interviews suggest that approximately half of respondents never considered fostering a child. The reasons of care refusal are not only financial ones, but the feeling of insecurity in themselves and their future. Many of respondents would not agree to take care of a child with any problem, including disabilities, effects of alcohol, drugs and so.

The education of adults and cultural activities are recommended in order to overcome communication gap.

## References

Bauman, Z. (2007). *Consuming Life.* Cambridge: Polity Press.

Apple, M. W.(2013) Can education change society? New York:

**Routledge.**Blaustein.M. E., Kinniburgh, K. M. (2010). *Treating Traumatic Stress in Children and Adolescents*. N.Y.: The Guiford Press.

Common European Guidelines on the Transition from Institutional to Community-- based Care (2012). Brussels.

Eurochild. (2010). *Children in alternative care.* National Surveys.

Giroux, H. (2013) *America's Education Deficit and the War on Youth*. New York: Montly review press.

Goodyer, A. (2011) Child-- centred Foster Care. London: Jessica Kingsley Publishers.

Konovalovienė, V. (2013). *Socio-- economic problems of children in care homes: the round-- table discussion*.

Laklija, M. (2011). *Foster care models in Europe: results of a conducted survey*. Zagreb.

*Moving Forward: Implementing the 'guidelines for the alternative Care of Children'*. (2012). Glasgow: CELCIS.

Plan (2014). *Perėjimo nuo institucinės globos prie šeimoje ir bendruomenėje teikiamų paslaugų neįgaliesiem ir likusiems be tėvų globos vaikams 2014-- 2020 metų veiksmų planas*. Approved by the Ministry of Social Security and Labour in 2014. 14 February. Order No. A1-- 83.

Radzevičienė, L. (2003). Kūdikių namų auklėtinių tėvų socialinės reabilitacijos aspektas. *Socialinis darbas*, nr. 2(4), p. 56-- 66.

Schooler, J., Smalley, B. K., & Callahan, T. (2009). Wounded Children, Healing Homes. Colorado: NavPress.

Sinclair, I., Baker, C., Kate, W., Gibbs, I. (2005). *Foster Children : Where They Go and How They Get On.* London: Jessica Kingsley Publishers, 288 p.

*Towards a Lifelong Learning Society in Europe: the Contribution of the Education System* (2011). Tallin: Institute of International and Social Studies.

Tsvetanska, S. (2010) Social stratification in the classroom: challenges for teachers. *Policies and practicies for teaching sociocultural diversity*. Strasbourg: Council of

Europe Publishing.

United Nations. (2009). *Guidelines for the Alternative Care of Children*.

Wade, J., Biehal, N., Farrelly, N., Sinclair, I. (2011). *Caring for Abused and Neglected Children: Making the Right Decisions for Reunification or Long-- Term Care.* London: Jessica Kingsley Publishers.

http://vaikoteises.lt/lt/globa/globa_institucijoje/kas_yra_vaiko_globa_institucijoje.html

**Contact email:** dalia.strazinskaite@leu.lt

### Challenges of Dance Education in the 21st Century: The University of Uyo Experience

Ifure Ufford-Azorbo, Department of Theatre Arts, University of Uyo, Nigeria

**Abstract**
Dance, which is the rhythmic movement of the human body in the required time on a chosen space for communication and entertainment purposes, remains an ephemeral artistic experience which emphatically happens on the performer's body and disappears after the exhibition. This peculiar nature of dance gives room for a major challenge in scholarship as it does not 'wait' or 'stop' in the course performance for proper scrutiny. It passes in time and is elusive. Some uninformed critics see dance as a mere pastime unworthy of serious intellectual endeavour. Others see dance as a common thing which anybody who is just happy can do. Through personal experience, a comparative study of different Universities that offer dance courses and available literature on the topic, it is observed that dance education suffers even within the University which is the Ivory Tower of all knowledge, in curriculum development, provision of a standard dance studio, staffing, technical equipment and even a placement on the time table for rehearsal venue and time. Priority is given to other performances and practices of the Theatre Arts. This study seeks to bring to the fore, these challenges and make suggestions for an all round scholastic development.


Keywords: Dance, Education, 21st Century, University of Uyo.

1. Introduction

The 21st century has witnessed a lot of development in every field of endeavour. The world has been reduced to just a global village with the advent of superior technology in the dissemination of information. Teaching and learning in this era demand a combination of a discrete focus on student outcome, which is a blending of specific skills, content knowledge, expertise and literacy exposures with innovative support system in order to aid the student in the understanding and mastery of the multi-dimensional abilities required of them in the 21st century and beyond.

Dance which is a performing and creative art, has been variously defined as "the movement of the body in a rhythmic way, within a given space for different purposes which include the expression of an idea or emotion, the release of energy or a simple delight in the situational ordering of movements for entertainment"(Ufford-Azorbo, 2012: 14); "an eloquently expressive non-verbal art form communicating both congnitively and affectively" (Ajayi, 1986:11) "an encoded system which inheres particular stylistic qualities (Thomas 1995:28) "a 'formed' and 'performed' art which does not exist prior to its creation" (Sheets-Johnstone, 1979:14). Dance, as a powerful impulse and a skillfully choreographed art, takes into consideration professionalism. With definitions in context, it is no gainsaying that dance requires a lot of training in theory and practice to actualize its form as an academic discipline.

Education, from all indications and manifestations is a multi-faceted concept which centers on learning and attainment of intellectual goals. Through this process, unknown facts about life and humanity are made known. As a major instrument for conscientisation of society for all round development, education provides discipline through the training and impartation of skills and knowledge. This makes it possible for man to adapt himself productively to his physical, cultural, social, political and religious environment. This possibly informs Adeogun's submission that "education empowers human beings so that they can actualize their potentials and tendencies satisfactorily, and as members of society, they can interact with their environment richly" (Esimone 2013:207).

2. Dance Education

Dance education, by deductions from the conceptual framework of dance and education, becomes a technical transfer of dance performance skills and knowledge to students through teaching, training and research. This is necessary for the provision of high quality professional development in the theory and practice of dance. Dance and education, therefore, become complementary domains of knowledge.

Dance became entrenched in the educational curriculum of Nigerian universities in the 20th century. Its inclusion and exhibition in professional theatrical shows by notable performing artistes like Hubert Ogunde and his traveling theatre, was a pointer to the need to study dance as a serious intellectual endeavour. Presently, almost all the universities in Nigeria have dance studied in varying degrees.

3. The Dance Experience in the University of Uyo

The University of Uyo came into being in October 1991 from former University of Cross River State. It then became a Federal University, inheriting students, staff and academic programmes of the defunct University of Cross River State which did not

have a Department of Theatre Arts and so no dance unit. But as a Federal University, the Department of Theatre Arts was instituted.

Presently the department runs three programmes of study; Diploma, Degree and Masters programmes. Dance features in the diploma programme, in the second semester of the first year, in the degree programme, there is a dance course for 200 level second semester, 300 level first semester and two dance related courses for first semester 400 level and one for the second semester strictly for final year students who choose dance as their area of stress and no dance course is featured in the masters programme. Summarily, there are only 6 dance courses in the curriculum of the Department of Theatre Arts University of Uyo. This is not an adequate curriculum for a wholesome study of the dance art.

4. Dance Personnel in Charge of Tutelage in the University of Uyo

The teaching of dance in the Department of Theatre Arts of the University of Uyo was initially handled by personnel that had a background in music for want of dance professionals. Music which is an ally of dance provided temporary succour. The first lecturer in dance in the 1992/93 session was then Mrs. Margaret Akpan who was trained in the stress area of music, then came Prince Inieke Ufford who, though not trained academically for dance, was a professional dance artist and director and was at that time, a lecturer in the Department of Music, University of Uyo. Prince Ufford extended the dance curriculum in theory and practice to incorporate musical and other theatrical performances with dance as a base. He experimented with ceremonial, social and narrative dances which had a large cultural content regarding the Nigerian scene. He introduced performance workshop for dance, music and dramatic experimentations. Dance courses were later allocated to Miss. Joyce Adewumi who was also from the Music Department. She tilted her dance tutelage in theory and practice to the western dance styles with particular reference to the Ballet.

Eventually, then Mr. Ojo Rasaki Bakare, now Professor, was brought in as a Visiting Lecturer to take over dance courses in theory and practice. This was the very first dance teacher, trained in dance and from the Department of Dramatic Arts, Obafemi Awolowo University, Ile-Ife. Having studied and practiced dance, Bakare was the best bet for any student who was interested in dance. He brought a more vibrant dance culture to the University of Uyo though working on the very few dance courses.

During Bakare's first period in the teaching of dance in the Department of Theatre Arts, University of Uyo (1998) there was only one student, in a Department that had on ground or graduated a combined number of over 800 students who took dance as a stress area, thus becoming the first dance stress student of the University of Uyo and that is the writer of this paper. Bakare later became a full staff and Head of Department of Theatre Arts of the University of Uyo and dance thrived, though the curriculum remained the same even up to date.

After about a year Bakare moved over to the University of Abuja, thereby creating a vacuum in the dance area. After serving the nation for the mandatory one year National Youth Service Corps in 2001, the writer was employed as a Graduate Assistant in 2001 but took up full responsibilities of the teaching of dance related courses in the Department. This she has done till date and has also been enriched through further training for a Masters and Ph.D programmes in Dance and Choreography. During the

period of her training, between 2003 -2008, her brother and colleague, Ikike Ufford, who teaches Dance and Choreography in the University of Calabar was employed as a Visiting Lecturer to the Univeristy of Uyo to fill in the gap. She returned in 2008 to take over from Ikike Ufford.

This could be represented thus:

| YEAR | | LECTURER |
|------|---|----------|
| 1991-1993 | - | Mrs. Margaret Akpan |
| 1993-1995 | - | Prince Inieke Ufford |
| 1995-1997 | - | Miss. Joyce Adewumi |
| 1998-2001 | - | Mr. Bakare Ojo Rasaki (now professor). |
| 2001-2003 | - | Miss. Ifure Inieke Ufford |
| 2003-2008 | - | Mr. Ikike Inieke Ufford |
| 2008-date | - | Dr. Ifure Ufford-Azorbo |

This has been the situation regarding the teaching of dance in the Department of Theatre Arts, University of Uyo. Again, only the dance courses for the diploma, second year degree and third year degree programmes are compulsory for all students making it three (3) compulsory dance courses but the final year is optional. Here the dance records a very low number of students who register as their stress area. It could be captured thus:

| Date | NUMBER OF STUDENTS (DANCE STRESS) |
|------|-----------------------------------|
| 1991-1999 | 0 |
| 1999-2000 | 1 |
| 2001-2003 | 2 each year |
| 2011-2013 | 3 each year |
| 2014 | 4 |
| 2015 | 2 |

In 2013, the university again employed a Graduate Assistant, who was a dance stress student in the Department of Theatre Arts, University of Uyo, Mr Victor Thompson.

Each personnel in the dance area came in with his or her own convictions about dance and its practice guided by available literature. Some emphasied on ethnic dance technique, some on western dance techniques and yet others proposed a blend. It is important to assert here that true and wholesome dance tutelage comprises of a curriculum which is broad, emphasising skills, knowledge, attitudes and values that the student will need in future practice. It goes way beyond the skills and techniques of just particular dances.

By an integration of education and training, dance teachers and students will move towards a broad understanding of dance arts, developing creativity as a means of communication for everyday living. All learners should be exposed to dance arts generally; the importance of the processes taken to realise the art as well as the product and on the need to recognise and develop marginalised cultural forms.

5.  Challenges of Dance Education in the University of Uyo

The realisation of the ultimate goal of dance education in the University of Uyo is met with several challenges spanning from the curriculum planning and instruction, personnel and professional development, learning environment and studio facilities, assessment standards, to audience engineering and funding. For the purpose of proper enunciation, each will be discussed in detail.

5.1.    Curriculum Planning and Instruction: The curriculum informs what is taught, what students learn and the future of such education. It is what defines the strength or weakness of any course of study and the determinant factor of the final output. The dance curriculum is one that should recognise that all students are exposed to dance arts education as a fundamental part of basic education in the field. This is so because students need the enabling environment and programme to discover their own innate capacity for the communication of ideas, thought and feelings through the medium of dance. It should therefore include creative work, dance forms and techniques, movement skills, dance history, communication and meaning, performance and production, aesthetics and criticism. There should also be an infusion into dance education, of the recognition of dance education as a contributive factor to a healthy lifestyle, as well as the development of individual and social skills. A proper dance curriculum is one that should provide unique opportunities for cross-curricular connections like anatomy, music and so on which should be an inherent benefit of studying dance. Dance is an art which is symbolic of life in its entirety. As an art of movement of the body, dance plays a significant role in the developing life of an individual.

Dance students should explore, perform and create dances from various historical, cultural and social genres in order to increase their knowledge and appreciation of dance and how it relates to other significant components of human history and experience. They should demonstrate the ability to relate dance experience to other disciplines in order to increase knowledge and understanding. It is also necessary to have a curriculum which gives students the chance to explore processes for dance construction through improvisation and organisation of movement based on specific idea, feeling or concept and utilise various processes of dance creation in order to communicate meaningfully. They should identify, analyse and apply various criteria in dance aesthetics in order to develop critical and creative thinking skills.

In considering the aspect of instruction, students should be exposed to opportunities to learn through movement with the incorporation of the auditory (hearing), visual (seeing) and kinesthetic (movement) modalities. Dance being a powerful educational device meets the physical, intellectual and special needs of students. Its education, most especially provides students with exploration, selection, organisation and evaluation experiences which include, movement skill development and refinement, sensory integration, exploration of values and ideas, performance, expression, originality in movement, creative approach to learning, appreciation of cultural and social heritage, critical and creative thinking, aesthetic cognition, development of self esteem, respect for others, healthy work habits, self discipline and direction and skills for a lifetime. These would make a wholesome dance experience.

The situation on ground is a far-cry from the aforementioned need in dance education in Nigeria as a whole and University of Uyo in particular. Some higher institutions do not offer dance courses and others that do suffer from insufficient provision of dance courses and credit hours in the school's curriculum. A glance at the table below shows the heart-rending representation of the dance curriculum in select schools across Nigeria offering a degree programme and an emphatic presentation of the University of Uyo's case.

| UNIVERSITY | DANCE COURSES | TOTAL COURSES/DURATION PER WEEK |
|---|---|---|
| Uyo | • Dance technique<br>• Choreography and KinestheticTechnique<br>• Advanced Choreography and Kinesthetics<br>• Dance in Drama<br>• Formalism in dance. | 5 courses<br>2hrs a week |
| Calabar | • Introduction to Dance and Music<br>• Operatic Forms<br>• Musicology and Story Telling<br>• Modern Dance and Ballet<br>• Choreography and Kinesthetic<br>• Advance Choreography and Kinesthetics<br>• Formalism in Dance. | 6 courses<br>3hrs a week |
| Nnamdi Azikiwe, Awka | • Introduction to Basic Dance Skill<br>• Improvisation and Dance Organization<br>• Dance Theatre in the World<br>• Dance specialization | 4 courses<br>3hrs a week |
| Niger Delta University | • Movement and Choreography<br>• Basic Choreography and Kinesthetics | 2 courses<br>2hrs a week |
| Redeemers University | • Rudiments of Dance<br>• Dance Kinesiology<br>• Dance Kinesiology and Movement Analysis<br>• Theories and Practice of Music 1&2<br>• Choreography: Advance Study<br>• Music Theatre 1&11 | 10 courses<br>2 hrs a week |

| | | |
|---|---|---|
| | • Choreography Advance Practice | |
| University of Ibadan | • Introduction To Theatre: Production Styles (Dance, Music, Drama)<br>• Theatre Arts Forms: Preliminary Survey (Dance, Drama, Music)<br>• Acting, Mime And Movement Or Choreography And Dance (Basic Principles)<br>• Dance Theatre And Music Theatre: Conceptual Studies<br>• Acting, Mime And Movement OR choreography and dance: Intensive Practice<br>• Dance Theatre and Music: Intensive Practice | 6 courses<br>3hrs a week |
| University of Ilorin | • Dance Analysis And Criticism I<br>• Advance Choreography I<br>• Advance Dance Workshop<br>• 20th Century Dance<br>• Dance and Media<br>• Professional Dance Practice<br>• Dance Studies IV<br>• Dance and the Society 1: Town and Gown Confluence<br>• Dance and the Society: Town and Gown Confluence II<br>• Dance and the society III<br>• Intermediate Modern Dance Techniques<br>• Dance Analysis and Criticism 1I<br>• Trends in Contemporary African Dance Practices<br>• Dance Study III<br>• Dance Workshop | 17 courses, 3 hours a week |

Apart from the University of Ilorin dance curriculum, dance studies is lacking in content definition because of underestimation in the curriculum. It is obviously not possible to actualie the goals of producing dance graduates who can stand tall and excel in the practice of their chosen career with such an oversight. This challenge does not give room for an indepth study on a wide range of topics. It has been the practice in the

University of Uyo, over the years to attempt a merger of necessary topics in the course outline but even that is difficult to complete in just about 13 weeks which translates to 26 hours in a semester.

Again, dance education requires a balance in theory and practice but on the Departmental Time Table, only two hours a week is allocated for dance practice but students split into groups to arrange for alternative time and space for rehearsals. They end up creating room from 6am-8am daily for practice. This poses a lot of problems and is rarely adhered to because most times the students have other classes starting from 8am and at other times, students who are not living on campus find it difficult to arrive in time for rehearsals.

Considering the advancement and digital development of the 21st century, dance educational curriculum and instruction must actualise skills discretely in the context of core topics and inter-disciplinary themes. There should be a focus on providing opportunities for the application of skills taught across content areas and for a competency based approach to learning. There should be innovative learning methods that integrate the use of supportive technologies, inquiry and problem-based approaches and higher order thinking skills. A lot is needed to bridge the lacuna created through insufficient representation in the dance curriculum. For as Muyiwa Osonaike, a Brand Ambassador of the Nigeria dance scene opines "dance syllabus alone is about 23 subjects! A theatre technician cannot be a dance technician! You must know how to write, direct and manage dance…. When a dancer is performing, 20 people are working" (Oriade 2014). The curriculum should also be one that encourages the integration of community resources beyond school walls like the Unilorin representation.

5.2. Personnel and Professional Development: Dance education in the tertiary institutions has over the years witness a serious challenge of under-staffing. The dance art is a professional area of stress which requires qualified personnel and services. As mentioned above, the University of Uyo has been grossly under-staffed in the area of dance. Here, dance courses have been handled since inception to date, by one staff at every point in time. This makes work load very heavy on a single lecturer considering the demands of the field. Some institutions co-opt non-dance majors to handle dance courses and sometimes such people do not have the patience to read deep into the course, even those who do, lack practical balance.

There is the need to have Dance Instructors, Dance Therapists, Dance Historians, Librettists, Choreographers and Critics. These are merged into a single individual in the University of Uyo. Specifically, educated teacher-dancers are best placed to offer dance students a safe and comprehensive dance education. In the absence of specially educated teacher-dancers, one can take existing qualified teachers in related fields and give them as much dance and dance education as is deemed necessary to enable them properly enthuse and instruct students with the use of the skills of a professional dancer to work with. The fundamental issue to be taken into consideration here is to recognise the discrete talents and abilities involved in both teaching and dancing. Possession of the one does not automatically confer skill in the other. Dance teachers must be well versed in safe dance practices and efficient kinesiological principles.

These would ensure the manifestation of dance education goals. For as David Surgeon opines,

> It is time that we made sure that tertiary institutions provide programs whereby students may become skilled pedagogues and talented dancers able to excite school students to do dancing, to make dances and to appreciate the rich cultural diversity of our dance heritage (2013:157).

5.3.     Learning Environment and Studio Facilities: The place in which knowledge is imparted has a lot of influence in the level of internalization of the receiver. For dance education to thrive there must be the creation of favourable learning practices, human support and physical environment. There should be, for dance education a well ventilated classroom, spacious enough to accommodate the students comfortably without distractions and discomfort. This will readily create an enabling environment for teaching and learning. The University of Uyo's Department of Theatre Arts as at date has only two lecture spaces for all the programmes undertaken in the department. Some lecturers have to use their offices for lectures. This situation poses a major problem because the rooms are small and sometimes over-crowded with poor ventilation. This creates an unfavourable distraction.

The dance studio is the most important space facility for dance practice. Many universities with the theatre or performing arts discipline cannot boast of a standardized dance studio. This studio is a space in which dancers learn or rehearse. Normally, a dance studio consists of a smooth floor covering or hardwood floor. Some floors are constructed to provide a degree of flexibility to absorb the impact of intensive dance exercise like high jumps and landing. There is also a barre or rail fixed to the wall at approximately waist level to serve as support during movement enactment. There must be a sound system for playing CD's and video mechanism to record and watch dance creations before they are presented to the audience. This will align more with the needs of the 21$^{st}$ century. It is typical for at least one wall to be covered by floor to ceiling mirrors, which are used by dancers to see their body position and alignment. This is necessary for the dancer to correct mistakes, eliminate physical tensions, distortions and untidiness, improve on line, special design and body configurations; ensure appropriate body shape and size, affirm general sensibilities on what constitutes aesthetically pleasing dance positions and possibly enhance the idea of beauty.

The University of Uyo's Department of Theatre Arts, where dance is studied has set aside a space called the dance studio but this space is more like a dead trap. There are no adequate ventilation provisions and in serious practice, this may cause health hazards. There are no railings to aid movement; the floor is covered with rug which gathers dust as it is difficult to maintain and very detrimental to any serious dance movement rendition. The rug hinders free movement and dust gathered affect breathing and may cause serious health conditions. There is not a single mirror placed there even as the ultimate importance of the mirror in a dance studio cannot be over-emphasised. There are no musical instruments or provision of sound and video systems to aid dance. There is no first aid box to ensure that an injury is kept under control. Sometimes the dance studio is turned into dump site for broken props and flats from other parts of the theatre. This is quite discouraging. This makes even students in the 2$^{nd}$ and 3$^{rd}$ years see dance as a burdensome experience and grudgingly go through it only to get their scores.

Once in their final year, they go off to other seemingly less-stressful areas of the theatre leaving a negligible few for the dance stress area. Those who opt for dance are driven by passion and a strong conviction to make a name in this very spectacular field of dance.

5.4 Assessment of Standards: Dance is a course which demands a theoretical and practical balance. There is need in the 21st century to create an assessment standard that supports this balance including high quality standardised testing along with effective classroom formative and summative technique. This will emphasise useful feedback on student performance that is embedded in everyday learning. Present day assessment requires a balance of technology enhanced formative and summative assessment that measure student mastery of 21st century skills for prospective employment. In University of Uyo, the practice has been a formatted 70% grading for theoretical exams and 30% for continuous assessment but for dance, the writer deviced a 50-50 module of theory and practice - 40% practical exams 30% theoretical exams 10% practical continuous assessment and 20% theories for continuous assessment. Assessment strategies should move away from judgmental examinations that function as selection mechanisms. Instead assessment should be on-going, part of learning, informing the learner and teacher of where remediation is needed in forming future practice. It should be about success not failure and should focus on what learners can do rather than on what they cannot do. The teaching method of dance in the University of Uyo has been commendable as it has been different from stories of patriarchal, authoritarian, teacher-driven discipline and specific methodologies. Rather, the experience has been participatory, democratic, integrated learner-centred methodologies. The assumption is that every learner can learn given sufficient time, varied methods and a supportive environment. Individuals are allowed freedom of creation and exhibition through solo performances, duet and group experiments. The emphasis is on empowering the learner, here, the dance and choreography student, to produce, rather than on training the dancer to memorise, copy, conform, and reproduce other people's creations. Learning takes place best when learners participate, have fun, communicate, are unafraid and feel good about themselves.

5.5 Audience Engineering and Funding: All performances are created for the consumption of the audience who come to the theatre to view the presentations. As a group of people who participate in a show or encounter a work of art, audiences are very important inspirators for artistic works. Audience engineering has to do with the modalities involved in getting audience members informed about performances and drawn to the theatre to watch performances. Performers use different media to advertise shows like the electronic media of the television and radio, social networks and print. There is also jungle publicity where performers take to the streets in a somewhat carnival style to advertise their shows.

The University of Uyo dance audience is mostly limited to the University community because productions are underfunded as such the needful cannot be achieved. Students task themselves to put up their practicals, there is no support from the school's management, no sponsorship from individuals and corporate bodies. This way, it becomes a challenge for elements of production to be utilized in their correct proportions and so students may graduate without experiencing appropriate production conditions and audience engineering procedures.

6. Conclusion

In order to improve the operations of dance in Nigeria, the researcher has found it pertinent to make the following practical suggestions and recommendations which will help to reposition, re-engineer and reinvigorate Nigeria's art and culture with particular reference to dance for operational excellence and a new role which will ensure a meaningful economic, moral and social development. Essential to future studies is an examination of the arts in their cultural context. Though the core presentation in their cultural state may be seen as that which does not give room for creative expressiveness, they serve as a launch pad for creative manipulation which in turn enhances the form and enlarges the content value of the presentation. The recognition of dance as an expressive art and to learn, analyse and preserve the movements will facilitate inter-tribal and intercontinental comparisons.

Although the academic study of dance in Nigerian universities started in the 20th Century, its curricular is yet to be harmonized and developed to cover the demands of dance studies. There should be a balance in curricular development. The Performing or Theatre Arts programmes in Nigerian Universities comprise of three major performance genres of dance, music and drama. The curriculum should not be tilted to one section; rather, adequate balance should be created. In the University of Uyo, Music has an independent department leaving drama and dance merged as Theatre Arts. Even under this situation, majority of the courses offered in Theatre Arts Department are drama based with a negligible five (5) as dance based courses in the degree programme. In the University of Ilorin, the three arms belong to The Performing Arts Department and each unit is well developed to a certain extent with a balanced spread. In curricular development for dance art, there should alliance between dance and related fields of music, physical education, medicine (anatomy), engineering and so on.

The curriculum should be developed to cover a diverse range of courses including dance notation, human anatomy, physics, dance history and cultural aspects of dance. It should include the study of one or more dance genres including formal genres such as ballet, ballroom, contemporary, jazz, Latin and Tap dance, informal and social genres such as Live, Freestyle and Sequence dancing.

Dance programmes should be made relevant to the needs of society in order to bring the town and gown together for human development. The curriculum should allow for an experience and analysis of the role of the mass media in popular arts and its impact on multiple forms of communication and expression. Artistic skills should importantly acknowledge, understand and promote historically marginalised arts and cultural forms and practice.

There should be exchange programmes between schools studying dance to stay in tune with nascent developmental strides in the art world. There should be the provision of audio-visual and computer studio for the advancement of dance practice.

In the development of our modern theatrical forms, dance suffers relative neglect possibly because of the wrong notion that everybody can dance. As a result, few universities have dance as core course and there are few dance teachers who are scantily spread round the few universities that offer dance courses. This results in the relative lack in scholarship and publication that this very important area of the performing arts, experiences. For these conditions to be corrected, dance should be accorded due

recognition as a unique and important art form worthy of study. It should be taken as a serious academic discipline from the elementary levels through to the universities. Dance artists should be employed mostly at the college and university levels to create a better understanding and acceptance of dance development in the contemporary setting to reflect the thoughts and beliefs of the present. They should also be encouraged to undertake studies in the forms and content of traditional dances and to teach their students in order to be culturally relevant and to keep these forms alive. This is necessary because the theatre arts departments of Nigerian universities need more dedicated competent and innovative danced teachers and choreographers who would not only develop a technique for teaching African traditional dances but also forge a style of contemporary African dance for the theatre.

Dance artists in our culture are noted to be non-verbal about their creations. This is understandable because, in dance one is dealing with a non-verbal medium. As such, the processes set in motion, the actual creation and execution, conceptually and technically are very difficult to translate into words. This is in total agreement with Dark's notion that " the use of words generally is only a summation, or symbolic summation, of what in actual fact goes on and is likely only to approximate to the nuances of all that goes into the activity of artistic creation" (1973:40). This notwithstanding, for their works not to remain forgotten or worse still unknown, dance teachers and instructors should be encouraged to put their talents and experiences into writing, in order to make new compositions available for the benefit of students, interested practitioners, locally and internationally, and the public. They should be sponsored on studies and workshops at home and abroad to broaden their horizon regarding the new trends in dance art the world over. They should be able to research and come up with their individual, objective and unbiased interpretation of forms for optimal transfer of knowledge.

To effectively arrive at a structure of the subject matter of dance for the educational level seems to be a problem. For this reasons, dance is not well entrenched in the academic programme. This is capitalised upon by many critics to demean and question the virility of the field. This, in turn, tampers with the reputation of dance and choreography as a discipline and as an art form. The universities must arrive at an appropriate structuring of curricular on the subject matter of dance with a wider use of good dance films and written teacher's guide to aid dance education and practice.

The National Universities Commission, Colleges of Education, The Ministry of Education, National Policy on Education and other relevant authorities should come up with a policy on school curriculum that will develop children from the primary school in the art dance through secondary level, and at the university level, they will study with a confidence derived from foundational advantage. With these and more, taken into consideration, dance education will excel with manifold advantages towards the development of humanity.

Dance is an art form worthy of intellectual exploration. This study examined challenges faced in the study of dance in Nigeria with particular reference to the University of Uyo experience. These challenges are shaped by ideological trends as posited by Udoka (2012) thus

> The first challenge is ideological; the substructure has not created the bulwark for the people who want to get into dancing to grow…That ideology has other elements in religion, some religions abhor dance, others accept dance, and they don't see it as an important cultural element, as a capital for development (3).

These trends are subject to the interplay of immense forces which fundamentally alter the artistic landscape of dance. These forces include education, economy, cultural infrastructure, demographic change, societal values, growth of the arts and political environment. This is one major art form which operationally avails the people with a better understanding of the attitudes, beliefs, feelings and yearnings of people in different cultures and at different times as it reflects the generality of life. It is indeed an attestation to the fact that dance is an art worthy of sincere study and practice.
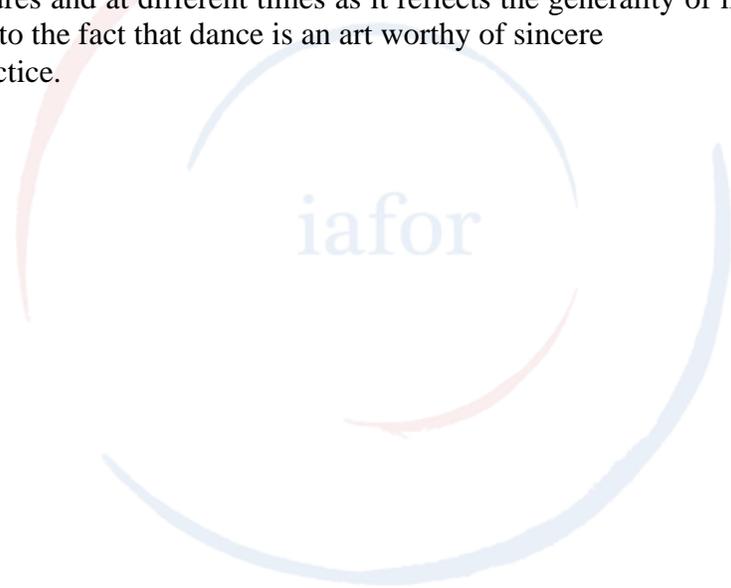
References

Ajayi, F. 1986. Nigerian stage dances: a historical perspective. Paper Presented at the National Symposium on Nigeria Dance, University of Ibadan, Ibadan. (7th – 11th July, 1986).

Dark, P. J. C 1973. An Introduction to Benin Art and Technology. Oxford: Clarendon Press.

Esimone, C. 2013. Awka Journal of Research in Music and the Arts. Vol. 9. July, 2013. Agatha Onwuekweed, ed. Awka: The Department of Music. 206-214

Oriade, Ayomide. 2014. Brand Personality. Brand Power Magazine. Retrieved from www.brandpowerng.com/Nigerianbrands. 13th February, 2014

Sheets-Johnstone, M. 1979.The Phenomenology of Dance. London: Dance Books. Thomas, H. 1995. Dance, Modernity and Culture: Explorations in the Sociology of dance. London: Routledge.

Udoka, Arnold (2012) The Beauty of Nigerian Dance is the Pilosophy Behind them. Retrieved

from bivnze.wordpress.com 13th July, 2012. Ufford-Azorbo, Ifure (2012) "Dance in the Context of Other Art Forms". The Parnassus:

University of Uyo Journal of Cultural Research Vol. 8, Stephen Inegbe (ed). University of Uyo Cultural Research Forum, Uyo. Pp153-173.

# *Using Peerwise to Improve Engagement and Learning*

Biggins D, Bournemouth University, UK
Huseyin Dogan, Bournemouth University, UK

**Abstract**

This paper assesses the experiences of Bournemouth University in using the online multiple choice question (MCQ) tool, Peerwise, in student learning and engagement.

MCQs are excellent for developing and testing knowledge, providing reassurance and identifying development needs. The creation of MCQs reinforces learning by tasking students to generate challenging questions. Peerwise supports self-direction and flexibility, which is embraced by students.

Bournemouth University started embedding Peerwise within teaching units in 2014. The intention was to transform the approach of students towards the non-assessed elements of the unit. Peerwise was used in an undergraduate business unit consisting of 50 students over at 15 week period. 804 questions were created and 3,345 answers were recorded. 10% of the unit marks were allocated to Peerwise use. Qualitative feedback from students was very positive. Correlation analysis showed a very weak relationship, 0.120, between the number of questions answered and the overall unit mark. Self-assessment of the change in learning was statistically significantly better for students who used Peerwise compared to those who did not.

Overall, the evaluation of the Peerwise was positive with many lessons learnt. Six recommendations for the further use of Peerwise were developed, including improving the scaffolding to students, refining the way quality is assessed and developing evaluation criteria.

Keywords: Peerwise, MCQ, student engagement, gamification, technology-enhanced learning

iafor

The International Academic Forum
www.iafor.org

## Introduction

The engagement of students in the learning process has received a great deal of attention in education literature. Different cognitive levels of engagement can be characterised on a continuum from surface learning which has low engagement to deep learning in which there is a high level of cognitive engagement (Bloxham 2007). Low engagement can lead to poor learning outcomes because the students' focus is often on how to pass the unit rather than engaging more deeply in the subject matter (Entwistle, 2000).

The influence of assessment on students' focus and attention is well documented by authors such as Biggs (2003). By choosing appropriate assessment strategies, students can be encouraged to take more interest in and develop a strong understanding of their subject. In addition to assessment, good teaching requires active student participation in the learning process engendering student independence and control over the learning process (Ramsden, 2003 as cited in Denny, Luxton-Reilly & Hamer et al., 2008).

The purpose of this paper is to provide a case study of the use of the learning tool, Peerwise, in an undergraduate unit in the 2014-15 academic year, as a solution to low student engagement in the non-assessed components of the unit. The appropriate use of this blended learning environment, which integrates teaching and online learning, was intended to transform the approach of students to the unit and improve the learning experience (Prosser & Trigwell, 1999). The intended outcome of using Peerwise was to deepen students' knowledge of project management in ways that could be quantitatively and qualitatively measured.

This paper begins with a description of the teaching unit in which Peerwise was used and then explores the current levels of engagement and the benefits of improving engagement. The benefits of technology enhanced learning (TEL) are then highlighted and a description of the Peerwise tool is provided. How Peerwise was trialled at Bournemouth University is followed by an explanation of how it was embedded in the unit and assessed. Data on the use of Peerwise during the semester is presented. The paper concludes with an evaluation of the use of Peerwise and a set of recommendations for its future use.

## Background to the unit

At Bournemouth University, Advanced Project Management (APM) is a 20 point, final year, undergraduate unit that forms part of the BA in Business Studies (BABS) programme. The unit spans one semester (15 weeks) and there are typically 60 students per annum.

The intended learning outcomes (ILOs) seek to widen and deepen students' knowledge of project management, understand multiple perspectives and help students to make a positive contribution in project environments that can be uncertain and fluid. The unit is assessed solely by coursework; 25% for a group presentation and 75% for individual activities.

The delivery of the unit consists of one lecture of two hours and a one hour seminar each week. Each lecture typically concentrates on an aspect or theme within project management using a variety of techniques including slides, student activities and guest lectures. The seminar focuses on the same topic as the lecture and permits more interaction and discussion with students often framed around the set course text or a relevant case study.

While a tutor-led, didactic model is used for most material, teams of four students are asked to prepare and present on a topic in project management. The student-led, collaborative presentations actively engage students to interact deeply with their chosen topic. Their experience of presenting is also used as a practice to prepare them for a summatively assessed element of the unit in which the same team presents a different topic in project management. Another positive outcome of that deeper learning was that many students chose to continue with similar topics in their dissertations written at the end of their final year.

**Levels of student engagement**

End of unit feedback from APM students in the previous year had shown that the practice presentation was enjoyed by students. The assessment was seen to possess the key attributes of transparency, feasibility, reliability, validity and to be aligned to the unit's objectives (East, 2010). Having spent a year on a work placement prior to commencing their final year of study, students understood the benefit and need to develop good presentation skills and the positive effect this can have on their employability. Students understood clearly how the activities, outcomes and assessment connected. The assessment was constructively aligned (Biggs, 2003) and this explains why engagement was high for this component.

As the three other summatively assessed elements derived the remaining 75% of the unit mark, students were very driven to complete the activities. However, the level of engagement from students, as subjectively perceived by the tutor and supported by student feedback, was lower than for the presentation. This decreasing trend in student engagement was evident in those elements of the unit that represented project management threshold concepts (Meyer & Land, 2006), content which was not assessed. For these topics, in the opinion of the tutor, the absolute level of engagement was low. This view was supported by a mid-unit assessment which demonstrated low levels of recall of material covered in the first 6 weeks of the unit. While some students approach project management with a deep learning aim (Bloxham, 2007), enjoy the subject and have high motivation and engagement, the tutor's perception was that this approach is not universal. Many students appeared to adopt a surface approach to learning (Race, 2015) for those elements that had low constructive alignment because they are were assessed. From the student perspective, this was not an unreasonable approach. Students want to perform well at university and have other projects, units and a myriad of other activities that vie for their attention and form component parts of their overall student experience.

**Increasing engagement**

The focus of this paper is on one approach that was adopted to increase student engagement in the elements of the unit that are not summatively assessed. Engagement can take many forms such as student-tutor contact, cooperation between

students, promoting active learning, providing prompt feedback and respecting diversity and ways of learning (Chickering & Gamson, 1987). The tutor has a major role in engagement. Conventional teaching sees the expert tutor dispensing knowledge to passive students and motivating them using extrinsic techniques such as grades and praise. In student-centred learning the student is given the responsibility for planning what and how to learn. The tutor takes the role of guide and facilitator and the students are motivated and engaged by intrinsic interest and a sense of ownership.

Establishing communities and emphasising student-centred working is very much a constructivist approach to education. Immersed in this environment, students construct their own meaning through incremental learning, building and amending the knowledge in their minds, and reflecting on their interactions with others in a social context (Huxley-Binns, 2015). This very personalised approach supports students in developing knowledge in ways that are appropriate as they undergo individual transformations (Biggs & Moore, 1993). Students are encouraged to learn for themselves, be self-reliant and take some responsibility for their learning (Bruner, 1990).

As face-to-face time with students is limited, solutions to the issue of engagement were sought that took advantage of the benefits of technology and supported students in transforming their learning.

**Benefits of technology enhanced learning (TEL)**

TEL is defined as the use of computers and networks to support the learning process (Shepherd, 2013). Many studies have shown the benefits from using technology to support learning with the key benefits listed by Draper (2009), Overton (2013) and Universities and Colleges Information Systems Association (UCISA) (2014) as:

- Students learn faster
- The material can be accessed at times suitable to the student and on multiple occasions
- More students can be reached than with lectures and the material is scalable for large groups
- There can be no or low cost implications because the infrastructure is often already in place
- Students enjoy using technology

As a result of these benefits, student satisfaction and engagement can improve. For these reasons, a TEL tool that supported student-led learning was sought for the APM unit and Peerwise was chosen.

**What is Peerwise?**

Peerwise is an online repository of multiple choice questions (MCQs) that students create, share and answer. In creating questions, students indicate the correct answer and a number of wrong or distracting answers. Question creators should also provide an explanation for why the answer is correct with some students going further to explain why the distractors are incorrect. Students are encouraged to rate questions

according to difficulty and quality. Questions can be tagged to group them into themes and categories which are searchable when answering questions, a feature which allows students to target their use of Peerwise to specific areas of their learning. Students earn virtual trophies for their work in Peerwise and this acts as a motivational factor. Leveraging the benefits of gamification, leader boards of the students who have created the best questions and those with the most correct answers engage participants and encourage frequent access.

The MCQ, which is at the heart of Peerwise, has proved to be a very effective device in the learning process. Tulving (1967) evaluated three different learning strategies: study – test – study – test; study – study – study – test; study – test – test – test. Of the three approaches, Tulving found the third (study – test – test – test) to have much greater effectiveness than the alternatives. A similar study concluded that "repeated retrieval of information is the key to long-term retention" (Karpicke & Roediger, 2007 p. 151).

Providing timely feedback to students is very important (Gibbs & Simpson, 2006). As soon as a student answers a question in Peerwise, they discover if they are correct and also see how other participants have answered the question. This immediate feedback indicates a student's level of understanding of the topic and allows a comparison with peers. Self-assessment facilitates knowledge development (Luxton-Reilly, Denny, Plimmer, & Sheehan, 2012). Identifying areas of uncertainty or gaps in knowledge has been acknowledged as important in indicating areas for future improvement, optimising what has been learned and raising attainment (Hounsell, 2007, Sadler, 2013).

Hanrahan (1998) reported that the control the educator has over the learning process and curriculum demotivates students. For the student, Peerwise promotes a self-directed, independent approach to learning where the student takes the initiative to formulate and achieve goals they set for themselves, determines the quality of their own work, the quality of the work of others and successfully filters information to satisfy their needs (Luxton-Reilly, Denny, Plimmer, & Sheehan, 2012). The success of self-directed learning initiatives can dependent on how the learning is framed (Foley, 2000). Studies show that Peerwise provides an effective frame to encapsulate this learning for students (Denny et al., 2008).

From the tutor perspective, Peerwise increases student involvement in teaching and learning. Co-creating with students benefits the institution because of the fresh perspective brought by students, whilst students benefits through the sense of empowerment they attain (JISC, 2014). Using Peerwise, tutors can also monitor whether a particular topic is causing problems for students allowing interventions to be made that are timely and effective. For a tutor, Peerwise can be highly efficient as it has a low maintenance demand and high student engagement (Walsh, Denny & Smith, 2015).

While there are many applications that provide similar functionality, Peerwise was chosen because it is stable, continues to be developed, is free to use, is accessible to staff and students and has generated support in literature for the benefits it offers in student learning (Denny et al. 2008; Denny, 2010; Luxton-Reilly et al., 2012; Walsh et al., 2015). One approach to incorporating MCQs in the APM unit would have been

to evaluate all the contending products and then choose one or two to trial. The approach taken here was to undertake a proof of concept test to gain some experience in using the software.

**Peerwise trial**

This trial involved 10 people (including staff, students and university learning technologists). A *project management repository* was created within PeerWise and participants were then asked to use the tool and subsequently comment on their experience via a survey. Whilst only small in size, the survey of the trial participants generated a positive view of Peerwise and echoed the findings of other, larger surveys that had been undertaken in other institutions (Denny et al., 2008). Table 1 lists the survey's 7 main findings:

| Nr | Finding |
|----|---------|
| 1 | Accessing Peerwise was easy and use was intuitive. No training was needed. |
| 2 | Peerwise aids revision (100% agree or strongly agree) and builds understanding (100% agree or strongly agree). |
| 3 | Earning trophies is motivational (70% agree). |
| 4 | Peerwise identifies gaps in knowledge (100% agree or strongly agree). |
| 5 | 24 hour access to Peerwise gives flexibility (100% agree or strongly agree). |
| 6 | For tutors, 90% said Peerwise would be useful for some or all of their units. |
| 7 | On a scale of 1 to 10 where 1 is very poor and 10 is excellent, students scored Peerwise at 7.6. One same scale, the tutors' score was 7.2. |

Table 1: Findings from the Peerwise trial

In addition to the physical trial, literature was also searched for guidance. The checklist of 67 resource-based learning materials and processes (Race 2015) proved a useful assessment tool for projects such as Peerwise. Using subjective assessment Peerwise scored well against the checklist but not in every criterion. The gaps highlighted where additional work was required, for example, what to do if the software was not available to students because the server was down. Other potential deficiencies, for example the quality of questions, were addressed in the scaffolding session with students (described below).

As a result of the trial, it was decided to utilise Peerwise within the APM unit and to use this experience to learn about the benefits of online collaborative applications, so that an informed decision could be taken about their usefulness and wider application within Bournemouth University.

**Embedding Peerwise in the APM unit**

Building on the experience of the trial and reflecting on the experiences of other institutions, a plan was developed to embed Peerwise within student learning. Before the unit began, a repository was established in Peerwise and student identifiers were generated, so that the students were able to create Peerwise accounts and link to the APM repository. Linking the student account to the identifier prevented any student from outside the APM unit from accessing the material in the repository.

In the second week of the unit, a two hour scaffolding session was held with all students to set and communicate expectations about Peerwise to students. The scaffolding session had 8 components. These are described in table 2. The scaffolding session was well received by students. Of the 7 areas, most time was spent discussing quality.

| Nr | Area | Explanation |
|---|---|---|
| 1 | Rationale | The reasons for using Peerwise were explained. The high level of constructive alignment was reinforced in the minds of students. |
| 2 | Functionality | How to access Peerwise. Account creation process. How to create, find, answer and rate questions and other features of Peerwise. Explanation of anonymity and identification (eg leaderboards). Trophies. |
| 3 | Quality | Examples of good and poor quality questions were discussed to promote "Good design practice" (Beetham, 2013, p. 278). The quality of a question is the extent to which a question is an effective and efficient means to acquire the knowledge required for the unit (Denny, Luxton-Reilly, & Simon, 2009). This is a workable definition that was comprehendible by students. In terms of the SOLO taxonomy (Biggs, 2003) it was suggested that questions should tend towards the higher levels that are relational and require students to integrate, analyse and apply their knowledge. Questions at the other end of the taxonomy, that are unistructural and test memory and recognition, were expected and required but these were to be less prevalent in the repository. It makes intuitive sense to provide examples for students however they may not be necessary. Purchase, Hamer, Denny, & Luxton-Reilly, (2010) report how a repository of adequate quality was created by students without any instruction on what constitutes a quality question. |
| 4 | Creativity | With the ability to embed video and images within Peerwise, students were encouraged to unleash their creativity. Dull questions, it was stated, were unlikely to engender a positive view of Peerwise (Shepherd, 2013). |
| 5 | Parameters of use | It was explained that there would be one week of practice use. The repository would then be wiped and it would then be live until the end of the semester. |
| 6 | Assessment | Explain the mechanism for assessing student engagement. (See table 3 below) |
| 7 | Issue resolution | As this was students' first use of Peerwise, details were given of the process by which any issues could be highlighted and managed. |
| 8 | Feedback mechanism | This section explained how students could feedback their views on Peerwise. |

Table 2: Components of the scaffolding session

It was anticipated that the students would raise concerns about the pedagogical assumption that students were good teachers of other students but no such issues were raised by this cohort. While students have implicit trust in tutors, they are less trusting in the knowledge of their peers. However, students' trust in tutors can lead to acceptance of what is said without any critical assessment, behaviour which acts to suppress deep learning in students (Draper, 2009). One study found that students are effective judges of question quality and that there is a willingness to accept the judgements of other students when choosing questions to answer (Denny et al., 2009).

Concerns were raised about the quality of questions created in Peerwise. With no tutor to oversee the questions, will students create simple, poor or incorrect questions? These potential problems have in-built solutions within the Peerwise application. If students create poor questions, they will be rated as such by fellow students and these questions will be bypassed by students looking for better quality questions. If students indicate the wrong answer to a question, feedback from other students is likely to encourage the question creator to revise and correct the question, due to perceived peer pressure, competition or an inherent desire to be viewed as knowledgeable and accurate by class colleagues.

Figure 1 shows how Peerwise was to be used throughout the semester and in association with other unit elements. Students were asked to create questions based on weekly lectures, their own presentations and any other questions linked to project management, for example, recent news reports that contained aspects relevant to the unit.
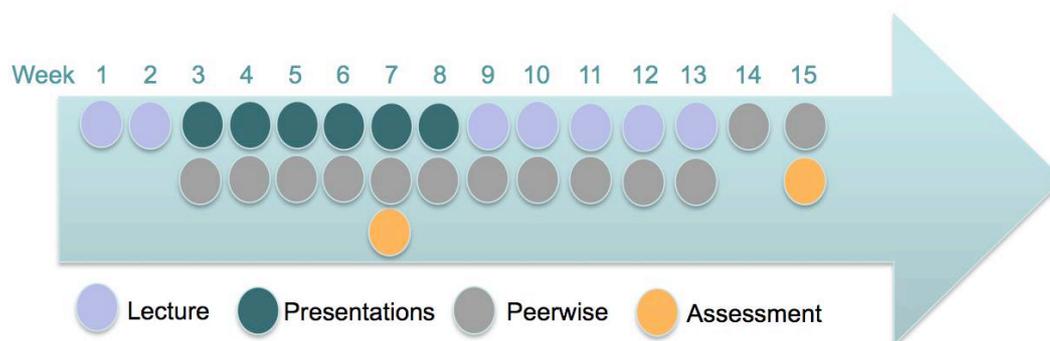


Figure 1. How Peerwise integrated into the unit

**Assessment**

To encourage students to use Peerwise, the assessment strategy for the unit was changed to allocate 10% of the unit mark for Peerwise use. A maximum of 10 marks were allocated to the most active and highest achieving students based on quality of question, with fewer marks being awarded for less engagement (Table 3).

| Marks | Criteria |
|-------|----------|
| 4 | For creating 5 questions and answering 10 questions correctly. |
| 6 | For creating 10 questions and answering 20 questions correctly. |
| 8 | For creating 15 questions and answering 30 questions correctly. |
| 10 | For being in the top 15% of students based on the quality of question as voted by other students. |

Table 3: Assessment criteria

**Use of Peerwise during the semester**

After the practice period, the repository was available to students between 13 October 2014 and 31 January 2015. During that period, 50 of the 52 eligible students used Peerwise. No student raised any issues with the use of Peerwise during the semester. The usage figures are shown in Table 4.

| Parameter | Total | Mean | Standard deviation | Range |
|-----------|-------|------|--------------------|-------|
| Questions contributed | 804 | 16.1 | 2.0 | 11 – 24 |
| Answers submitted | 3,345 | 66.9 | 61.9 | 30 – 380 |
| Comments | 66 | 1.3 | 2.5 | 0 – 11 |
| Distinct trophies | 427 | 8.5 | 3.4 | 4 – 19 |
| Trophies (including duplicates) | 941 | 18.8 | 15.0 | 4 – 88 |
| Answers per question | 3,273 | 4.1 | 4.0 | 0 – 20 |
| Questions ratings | 2,897 | 3.6 | 3.7 | 0 – 20 |
| Average rating | | 1.8 | 1.2 | 0 – 5 |
| Days of distinct activity | | 7.0 | 7.3 | 1 – 46 |

Table 4: Usage metrics

Note that there is a difference between the number of answers submitted and number of answers per question. This difference is caused by the dynamic nature of Peerwise. For example, a student may create a question that is answered by students. The question raiser may then delete that question causing an imbalance between the two parameters.

16 tags relating to project management were created at the start of the semester. In addition, students could create their own tags. By the end of the semester, the tags had been used 665 times and 83% of questions had been tagged. Tagging of questions was useful as students could search for questions based on this metadata and thus target their learning in specific areas. A tag cloud was available showing the tags and approximately how many questions used each tag.

Charts depicting, by day, the number of questions contributed and answers submitted are displayed in figures 2 and 3 respectively.
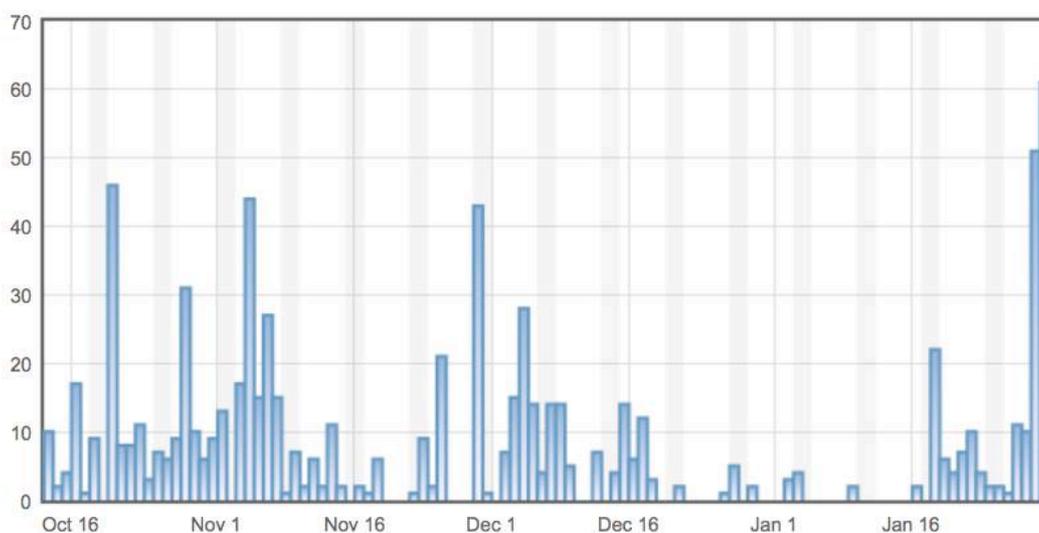


Figure 2: Number of questions contributed by day
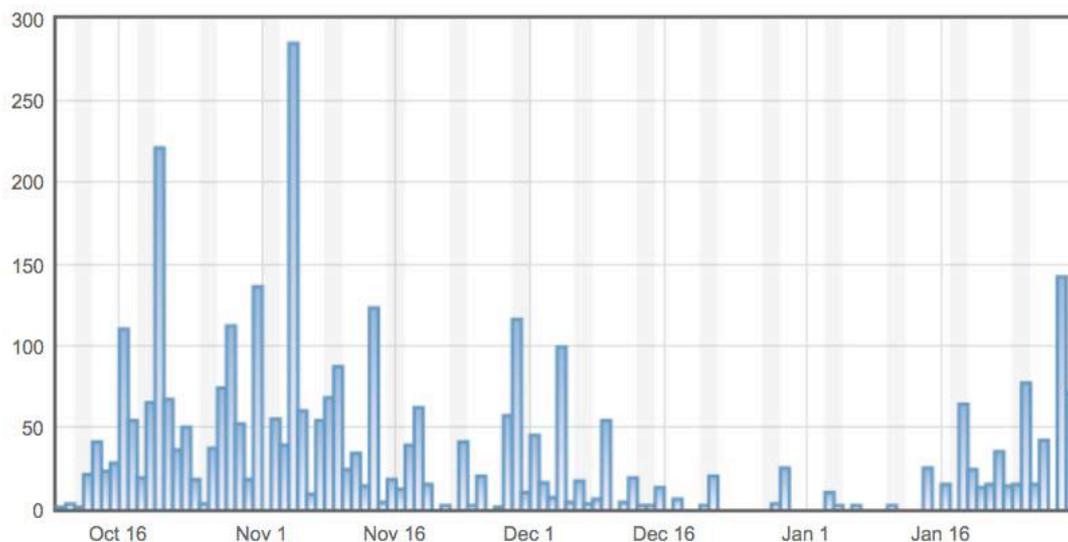
Figure 3: Number of answers submitted by day

## Evaluation

Draper (2009) highlights that the use of TEL, such as Peerwise, is only beneficial if teaching methods are improved as a result. Evaluating Peerwise was difficult because, other than the performance measure related to compliance with the assessment requirements, no criteria were established to derive objective measures of its effectiveness. There are however a number of subjective and qualitative points that can be made as shown in the Evaluation Table below:

| Nr | Aspect | Comment |
|---|---|---|
| 1 | Overall success (tutor's view) | From a tutor perspective, the use of Peerwise in the APM unit was a success. The application was used by 96% of students. Two students failed to engage in Peerwise and also in the unit as a whole due to external circumstances. Of the students who did engage, 96% attained the criteria to gain 8 marks of the 10 possible. Two students failed to reach this level because they created 11 and 14 questions respectively, mistakenly believing they had created the requisite 15 questions. All students answered at least 30 questions correctly. The upper range for this metric was 385 questions answered by one student during the semester. 6 students answered more than 100 questions. |
| 2 | Identifying the top 15% of students | Data on student participation and the number of correct answers was available within the Peerwise administration function. Supplementary data was obtained from the Peerwise support team to allow the top 15% of students to be identified. The fact that students could not access this data themselves reduced its use as a motivator. |
| 3 | Question creation | Figure 2 reflects how several students waited until the end of the usage period to create questions. 112 |

| Nr | Aspect | Comment |
|---|---|---|
| | | questions (14% of the total) were submitted in the last two days. This helps to explain why 115 questions were not answered by any student. |
| 4 | Rating of questions | 87% of answers included a rating. No clear guidelines were included for rating. |
| 5 | Knowledge building | Two assessments were undertaken which tried to evaluate the whether knowledge has been increased through the use of Peerwise.<br>1. At the beginning and end of the semester all APM students completed a knowledge self-assessment of their competence in project management across 64 knowledge areas. An independent samples t test was conducted to evaluate the hypothesis that the change in the self-reported level of knowledge (calculated as the difference between the two self assessments) for students using Peerwise would be higher than for students who did not use Peerwise. The data from 67 students consisted of 8,025 data points. The mean change score for non-Peerwise students ($M = 0.546$, sd $= 0.331$) was statistically significantly lower ($t = -2.385$, $df = 65$, one-tailed $p = 0.01$) than that of Peerwise users ($M = 0.726$, sd $= 0.284$). This test showed that Peerwise users had a greater increase in the change in their knowledge during the semester. This could be attributable to a number of factors including Peerwise, but also the different cohorts, self-reporting bias and other factors.<br>2. A Pearson's correlation was calculated to determine if there was any significant relationship between the student's overall unit mark and the number of questions answered in Peerwise. The correlation between unit mark and questions answered is $+0.120$ which is not significant, meaning that there is a slight, even random relationship between these two variables. The APM correlation is low when compared to others studied. For example, a study of medical students by Abdullah and Nor (2014) found much stronger correlation coefficients, between 0.634 and 0.739, for the relationship of Peerwise activity and unit mark. |
| 6 | Overall students' feedback | At the end of the semester, students were asked to complete an online questionnaire about their Peerwise experience. 13 students did so. These students ranked Peerwise 7.9 out of 10 (1 is poor and 10 is excellent) for the usefulness of Peerwise. Using a 5 point Likert scale where 5 equated to 'strongly agree' and 1 to 'strongly disagree', students gave the following responses: Easy account creation ($M = 4.5$, sd $= 0.5$); No training needed ($M = 4.7$, sd $= 0.9$); Adequate speed of response ($M = 4.1$, sd $= 0.8$); Creating questions builds knowledge |

| Nr | Aspect | Comment |
|----|--------|---------|
|    |        | required for the unit (M = 4.0, sd = 1.2); Creating questions builds understanding (M = 4.6, sd = 0.5); Creating distractors is challenging (M = 4.2, sd = 0.8); Trophies are motivational (M = 4.0, sd = 1.4); Access progress against peers (M = 3.5, sd = 1.3); Highlights new information (M = 4.0, sd = 1.0). While Peerwise was not universally appreciated by all students, the questionnaire feedback suggested was of a positive student view of Peerwise. |
| 7 | Group and individual use | It was found that some students worked in groups to create and answer questions. While not originally envisaged, students commented that the discussion and engagement with other students that accompanied the activity was very rewarding. |
| 8 | Peerwise username and password | Peerwise is an application separate from the University's virtual learning environment (VLE). It would be easier for students if Peerwise was integrated within the VLE so that the username and password required for Peerwise were the same as for the VLE. |
| 9 | Preparation for exams | While there are no exams in the APM assessment, several students commented that Peerwise would be very useful as a learning aid for exams. |
| 10 | Engagement in Peerwise | The days of distinct activity metric shows how one student used Peerwise on 46 distinct days. The average was 7 days of use with 3 students completing all their engagement within a single day. |

Table 5: Evaluation

**Recommendations for further use**

The experiences gained and reflective evaluation of Peerwise in the APM unit have been combined to generate a set of recommendations for the future use of the application within Bournemouth University. The six recommendations are detailed in Table 6.

| Nr | Recommendation | Link to Table 5 | Rationale |
|----|---------------|-----------------|-----------|
| 1 | Further develop the scaffolding for students | 3, 4, 7, 10 | Utilise the experience gained to improve the way Peerwise is explained to students. |
| 2 | Raise the awareness of colleagues | 1, 6, 7, 9 | Make more staff and learning technologists aware of Peerwise so that they may evaluate its use for themselves. |
| 3 | Develop evaluation criteria | 5 | While students believed Peerwise was helpful in their learning, it was not possible to demonstrate this other than qualitatively. Considering how Peerwise can be evaluated would provide support to recommendation 2. |
| 4 | Change the way in which marks are allocated for Peerwise use | 2 | Adopting a more transparent and simpler scoring mechanism will improve students' ability to self-assess. |
| 5 | Developing higher order thinking | 4 | Peerwise has a quality scale that ranges from 0 (very poor) to 5 (excellent). Linking the quality scale to Bloom's taxonomy (Anderson & Krathwohl, 2001) will encourage students to think about the type of question being asked eg 1 may be equated with remembering type questions where 5 would relate to a question where the student needs to synthesise information to answer the question. Alignment with the taxonomy would mean that students can choose the type of question to answer and develop their higher order thinking (Kesaria, Panchal, & Kominski, 2015). |
| 6 | Integration in VLE | 8 | Investigate the ability to use the same account details. |

Table 6: Recommendations for future use

**Conclusion**

The authors have been impressed with the initial deployment of Peerwise and much has been learnt during the period. It is hoped that the experiences detailed in this paper will help others who decide to follow a similar path. The authors will continue to implement Peerwise within the University and take forward the recommendations that resulted from this initial use of the application.

The extent to which Peerwise helped to increase engagement in the non-assessed elements of the unit is unclear. The level of engagement from most students complied with the assessment requirements to guarantee 80% of the available 10 marks. Questionnaire feedback from students was mostly very positive and anecdotal feedback was supportive and encouraging. The low level of correlation between questions answered and the overall unit mark shows that more work is needed to investigate how Peerwise can add value to students.

The authors are currently developing several connected papers based on Peerwise; the first considering how the recommendations were implemented in other teaching units that incorporated Peerwise and the second addressing how the effectiveness of Peerwise can be evaluated.
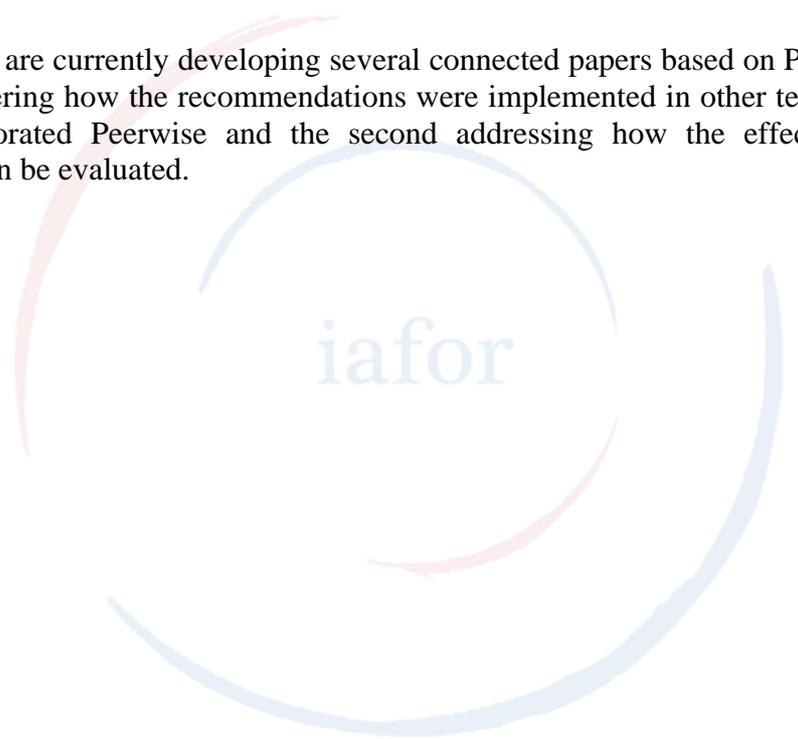
**References**

Abdullah, M. H. N. & Nor, H. M. (2014). The Impact of Peerwise Approach on the Academic Performance of Medical Students. *Malaysian Online Journal of Educational Technology,* 2(4), 37-49.

Anderson, L. W.& Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing*. New York, NY: Longman.

Beetham, H. (2013). Designing for learning in an uncertain future. In H. Beetham & R. Sharpe (Eds.) *Rethinking pedagogy for a digital age: Designing for 21st century learning* (2nd ed.) (pp.258-279). Abingdon: Routledge.

Biggs, J. & Moore P. (1993). *The process of learning*. New York: Prentice Hall.

Biggs, J. (2003). Aligning teaching and assessing to course objectives. *Teaching and Learning in Higher Education: New Trends and Innovations*, University of Aveiro, 13-17 April, 2003 .

Bloxham, S. (2007). *The busy teacher educator's guide to assessment*. Retrieved from http://dera.ioe.ac.uk/13028/

Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE bulletin*, *3*-7.

Denny, P, Luxton-Reilly, A, & Hamer, J. (2008). Student Use of the PeerWise System. In *ITICSE `08: Proceedings of the 13th Annual Conference on Innovation and Technology in Computer Science Education,* Madrid, Spain, 30 June – 02 July 2008 (pp. 73-77). New York, NY: Association for Computing Machinery.

Denny, P. (2010). Motivating Online Collaborative Learning. In *ITiCSE '10: Proceedings of the 15th annual conference on Innovation and technology in computer science education, Ankara, Turkey, 26-30 June 2010* (pp. 300-300). New York, NY: Association for Computing Machinery

Denny, P, Luxton-Reilly, A & Simon, B. (2009). Quality of student contributed questions using Peerwise. In ACE '09: Proceedings of the 11th Australasian Conference on Computing Education, Wellington, New Zealand - Volume 95 (pp.55-63). Darlinghurst: Australian Computer Society.

Denny, P. (2013). The effect of virtual achievements on student engagement, In *CHI '13: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 28 April – 2 May 2013, Paris France,* (pp. 763-772). New York, NY: Association for Computing Machinery
Draper, S W. (2009). Catalytic assessment: understanding how MCQs and EVS can foster deep learning. *British Journal of Educational Technology*, 40(2), 285-293.

East, R. (2010). *Effective assessment strategies in law*. Coventry: UK Centre for Legal Education (UKCLE), Retrieved from http://78.158.56.101/archive/law/resources/assessment-and-feedback/effective/index.html

Entwistle, N. (2000). Promoting deep learning through teaching and assessment: conceptual frameworks and educational contexts. In ESRC Teaching and Learning Research Programme (TLRP), First Annual Conference, University of Leicester, November 2000.

Foley, G. (2000). Understanding adult education and training. Sydney: Allen and Unwin

Gibbs, G. & Simpson, C. (2004). Conditions under which assessment supports students' learning. *Learning and teaching in higher education*, 1(1), 3-31.

Hanrahan, M. U. (1998). *The effect of learning environment factors on students' motivation and learning*. International Journal of Science Education, *20*(6), 737-753. Retrieved from http://eprints.qut.edu.au/1352/#?

Higher Education Academy (2012). *The UK Professional Standards Framework for teaching and supporting learning in higher education 2012*. Retrieved from http://www.heacademy.ac.uk assets/documents/ukpsf/UKPSF_2012_v2_050912_1044.pdf

Hounsell, D. (2007). Towards more sustainable feedback to students. In N. Falchikov & D. Boud (Eds.) *Rethinking assessment in higher education* (pp.101-13). London: Routledge.

Huxley-Binns, R. (2015). Law. In H. Fry, S. Ketteridge, & S. Marshall (Eds.) *A handbook for teaching and learning in higher education: Enhancing academic practice* (pp. 311-325). Abingdon: Routledge.

JISC (2014). *Students as agents of change*. Retrieved from http://www.jisc.ac.uk/guides/students-as-agents-of-change.

Karpicke, J D & Roediger III, H L. (2007). Repeated retrieval during learning is the key to long-term retention. *Journal of Memory and Language*, 57(2), 151-162.

Kesaria, J M, Panchal, H K & Kominski, C. (2015). *Peerwise Study for Assessment of Higher Order Thinking in Students*. UNT Health Science Center Research Appreciation Day 2015. Retrieved from http://digitalcommons.hsc.unt.edu/rad/RAD15/Education/4/

Luxton-Reilly, A, Denny, P, Plimmer, B, & Sheehan, R. (2012). Activities, affordances and attitude: how student-generated questions assist learning. In *ITiCSE'12 - Proceedings of the 17th ACM Conference on Innovation and Technology in Computer Science Education, 3-5 July 2012, Haifa, Israel.* New York, NY: Association for Computing Machinery

Meyer, J H F & Land, R. (2006). Overcoming barriers to student understanding. London: Routledge.

Overton, L. (2013). Getting the business on board. *In*: R. Hubbard (Ed) 2013. *The really useful elearning instruction manual*. Chichester: John Wiley.

Prosser, M, & Trigwell, K. (1999). *Understanding learning and teaching: The experience in higher education*. Buckingham: Society for Research into Higher Education & Open University Press

Purchase, H., Hamer, J., Denny, P. & Luxton-Reilly, A. (2010). The quality of a PeerWise MCQ repository. ACE '10: Proceedings of the Twelfth Australasian Conference on Computing Education, Brisbane; Australia, - Volume 103 (pp. 137-146). Darlinghurst: Australian Computer Society.

Race, P. (2015). *The Lecturer's tooklit*. London: Kogan Page.

Sadler, D R.(2013). Opening up feedback: teaching learners to see. In S. Merry, M. Price, D. Carless & M. Taras (Eds.) *Reconceptualising feedback in higher education: Developing dialogue with students* (pp. 54-63). Abingdon: Routledge.

Shepherd, C. (2013). So what is elearning? *In* R. Hubbard, (Ed.), 2013. *The really useful elearning instruction manual* (pp. 1-18). Chichester: John Wiley.

Tulving, E. (1967). The effects of presentation and recall of material in free-recall learning. *Journal of Verbal Learning and Verbal Behavior*, 6(2), 175-184.

Universities and Colleges Information Systems Association (UCISA). (2014). *Mobile learning: How mobile technologies can enhance the learning experience.* Retrieved from   https://www.ucisa.ac.uk/publications/effective_use.aspx

Walsh, J. L., Denny, P. & Smith, P. E. (2015). Encouraging maximal learning with minimal effort using PeerWise. *Medical Education*, *49*(5), 521-522. doi:10.1111/medu.12720

**Contact email:** peerwise@bournemouth.ac.uk

# Moodling English Presentation Skills: A Constructivist Instructional Design for Thai Adult Learners in Distance Education

Watsachol Narongsaksakul, English Program, School of Liberal Arts, Sukhothai Thammathirat Open University, Thailand

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**
Beyond traditional undergraduates, Thai adult learners from diverse backgrounds in higher education lack a firm foundation in spoken English. The prevalent mode of distance learning limits the opportunities for utilizing life-experience and fostering presentation skills in English to the fullest possible extent, when compared to a face-to-face classroom. The Moodle platform has created a richer, collaborative learning experience by incorporating a powerful technology-based environment to their coursework with self-initiated topics. With a constructivist approach, learners refine necessary presentation skills from individual task assessments provided by instructors. This presentation focuses on the experiences and challenges of using e-learning in case-based teaching of the English language. Research methods included questionnaires and oral assessments from twenty-five senior English major undergraduates taking the "Effective Presentations in English" course at Sukhothai Thammathirat Open University. Knowledge construction is encouraged through the two required assignments, which account for 40 percent of the course grade. The initial written formative assessment determines students' necessary skills prior to demonstrating a five-minute oral presentation video embedded on YouTube as the final assignment. The online activities will be presented to illustrate the application of the model from the e-learning activities. The study shows positive impacts on the students' language performance and speaking ability, as well as an enhanced enthusiasm for learning.

**Keywords:** adult learning, educational technology, online course, constructivism, English (foreign language), public speaking, distance education

## Introduction

Adult learners favor a specific type of online course to model presentation skills in English for their professional development. Technology-based courses have become an economically viable and convenient option and play a future role in distance learning. With the Moodle platform, English major learners deepen their understanding of English presentation skills and develop a high degree of interactivity through the course design. This presentation introduces the features of adult in learning presentation skills in English and constructivist design for e-learning will also be explored. Following this discussion, the organization of a constructivist design for learning English presentation skills will then be placed within the context of Thai adult learners. This study presents a framework of constructivism in distance learning courses with recommendations for designing an online environment to meet the needs of adult learners, relying on the concept of lifelong learning.

## Related Literature

### Learning English presentation skills as adult learners

Adult learners have unique needs and characteristics in the context of learning. Knowles (1989) stated that adult learners are capable of engaging themselves in self-directed learning. Compared to traditional university graduates, they are more independent, autonomous and self-reliant towards goals (Cercone, 2008). They also possess a variety of life and work experiences and new knowledge can be best learned when it is integrated into their real-life contexts (Huang, 2002). Adult learners present a constellation of learning processes with close application of their studies to their work, as learning presentation skills are essential in their future careers (Merriam, 2014).

Giving an oral presentation is one of the most preferable means to assess learners' oral communication skills in English language instruction, followed by responding to question orally, describing and reacting to visual prompts, and story-telling. The presentation features are sequenced openings and closings, introduction of new topics and topic shifts, and use of natural conversation (Khamkhien, 2010). Learning outcomes predicts what learners will gain as a result of learning. Thus, a clear relationship between learning outcomes and assessment should be identified. Scoring rubrics are commonly used for accessing learners' speaking performance regarding pronunciation, grammar, vocabulary, content, fluency, and comprehension (Stevens & Levi, 2004).

However, it has been argued that the rubrics are more linguistic competencies oriented towards measuring rather than conversational competencies (Kormos, 1999). Assessing the overall oral English performance of the learners is outweighed as English language proficiency is not the sole requirement for making a good presentation. Effective presentation is on the condition that learners are comfortable and feel at ease, more importantly holding the audience's attention is the key factor. Although, some learners' exposure to English is relatively low outside the virtual classroom, non-native English speakers employ better strategies in preparing presentation. (Anderson, 2013)

English language learning in distance education is a major issue for adult learners. Non-traditional learners encounter complex psychological and English language learning barriers to complete higher education (Rose-Adams, 2013). Oral presentation skills are difficult to master even after years of study at the Thai university level for the following reasons:

 1) **Lack of confidence.** Adult learners are prone to underestimate their ability to learn due to being away from systematic education (Hamp-Lyons, 1991). In addition, they face a new challenge of isolation and reduced interaction using asynchronous learning in a foreign language in comparison to the face-to-face classroom (Bouhnik & Marcus, 2006). Consequently, this lack of confidence prevents them from being engaged and fully developed their English skills in the delivery presentation of English in the academic context.

 2) **Lack of motivation.** Carrying out individualistic and research-type work regarded as essential to their life skills is uncustomary. Thai learners are generally intolerant of the inflexibilities of independent study as they have adopted learning methods appropriate to the examination-based system (Bankowski, 2010). The approach of second language acquisition emphasizes the cognitive process both in the situational and inner process factors. English major courses are predominantly taught in English. Nevertheless, learners are unlikely to acquire the skills for critical thinking and deliver oral presentations successfully in English.

 3) **Lack of vocabulary and understanding of intercultural communication.** Learning English as a second language is assumed to be systematic between knowing and using the language form. The variations of the communicative demand require different types of discourse in each task (Albert, 2011). Instructors generally use non-authentic and uninteractive speaking tasks to assess learners' communication abilities. It appears that learners are unable to present their ideas in their own original and creative ways in particular situations.

**Constructivist theory and online learning instructional design**

Instructional course design practices have shifted from objectivism to constructivism. The behavioral principles cannot define the acquisition of high level skills whereas cognitive conceptions can influence ineffective abilities of learners. Constructivism is referred as "meaningful learning". The constructivist learning theory postulates that knowledge can be constructed individually and socially, re-constructing based on their interpretations of experiences in the world through collaboration and social negotiation (Bonk & Cunningham, 2004; Bonk & Graham, 2014). Constructivism is a notion that the active role of learners is building understanding and making sense of the information, the knowledge occurs when the learning is tailored made for them.

Constructivism can be categorized in two folds: psychological and social views of knowledge construction. Piagetian constructivism is formed by transforming, organizing, reorganizing previous knowledge (Piaget, 1951). On the contrary, Vygotskyian constructivism is formulated through social interaction. Psychological constructivism provides opportunity to support and reflect in presenting content and practicing the English language (Vygotsky, 1987).  Learners are actively involved in knowledge construction rather than mere passive learners. Providing more advanced

media through the online course design, learners are capable of exploring richer information by audio and visual experiences. Through the online platform, learners notice the transmission of multiple verbal and non-verbal cues, natural language as well as the conveyance of emotions and feelings. Learning is constructed individually, based on participant's prior experience and collaborative contribution.

Social constructivism is characterized by online interaction and engagement in the course. This is on the condition that students are able to access the forum tasks. Thorpe (2008) stated that the course design facilitated a genuinely social constructivist pedagogy resulted in high levels of student satisfaction and engagement. Course interaction allows participants to develop successful learning communities. The prevalent English-medium curricula course design has generally failed to encompass the learning experiences of Thai students. When implanting the English language as a medium of online course instruction, it is essential to examine holistic understanding of learners and adapting curricula to the real world of local students (Dewy, 1938).

Online learning focuses on a communicative language approach and an engaging environment resulting in adequate practice of English speaking skills (Yoo & Huang, 2013). The Moodle application contains tools that support activities for collaborative environment. The instructors' roles are virtually providing assistance as well as feedback to learners' work regarding the developments of the participant's language skills, but also helping with the video recording, which enables learners to rehearse and make their presentations more cohesive.

The compromising approach is to investigate a way to enable instructors to facilitate learner-centered and authentic online interactions, as comprehensive activates are already embedded into module design and assessments. English major courses are predominantly taught in English. The course instructional design has been a move towards including forum and activities in online modules that contribute to formative and summative assessment (Yoders, 2014). Learners should possess the ability to acquire the skills for critical thinking and deliver oral presentations successfully.

A constructivist course design is not without challenge. Both self-directed and collaborative learning are required for learners to complete their learning activities with online interaction. Lack of student engagement is problematic unless it is made compulsory (Kirkwood & Price, 2005). Considering the constructivist approach, learners have ownership of the learning process with minimum supervision, and take responsibility for their oral skills. As a result, learners may have overwhelming trouble taking responsibility for their own pace.

**Pedagogical techniques in English language learning online**

Technology-based instructions have advanced the delivery method for open distance education. Learning speaking skills has been limited in course management system (Stephenson, 2001). The need for a unique structure with flexible features of an online course based on the implications is neglected. The researcher's belief was to create a rigid online course that learners are given rich and interactive academic oral skills in the English language. This would lead to development of more effective alternative of helping adult learners achieve their fullest possibility of learning. It is necessary that

learners demonstrate oral presentations in an online learning environment, even though the instructors and learners are in different geographic locations. The instructional modules should be carefully designed to help prepare learners for the presentation in academic and professional settings. The details of the course are presented further in this paper.

## Course design and implementation

Adult learners prefer to be active participants in all phases of learning. Long (1986) alleged that the process of applying andragogical principles in entire programs encourages them to become self-directed, pro-active, and life-long learners. Individual learning activities establish a climate conducive to adult learning in the following criteria: an organizational structure for participative planning; the diagnosis of needs for learning; the formulation of directions of learning the development of a design of activities; the operation of the activities and the evaluation of needs for learning.

Incorporating new technology offers different responses to learning in colleges and universities. Moodle is a learning management system (LMS) that has a large learning curve for learners and instructors. The Moodle model curriculum has tremendously increased in popularity (Moore and Kearsley, 2012). This practical design is derived from a constructivist framework for learners to work through a typical step for presentation preparation. Successful learning is on the condition that the instructors select course activities that match with the course objectives. The instructional learning activities share common elements of involving  learners to engage, think critically, express their ideas through writing, receive feedback and reflect upon the learning process (Eison, 2010).

The pattern of oral skills is fostered during the course with the direct input of the multimedia content provided, rather than showing that learners had acquired or mastered those skills at an earlier time. Topics were suitably narrowed since students were required to submit them for the instructor's approval before preparing their presentations. Similarly, there was a requirement that students use references in preparing and presenting their assignments. Outlines including introductions, conclusions and other fundamental structures of their work are clearly given in the instructions.

With the increasing number of online courses, investigation of the activities that motivate adult learners continue to grow. Applying the constructivism approach through the Moodle platform provides a dynamic learning environment for learners by involving themselves in the presentation of the subject matter (Saba, 2008). The general guidance and study help guide them to make 5 minute presentation videos to show the understanding of the subject.

Poor instructional design fails to maintain learners' attention. The importance of employing learning strategies is to maximize their active learning. Adults should be able to scaffold their learning through interaction between learners and the instructors, and among the learners themselves (West et al, 2013). Scaffolding promotes self-reliance and greater performance of the activities that they were unable to perform. Language learners need to be exposed to the English language, communicate in the English language, negotiate meaning and testing rules and get feedback (Krashen, 1992).

Smith & Colby (2007) found that solely teaching materials and design of the online course limited students to surface learning. Learning environments designed around tasks promote deeper learning outcomes. Therefore, existing courses should be regularly revised to incorporate learning tasks that will result in deeper learning experiences.

The course contents, objectives and course syllabus are provided at the beginning of the course. Each learner is required to create an individual access account, complete their profiles and discover different constituents of the course. During the course learners were going through the resources and activities to work on their own presentation topics with clearly defined goals and the use of electronic tools, while communicating with course mates. News and forums post the numerical results, show new discussion topics posted by students, as well as the number of participants.

Developing different task options helps learners understand the content by working on their difficulties and bypass them in language learning interaction. This inter-relational framework is in accordance with their potential activities and their interests. Learners are able to take part in enriching activities unlike habitual drilling practices. Moore (2013) stated that language acquisition is closely related with distance education and learning theories. Oral presentation skills are developed into academic discourses from a variety of activities:

### 1) Module activity (Inference)
The different media elements are used in the course material integrating text, video audios and graphics. The sequence of the activities is implemented by the logical connection of the content (Baralt et al. 2004). To visualize structures and concepts of presentation skills in English, participants were given numerous examples modelled by using mind map, course content, and external resource links to make a successful presentation.

### 2) Pretest and posttest ( Formal practice)
The self-evaluation method can help develop critical thinking and the monitor process. Learners complete pretests and posttests in each module to check their understanding of the structured content in each module. These tests also can help learners evaluate themselves with the answer key.

### 3) Course assignment (Monitoring)
Participants are able to maximize the study from 2 assignments and obtain feedback. Participants are required to write their presentation outlines and record a 5 minute YouTube presentations based on different topics. These help learners recognize the difference of English language used in written and spoken forms. Receiving explanation from elaborate feedback is positively associated with student achievement. Recording the video is advantageous, as the learners have the opportunity to repeat themselves and regulate their speech on the presentation. YouTube facilitates self-evaluation as they can record their speech, provide sound and dynamic visual which give learners the

opportunity to make a meaningful connection to the English language and presentation content (Boonsai et al., 2010).

### 4) Discussion forum (Functional practice)
The forum boards are provided to share ideas and promote collaborative discussion. Communication among course participants creates cooperation and handles conflict throughout the course.

## Aims of the Study

The aim of this study was to explore learning strategies from adult learners' use of oral skills that have occurred during their last year at university. The unique specific online course design was delivered to 25 English major participants as a part of their program requirement, and through questionnaires and feedback from instructors during the 2014 academic year. It was anticipated that that the results of this course would be evident in the effective oral skills that are necessary to perform the required tasks that are produced by the adult learners.

This study intends to address the following 2 research questions:
1.  Do constructivist design and effective English presentation skills have a positive correlation in adult distance education?
2.  What learning activities favor online adult learners from constructivist course design?

The compilation of recommendations for the design of the online learning environment for adult learners is based on the theories presented in this article. These theories provide a foundation for organizing current knowledge.

## Study Settings and Participants

This comprehensive study was conducted at Sukhothai Thammarthirat Open University (STOU) in Nonthaburi. STOU has been the pioneer in distance education in Southeast Asia region since 1978. To provide a gateway to further education opportunities for working adults across Thailand, STOU has continuously evolved with transformations of distance education based on print technology, audio and video technologies, applications of telecommunications technologies, online delivery as the latest basis (Boyle, 1995; White, 2003). STOU has established 10 regional centers that are situated in major cities throughout Thailand to maximize access for the learners and to facilitate the teaching and learning processes.

The English program was founded in 2006. There are currently 14 online undergraduate courses in the School of Liberal Arts (SLA) offered by the English program. The program has a curriculum structured across 4 years with the online courses. The "Effective English Presentation" course on Moodle platform focuses on demonstrating oral English language skills at an intermediate level. In order to register for the course, a student is asked to pass the foundation English courses in the SLA. This course carries six credits with eighteen weeks per semester. The learners are provided with 15 self-study modules. The course requires participants to follow the course schedule consistently. The evaluation of the course is 40 percent from online assignments and 60 percent from the final examination, with a maximum of 100 percent available. Participants are required to obtain at least 60 percent to pass the course.

## Methodology

For the purpose of this study, an online survey questionnaire was developed for data collection. The methods employed to gather survey results were an email invitation along with an electronic-based survey. The list of email address was derived from the course user profiles. The questionnaire consisted of 6 parts: demographic information, syllabus design, online instructional activities, presentation outcomes and learning activities, and instructional design elements.

## Findings

To understand the case as a whole, this study relies on combining resources: questionnaires and feedback from instructors. Participants expressed their points of view of different aspects on the questionnaires: participants' backgrounds, the presentation skills outcomes, and learning activities. The participants had to decide whether they agreed with the statements. The responses received are in rating scale of disagree (1) to strongly agree (5). The data obtained in the questionnaires from 25 participants were transformed into tabular numerical data. Means and standard deviations relating to each item were then calculated (Swian et al., 2011). Feedback from instructors was extracted from the participants' assignments. This made it possible to determine the perceptions of their oral skills from the course.

## Participants' background

According to the scaling method, the 25 undergraduate learners responded to the questionnaire. Out of those respondents 72% (18) are female, and 28% (7) are male. From the sample, the average age of 42% of the participants was 40-49 years old. The average time of study was 6-10 hours per week for 36% of the participants. The result indicated 36% spent less than 5 hours per week.

## Presentation skill outcomes

From the results, learners overwhelmingly indicted the constructivist design enhanced their oral presentation skills as shown in Table 1.

| Topics | Mean |
|---|---|
| You are able to research the presenting topics and use references appropriately. | 4.08 |
| You are able to introduce a topic to the audience (using topic knowledge/linking/transition). | 4.2 |
| You are able to outline your ideas and grab attention (using written/spoken language). | 4.08 |
| You are able to stay focused at the presentation stage (using body language, eye contact, and voice). | 3.84 |
| You are able to construct visual aids and use them effectively. | 3.92 |

**Table 1: Presentation outcomes (N=25)**

In this study, participants interacted through asynchronous modes; exploring various aspects of oral English skills from instructors' feedback. They appeared to link the subject matter of their talks, using questions, comments, and related information from their lives and their professions. However, their statements were sometimes irrelevant or only slightly connected to their main points made and sometimes contributed little to the purpose of their presentations. They were able to address their audience according to their outlines directly. Most learners seemed to be at ease and less reliant on their notes. They are capable of using their own words and, in contrast to the previous written assignments, the majority of them made a clear effort to involve the audiences throughout their talks by using questions and comments.

Considerable change was discovered in uses of presentation language and visual aids. The great majority of students used appropriate forms of visual aid, to support their outlines. Some learners simply used photographs related to the topics. In the YouTube video assignment, all of the students made better use of the visual aids, explaining them more fully and linking them more effectively in their presentations.

**Learning activities**

Learners are satisfied with asynchronous interaction (time delayed online course) and reported a high level of social engagement. Based on the results, the assignment feedback is highly perceived as aiding to master their presentation skills followed by the discussion forum, pretest and posttest, and activity module. Concerning the key development of oral presentation skills in English, they feel their digital competency increased as shown in Table 2.

| Activities | Mean |
|---|---|
| Discussion form | 3.2 |
| Assignment feedback | 2.64 |
| Pretest and posttest | 2.12 |
| Activity module | 2.04 |

**Table 2: Rate learning benefits of the online activities (N=25)**

This study provided a positive virtual environment using technology-based environment. Participants are pleased with their time spent and work management. The participants acquired language skills from the course. Their progress was remarkable and positive for English language learning. However, some key aspects should be reinforced, for example, active discussions and linguistics competence.

The results indicated that learning became collaborative, rather than simply receiving of information. Collaboration with instructors and peers showed strong dynamic computer-mediated learning in conjunction with the delivery of the content. As online learning is conducted with individuals and has dependence of place and time, learners are able to make a progress on their oral presentation skills in English from their online experience.

## Discussions

## Constructivist approach

The primary consideration of instructors as they design online learning environments should be that each learner is unique. Understanding adult learning theories is also important, as it generates a dynamic learning environment. Saba (2012) posited that transactional distance varies throughout the learning process of the interaction between learners and the instructors as well as the interaction, and among learners. The instructor needs to be open with each student and respect each person as an individual who has experience that may be valuable to the virtual classroom.

The study results reported undergraduate constructivist instructional course design fulfills a skill-based English course. The course consists of an input (module activity and forum discussion) and opportunities for output (pretest, posttest and course assignment). Learners self-sufficiently work on their English presentation skills and know material well enough to communicate, rather than being dependent on instructors. Language acquisition and autonomy are supported as learners take advantage of English language learning from the reciprocal structure in an online learning environment (Andrede, 2014).

## Presentation skills

The results showed an increase in learners' overall presentation skills in the major areas of organization, content, and delivery. It can be seen that changes occurred through the working on written assignments over the semesters. The presentation contents were organized and well-prepared; in the same way learner were able to successfully link or integrate their outlines, introductions, and conclusions to the main content of their assignments.

Despite the course requirements, a small number of learners were unable to perform oral presentations across their assignments. It is possible that the difference in the types of topic selected in the outlines of their video presentations was a cause. A number of learners chose a more descriptive topic which was easier to formulate ideas and conclude their thoughts.

In the context of providing deeper learning environments, learning experiences were crucial for designing learning materials with real life experience in mind and situating them in authentic tasks. It was evident that the learners emphasized fluency rather than merely focusing on accuracy on YouTube presentations. Adults respond less readily to external sanctions for learning than to internal motivation (Knowles, 1989). Learning is concerned with engagement and communication. The paradigm changes in that learning is not just knowledge transfer, but rather skills development in authentic developments (Aksal et al., 2008).

## Learning activity outcomes

The primary consideration of instructors as they design online learning environments should be that each learner is unique. Understanding adult learning theories is also important, as is being able to change and accept change in a dynamic learning environment. Ellis (2003) stated that sequencing tasks that are suited to learners' development levels allows them to choose resources to arrive at their task outcomes. Online communities offer learners deeper learning opportunities, continuous monitoring, assessment of students' performance during their learning process, and provide feedback that impact the success of students' English language learning (Albert, 2011).

### 1) Assignment Feedback
Feedback includes information about one's learning from instructors. Providing feedback is considered to be one of the most effective strategies to promote student achievement (Wheatley, 2015). In online learning environments, students need validation of deeper learning from traditional methods of assessment. Individual formative feedback increases oral English skills.

### 2) Discussion Forum
Acquiring the new concepts from the course materials and obtaining different thoughts posted online are preferable. Learner discussion forums are the source of dialogue that provides opportunities for both rule-testing and meaning negotiating (Long, 1996). The constructivist designed course was found rich and helpful. The learners tended to meet their expectations on the flexible instructional design.

### 3) Module Activity
Learners recognized their linguistic deficiencies of not having available language for the tasks required from subsequently using designed activities to successfully promote language development from the tasks (Fosnot, 2005).

### 4) Pretest and Posttest
The degree of individuals applied skills were uniform, leaners were able to work on sequencing activities provided in each module at just above their learning level without help. Having reasonable challenges and specific expectations of performance served as guide for designing the tasks. The constructive cognitive complexity of the same types of tasks promoted learners' abilities to learn and in automation of learners' linguistics resources (Baralt et al., 2004)

Learning activities facilitated a holistic learning experience by balancing between the flexibility available online in which information is accessed, processed, and shared that which is discussed in collaboration with peers. Asking questions result in problem solving, establishing relationships, and choice. Smith & Colby (2007) argued that learners who move beyond surface learning consider any given task as a series of internal rhetorical questions. Increasing meaningful dialogue occurs in environments in which participants are open to other people's views and acknowledge each other's roles and feelings.

**Online course**

Thai adults have made the transition from conventional learning practices to Moodle-based tools that are used in the curriculum, which prepares and competitively positions the average learner for the future. The learner should be involved in the design process that supports any learning initiatives to meet the expectations of learners (Lowden et al, 2013). The online course strategy and guided, step-by-step, instruction play an important role in raising students' awareness of the individualistic learning process, which increases the confidence and ability to present academic tasks. The nature of the tasks required in the course determines the success of the online program. Students must perceive the work as interesting, related and useful to their personal development, and relevant to their longer-term goals.

**Concluding Thoughts**

This online course was designed as a pilot version and delivered in the Moodle learning environment for English majors at STOU. This study elaborates on the challenges of learning through technology in higher educational institutions in Thailand. The constructivist approach was examined in two sections: the relative presentation skills and the benefits of the activity. Each dimension constitutes a continuum along with learners' language skills achievements. The application of the framework illustrates positive development of oral presentation skills. The participants felt increasingly confident with their English presentations as non-native English speakers. The online learners appreciated the exchange of thoughts and cordial relations with other learners. The online activities must be emphasized for effective language learning. Learners' positive perceptions of this course are related to the sense of self-facilitation, whereas providing feedback on the assignments appears to be weak. Leaners are expected to receive responses from both instructors and course members to encourage enthusiasm throughout the course.

It is evident that students' learning originated from different sources. The students' oral productions recorded digitally enable them to show their competencies and become aware of their own development. This systematic collection of evidence promotes learning and allows for different assessment procedures. The assessment criteria are clearly presented based on the submission of their written tasks.

**Limitation and Future Directions**

The study was to explore the learners' presentation skills in English taught in the online environment. The findings of this study depict a better understanding of learning techniques in open distance education using the constructivism theory to ensure the success of the English course. There are a number of limitations in this study. The research was restricted to a relatively small sample of Thai adult learners. It was a specific sample of the English majors. The online environment may not be truly conducive to effective learning for English presentation courses under a constructive perspective. The benefits of using technology-based courses are not restricted to the area of English language acquisition. The constructivism design offers a theoretical lens into an innovative in educational approach. It is essential for instructors to investigate other effective avenues for teaching presentation online.

Another alternative is adoption of synchronous learning, where the instructors and learners can meet in real time. Moodle has turned passive courses into virtual learning spaces. With a special focus on strategies particularly in the virtual classroom, the more creative idea is to have learners give a presentations through video conferencing and others could be presenting face-to-face to course mates. Versatility and flexibility in online courses are to be exploited as much as possible.

## References

Aksal, F. A., Gazi, Z. A., and Isman, A. (2008). A comprehensive look into the learners' transferable skills related to constructivist approach, *World Applied Sciences Journal, 4 (4),* 558-567.

Albert, Á. (2011). When individual differences come into play: The effect of learner creativity. In P. Robinson (Ed.), *Second Language Task Complexity*. Amsterdam: John Benjamins.

Anderson, W. (2013) Independence Learning. In M. G. Moore (Ed.) *Handbook of Distance Education.* New York: Routledge.

Andred, M. S. (2014). Course-embedded student support for online English language learners. *Open Praxis*, 6 (1), 65-73.

Bankowski, E. (2010). Developing skills for effective academic presentations in EAP. *International Journal of Teaching and Learning in Higher Education, 22 (2)*, 187-196.

Baralt, M., Gilabert R., Robinson, P. (2004). *Task sequencing and instructed second language learning.* New York: Bloombery Academic.

Bonk, C. J., & Cunningham, D. J. (1998). Searching for learner-centered, constructivist, and sociocultural components of collaborative educational learning tools. In C. J. Bonk & K. S. King (Eds.), *Elec collaborators: Learner-centered tech's for literacy, apprenticeship, and  discourse* , (pp. 25-50). Mahwah: Erlbaum.

Bonk, C. J. & Graham, C. R. (2004). *Handbook of blended learning: Global perspectives, local designs.* San Francisco: Pfeiffer Publishing.

Boon Sai, G. T., Wei Lin, A. L., and Belaja, K. (2010). Five institutional reasons adult distance learners find it difficult to learn the English language via distance education. *Malaysian Journal of Distance Education*, 12 (2), 15-31.

Bouhnik, D. & Marcus, T. (2006). Interaction in distance learning courses. *Journal of the American Society for Information Science and Technology*, 57 (3), 299–305.

Boyle, R. (1995). Language teaching at a distance: From the first generation model to the third. *System, 23*(1), 283 – 294.

Cercone, K. (2008). Characteristics of adult learners with implications for online learning design, *AACE Journal*, 16 (2), 137-159.

Dewey, J. (1938). *Experience and education*. Toronto: Collier-MacMillan.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: Oxford University Press.

Eison, J. (2010). *Using active learning instructional strategies to create excitement and enhance learning.* Retrieved from https://www.cte.cornell.edu/documents/ presentations/Eisen-Handout.pdf

Fosnot, C. T. (2005). *Constructivism: Theory, perspectives, and practice.* New York: Teacher College Press.

Jurāne-Brēmane, A. (2014). Formative assessment on the Moodle platform. *Vocational Education: Research and Reality,* (25), 226-230.

Hamp-Lyons, L. (1991). Scoring procedures for ESL contexts. In L. Hamp-Lyons (Ed.), *Assessing second language writing in academic contexts*, (pp. 241-276). Norwood: Ablex.

Huang, H. (2002). Toward constructivism for adult learners in online learning environments. *British Journal of Educational Technology*, 33 (1), 27-37.

Keengwe, J., Onchwari, G., and Agamba, J. (2014). Promoting effective e-learning practices through the constructivist pedagogy. *Education and Information Technologies*, 19 (4), 887-898.

Khamkhien, A. (2010). Teaching English speaking and English speaking tests in the Thai context: A reflection from Thai perspective. *English Language Teaching*, 3 (1), 184-190.

Kirkwood, A., and Price, L. (2005). Learners and learning in the 21st century: What do we know about students' attitudes and experiences of ICT that will help us design courses? *Studies in Higher Education*, 30 (3), 257-274.

Knowles, M. S. (1989). *The making of an adult educator: An autobiographical journey*. San Francisco: Jossey-Bass.

Kormos, J. (1999). Simulating conversations in oral-proficiency assessment: A conversation analysis of role plays and non-scripted interviews in language exams. *Language Testing*, 16 (2), 163-188.

Krashen, S. (1992). *Principles and practice in second language acquisition.* New York: Pergamon Press.

Long, M. (1996). The role of linguistic environment in second language acquisition. In W. Rictchie and T. Bhatia (Eds.), *Handbook of Second Language Acquisition*, (413-468). San Diego: Academic Press.

Merriam, S. B. (2014). *Adult learning: Linking theory and practice.* San Francisco: Jossey-Bass.

Moore, M. G. (2013). The theory of transactional distance. *In M. G. Moore (Ed.) Handbook of Distance Education* (pp. 66-85). New York: Routledge.

Moore, M. G. & Kearsley, G. (2012) *Distance education: A systems view of online learning.* Belmont: Wadsworth.

Long, H. B. (1983). *Adult learning, research and practice.* New York: Cambridge Book.

Lowden, K., Jurković, R., and Mozelius, P. (2013). How to motivate adult learners through e-learning: Some key insights from research case studies. *Proceedings of the European Conference on e-Learning*, 266-273.

Piaget, J. (1951). *Psychology of Intelligence*. London: Routledge.

Rose-Adams, J. (2013). Leaving university early: Exploring relationships between institution type and student withdrawal and implications for social mobility, *Widening Participation and Lifelong Learning,* 15 (2), 96-112.

Saba, F. (2008). Learning management systems of the future: A theoretical framework and design. *Journal of Online Learning and Teaching*, *4* (2), 158-168.

Saba, F. (2012). A Systems approach to the future of distance education in colleges and universities: Research, development, and implementation, *Continuing Higher Education Review*, 76, 30-37.

Smith, T. W. & Colby, S. A. (2007). Teaching for deep learning. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *80* (5), 205-210.

Stephenson, J. (2001). Learners- managed learning: An emerging pedagogy for learning online. In J. Stephenson (Ed.), *Teaching and Learning Online: Pedagogies for New Technologies* (pp.219-224). London: Kogan Page.

Stevens, D. D. & Levi, A. J. (2004). *Introduction to rubrics: An assessment tool to save grading time, convey effective feedback and promote student learning.* Virginia: Stylus.

Swain, M., Bygate, M., and Skehan, P. (2001). *Researching pedagogic tasks: Second language learning, teaching, and testing.* Abingdon: Longman.

Thorpe, M. (2008). Effective online interaction: Mapping course design to bridge from research to practice, *Australasian Journal of Educational Technology*, *24* (1).

Vygotsky, L. (1986). *Thought and language.* Cambridge: MIT Press.

West, R. E., Hannafin, M. J., Hill, J. R., & Song, L. (2013) Cognitive perspectives online learning environments. In M. G. Moore (Ed.) *Handbook of Distance Education.* New York: Routledge.

Wheatley, L. (2015). Feeding back to feed forward: Formative assessment as a platform for effective learning, *Kentucky Journal of Higher Education Policy and Practice*, 3 (2), 1-29.

White, C. (2003). *Language learning in distance education.* Cambridge: Cambridge University Press.

Yoders, S. (2014). Constructivism theory and use from 21st century perspective. *Journal of Applied Learning Technology,* 4 (3), 12-20.

Yoo, S. J., and Huang, W. D. (2013). Engaging online adult learners in higher education: Motivational factors impacted by gender, age, and prior experiences, *Journal of Continuing Higher Education*, 61 (3), 151-164.

**Contact email:** watsachol.nar@stou.ac.th

*Developing Gamified Course Content*

Aphrodite Ktena, TEI of Sterea Ellada, Greece

**Abstract**
Over the last decades, student centered learning has slowly but steadily been uprooting transmissive instruction in most educational systems and traditional teaching methodologies are being complemented or even replaced by innovative ones. Student centred learning, based on the cognitive model, requires students' active participation in their learning, allowing them to choose, or shape with the help of the teachers their own learning path. Key to the success of this model is the student's engagement via curriculum design as well as novel learning and teaching methods. The methodology for developing engaging course content, presented in this work, uses the cognitive approach, following Bloom's taxonomy, to guide the students through the course content, while gamification mechanics are used to increase or ensure students engagement in the process. It is shown that the cognitive approach lends itself to the gamification process: a) it is suited for self-learning and allows the students to shape their own learning path in a strictly defined framework set by the game rules b) the hirerachical structure of the learning pyramid is ideal for the game structure with levels, rewards, et al. The basic structure and features of such a course are presented and the limitations and possibilities of the methodology are discussed.

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Immanuel Kant defines enlightment as "man's emergence from his self-imposed nonage" (Kant, 1784) and proposes Horace's phrase "Sapere aude!" as the motto of the whole era, encouraging people to dare to learn. Educational systems have been developed to bridge the gap between the individual's knowledge and new knowledge generated by the society, emancipate the individual and address societal needs. As Wiltshire points out, education comes from the latin word *educare* which means to lead out, to draw out students to the learning process, to confront reality as opposed to inctruction which comes from the also latin work *instruere* and means to build in information and techniques (Wiltshire, 1990). The fast pace of technological development and socio-economic transfiguration has alienated students from conventional education schemes which fail to help them make meaning out of their lives and the world around them.

The shift from conventional teaching and pedagogical methods towards student-centered learning is therefore dictated by the ever more competitive, knowledge-based and technology-driven economy and the non-sustainability of mass education systems developed in the last century. Ensuing reforms in modern educational systems are linked to student-centered learning focusing on individual learning paths and self-learning. Technological and social developments in and out of classroom facilitate the development of novel pedagogical methods and relevant teaching or learning material.

The 2013 Horizon report (NRC, 2013) for higher education positioned massively open online courses (MOOCs) and tablet computing in the near term horizon of less than one year. Games and gamification as well as learning analytics are placed in the mid-term horizon of two to three years. A year later, the 2014 Horizon report (NRC, 2014) identified social media and hybrid forms of conventional and online teaching methods and materials as a fast emerging trend. Data-driven learning and assessment, based on, mainly online, data generated during the educational process and a shift towards students as active co-creators of content are expected to emerge in the mid-term horizon. In the long range, the online learning is envisaged as the path towards personalizing the learning experience, in the sense of quantified self: people learn by monitoring and measuring behaviors and activities through apps, wearables, and cloud technologies.

All of the above could be summarized under one major trend: the adaptation of existing technologies such as consumer products, web services, pervasive sensing, graphic tools and social media, to serve formal and informal education and develop new learning and teaching.

Gamification is one of the tools explored in that direction. Its goal is to engage the user in a certain practice or process using gaming technology and mechamisms in non-gaming applications, such as marketing or education, or in the more general field of behavior modification. The position of gamification as an emerging technology in the Gartner Hype cycle has changed dramatically over the last 3 years from being at the end of "innovation triggering" period (2012) to the maximum point on the "peak of inflated expectations" (2013) to approaching fast the "trough of disillusionment" (2014) and moving towards the "plateau productivity" region faster than other

emerging technologies, such as content analytics or wearable user interfaces and followed only by cloud computing.

Gamification can be used in developing applications for a) formal education as part of the student-centered learning process for use either in the traditional classroom environment as a complementary learning tool or in e-learning and distance learning platforms b) informal education, *e.g.* technological literacy.

Online learning has generated a lot of spin in the last two decades and has been heralded, not merely complementing conventional learning, but as the alternative path to 21st century education. Studies as to its effectiveness vary as they concern different target groups, contents, teaching methods and materials, and learning outcomes. It seems though that online learning so far has proved most efficient when adult groups, in post secondary education, are concerned (Livingston, 2012). To address students of all ages and backgrounds and widen the range of topics covered by it, on-line learning must go beyond notes, presentations, tests, and lectures available online to truly interactive dynamic content generation drawing from the common, validated body of knowledge as well as available data and analytics to personalize learning curve. Replacing education by skill-specific training, generating and facilitating access to information rather than knowledge, content moderation and validation, are some of the risks underlying massive online learning but are outside the scope of this paper.

Gamification has already found its way as an activity in classroom environments, in e-learning and distance learning platforms as well as in adult learning (Lee and Hammer, 2011; Dominguez, et al, 2013; Carr, Taylor, Hunt and Mejia, 2014).

The gaming mechanics are used to increase student motivation, engagement and interaction with one another, as they appeal to the cognitive, emotional and social areas of players in a coupled way: *e.g.* a badge awarded to a player for a specific achievement, such as mastering some given course content and attaining a specific learning outcome, and communicated to all other players, appeals to all three areas.

In this work we present the guidelines for developing gamified educational applications. The proposed methodology has been used to develop SMARTEGE, a pilot application for smart phones, tablets and PC targeting the capacity building and behavioral modification in the use of electricity, in view of the emerging grid technologies and electricity markets.

**The proposed methodology**

Our approach is based on Fogg's Behavioral Model - FBM (Fogg, 2009), a model developed for persuasive design targeting behavioral modification. FBM postulates that individuals are convinced to change their behavior on an issue, when three conditions are satisfied: sufficient motivation, adequate ability and timely triggering to implement behavioral change (Figure 1). Motivation, $M$, and ability, $A$, can be visualized as two axes defining a plane of possible behavior states, $B(M,A)$ reflecting the various levels of motivation and ability among people. Individual behaviors, $B_i(A_i, M_i)$ occupy various positions on the plane and follow different trajectories to the target. Each trajectory is the result of discrete steps towards the target suggesting that change is incremental. To move from, say $B_1$ to $B_2$, triggering must be applied at the

right timing which occurs when the individual is of sufficient ability and has enough motivation to attain $B_2(A_2, M_2)$, *ie* the individual's motivation and ability are higher that $A_2$ and $M_2$. In the context of learning environments, the target behavior are the learning outcomes of a course and learners, who are not equally motivated or able, are allowed and encouraged to follow personalized trajectories towards attaining the predefined goals. They are allowed to do so by the availability of educational content supporting various trajectories and are encouraged by appropriate and timely triggering.

**Persuasive Technology and learning environments**

According to FBM, the ability of an individual to implement change is determined by the simplicity of the steps required to accomplish a task and is a function of money, time, physical effort, mental effort, social deviance and non-routine. It can be thought of as a cost function whose value is determined by the variable with the highest value at any given time: *e.g.,* if change in a given direction by an individual requires investment in both physical effort and money but the individual is in a dire financial situation, the height of the barrier preventing the individual from changing is determined by the lack of money. To reduce the cost associated with change, the height of the barrier faced by the individual must be decreased, either by decreasing the barrier height or by raising the individual's level. In the context of learning environments, the ability is determined mainly by the mental effort required to accomplish a task. For the learner to take steps towards achieving a given learning outcome, it is necessary to mainly increase his/her capacity through education. In this process, it is important to remember that the cost function associated with each step depends on all six variables. Decreasing the mental effort required to attain the next level in the learning process, should not have a cost in time, money, physical effort, social deviance and non-routine higher the cost savings achieved via capacity building.

On the other hand, the motivation of an individual can be increased using three basic emotional dipoles: a) the pleasure/pain motivator has an immediate effect on the learner, *e.g.,* high/low grade, answer/not answer a question b) anticipated hope/fear has a long-term effect, *e.g.,* move towards/away from mastering a skill or conquering a learning outcome, c) social acceptance/rejection, *e.g.,* high/low ranking in class, popularity among a group in need of target outcome.

Finally, triggers can be a) sparks, messages for unmotivated individuals, such as User2 (Figure 1), which are using all three types of motivators with respect to the main variable identified as determining the ability level of the individual b) facilitators, activities designed for individuals of low ability c) signals offering guidance and advice to individuals of sufficient motivation and ability.

**Gamifying learning**

To create an educational application along the lines presented above, we must develop the educational content for the learner's capacity building along the horizontal axis of Figure 1, motivate the learner along the vertical axis of the plane and trigger accordingly the learner when the time is right.

We propose that the cognitive approach and Bloom's taxonomy (Bloom & Krathwohl, 1956) is used for the educational content of the application. It is compatible with self-learning environments such as online learning as well as gamified applications. They follow a hierarchical structure, are goal-setting and use the inductive process towards the ultimate goal (McCombs & Vakili, 2005). The learning environment is built around tangible and measurable learning outcomes, using simple, attainable tasks of increasing difficulty leading to small successes, with well-defined transparent assessment methods as feedback mechanisms. The learner-user learns through actively participating in activities, is interacting with the application in a dynamic way and shapes own learning curve inside a well defined framework as that of the rules of a game.

First, the learning outcomes are defined in agreement with the six levels of cognitive learning: *know, understand, apply, analyze, evaluate, create.* Next, the learning material is developed based on the learning outcomes. The more types of material are offered the more flexibility is given to the user to draw own learning path: library organized according to Bloom's taxonomy, notes, other reading material from external sources, useful links, short videos, sounds or other audio material, figures, assignments, quizzes, tests, etc. Following the emerging trends in education, user generated content may be allowed which will be moderated by the application administrator and will be subject to game mechanics: a user uploading learning content will earn points in the game according to the quality, relevance and level of the content, the usefulness of the content to fellow students, etc.

To engage and motivate learners towards achieving the targets set by the learning outcomes, game design principles are applied along the lines of the flow model (Csikszentmihalyi, 2000) for user engagement. According to the theoretical flow of Chikszentmihalyi, if the task of the person is too easy, the user's status is converted to laziness. If the task is very demanding, the user becomes frustrated, anxious and usually abandons the effort.

To design an application using gamification principles it is important to define the target group of the application and the digital user profiles or types anticipated. Based on these, the phases of the motivation matrix are determined (Constantos et. al., 2015): a) *acquisition* where users are attracted and engaged in the course; this phase occurs only at the beginning; related content and mechanics vary with the type of course, elective or obligatory, formal or informal education and learners group, adult, higher education, qualification oriented, etc b) *education* spans the application from beginning to end; this phase is much shorter and intermittent in non educational gamified applications c) *attraction* during which the users are emotionally engaged to the application using game mechanics such as personalized features, entertaining and challenging content to keep users in the 'flow' zone; based on the ICT tools available, data-mining techniques may be used in this phase learner-user profiling and enrich the application in the direction of the quantified self d) *involvement*, which starts later in the game as capacity increases and the use feels more confident to advance to higher levels and tackle harder tasks e) *motivation*, spans the application from beginning to end; the three FBM emotional dipoles, namely, pleasure/pain, hope/fear, social acceptance/rejection, are employed in conjunction with sparks, facilitators and signals for triggering the user; in non-educational commercial applications this phase addresses mainly the social area of the user urging him/her towards viral activity f)

*conversion* is an important phase in applications targeting behavioral modification where the user attains target behavior; the content in this phase is clearly target oriented addressing well educated and well motivated users; in other educational applications, this phase refers mainly to the final level of the cognitive pyramid g) *conservation* is another important phase in applications targeting behavioral modification; in educational applications, the engagement stops when all earning outcomes have been achieved and this phase is not required i) *excitement* is the last phase aiming to make users return to the game by renewing content; this phase is not required in all educational applications.

Successful gamified learning must observe gamification principles and use game mechanics to serve the motivation matrix (Ivetic and Petrovic, 2012): feedback to the user must be ensured, *e.g.* in the form of counters and awards; the social dimension of the application should be served by both user-system and user-user interaction, *e.g.* in the form of messages, invitations, interactive content development; self-competition in the form of achievements and competition against the other users, *e.g.* in the form of leaderboards, should be allowed; progression should be guaranteed through the transparent profiling of each user and the well-defined ultimate goal; graphics, colour and a narrative pertaining to real world situations should be used.

The game mechanics used must serve the defined learning outcomes and motivation phases. Once the narrative and goal of the 'game' is determined, its levels must be defined in a clear and transparent manner. These must be of increasing difficulty and compatible with the learning material organized according to Bloom's taxonomy. Sparks, facilitators and signals are developed for each level. The counters of the game are decided next and points are assigned to each user action a way that serves the learning outcomes and the desired goal while maintaining the user in the 'flow' zone. Tasks and missions appealing to the cognitive, emotional and social area are designed as well as badges and leaderboards to reward the users and enhance competition among them.

**Developing SMARTEGE**

This method has been applied to design SMARTEGE (http://www.smartege.eu/index.php/en/) an online application for smart phones and tablets targeting the technological literacy and behavioral modification of electricity users.

SMARTEGE aims at the shift of the electricity user from being a passive electricity consumer to one interacting with demand side managed grids and deregulated electricity markets. To accomplish this, the users must 1) increase their ability to do so through education in the basic elements of electricity generation, distribution, consumption and saving 2) be motivated 3) triggered to take action at the right moment.

The SMARTEGE user, as a consumer, is expected to: know the basic notions and definitions of electrical energy; understand the relationships between the electrical energy quantities; apply this knowledge to a building's energy management; analyze the energy profile of a building; evaluate the energy performance of a building; create energy efficient scenarios for energy management.

The SMARTEGE user, as an electricity producer and agent, is expected to: know the basic notions and definitions of electricity production and market; understand the relationships between the electrical energy production and consumption; apply this knowledge to the management of small RES installations and electricity trading; analyze the techno-economical profile of a RES installation; evaluate the performance of a RES installation; create energy efficient scenarios for RES management. The educational content in the form of tips, definitions, explanations, questions and reading material is developed according to these objectives.

The SMARTEGE users are all electricity users regardless of age, sex or background. They can be divided into categories according to their electricity use profile at home and at work/school and whether they are the ones responsible to paying the bill or not. The digital users are divided into 4 main categories: guest, registered, social and devoted (Constantos et al, 2015). Guest users are those first entering the game and are guided through a tutorial level. Registered are the users that stay in the game and gain full access. These are divided to social or devoted according to their actions. The devoted user is the user that is more likely to implement change.

The narrative is as follows: the user has to manage the electricity use in several buildings of various profiles, residential, office, industrial etc, in order to achieve net zero energy consumption: the buildings must produce at optimum cost, using renewable energy sources, the energy required to operate with safety and comfort.

The game provides 3D graphics of buildings, an avatar moving about in the buildings which operate in real time, libraries with educational content, inventory of appliances and devices producing, consuming and storing electricity. All devices emulate the operation of actual commercial ones. An interface is also provided for hardware used to actually meter and control the electricity use of a real building to allow the user, once sufficiently trained, to take the acquired knowledge to the real world.

The pilot version has four levels:
The first level is a Tutorial which offers a virtual 'tour' of the application and introduces most of the game elements that will be encountered in the game. It is intended to attract and engage the user. The user is asked to answer a set of quizzes to accumulate points. If users fail, they are prompted to read appropriate educational material available in the 'library' and take the test again. This level is of high educational value and therefore mandatory.

The second level is the Flat level (Figure 2a) which unlocks once the tutorial is completed successfully. The user is invited to select from the application's "inventory" typical home electrical and electronic appliances such as refrigerators, stoves, washing machines, dishwashers, TVs and computers, and position them in the virtual flat he/she is going to manage. When the user touches the appliances and devices placed in the Flat, tips and information about their electrical energy specifications appear. With the help of appropriate triggering and educational material, such as recommendations, explanations and definitions, the user is led to schedule the operation of the selected appliances to optimize the electricity consumption as well as the comfort level in the Flat. The user may increase the energy class of all buildings under his/her control by replacing existing appliances and devices with others of higher energy class. The user upgrades his/her appliances by

spending 'Wallet points' accumulated through the successful completion of tasks and missions appropriate for this level. The idea of trade-offs involved in the use of various technologies underlies all actions in the game as it is important that the users learn to apply judgment and not simply follow trends or shy away from innovation. 'Wallet points' are earned when tasks and missions are accomplished, such as answering a set of questions, reading material, creating new content, inviting a friend, commenting on an another user's actions etc.

The next level is the Office level (Figure 2a) which unlocks after the user has managed to accumulate a certain number of points at the Flat level. To reach the ultimate goal of net zero energy consumption buildings (nZEB), electricity microgeneration is enabled from this level and on. The user first learns to optimize the electricity use and consumption of all his/her buildings, residential or professional, and then is allowed to use 'Wallet points' for the installation of electricity generation components. The concept of electricity production is a very important one in the game, since it allows the user to think of electricity as a resource and not simply as a costly comfort enabler. The user is also granted access to educational material concerning electricity generation and storage devices, such as photovoltaics, wind turbines and batteries, as well as the relevant legal framework.

'My Home' is the last level where the user can a) simulate the electricity use of an actual installation, e.g. his/her house b) with the acquisition of appropriate hardware, monitor the electricity use of the actual installation per appliance or electricity line, and have full control of it, setting operating points and allowing remote on/off. At this last level, the user is given the opportunity to relate what he/she has learned to the real world.

SMARTEGE has four counters: a) 'Wallet points' which accumulate when tasks and missions are accomplished, are spent when higher energy class devices are acquired and installed, and are lost when resources are managed poorly b) the 'Electrical Energy counter' which emulates the energy meter recording energy consumption and production in kWh c) the 'Green bar' which monitors the virtual buildings' energy class d) the 'Comfort bar' which monitors the comfort level in the building, according to existing standards and design specifications (Constantos et al, 2014). All four counters must be within acceptable ranges in order for the user to advance in the game.

The SMARTEGE leaderboard is called 'Tesla's Followers' and the user's ranking in it depends on the points earned though the progress of the game. Badges are awarded upon certain achievements.
Levels, rewards, leaderboards and missions all seek to transform negative emotions to positive ones and keep the user in the 'flow' zone of the game.

Some examples of motivators are given below:

The increase or decrease of "Wallet points" activates the pleasure/pain dipole as the user is pleased to see his/her wallet points grow through successful missions or correct and timely moves and experiences pain and frustration when he/she loses points or sacrifices a certain amount to improve his/her position in the game in the

long-run; the user is then triggered to gather more wallet points by participating in new, more demanding missions.

The hope / fear dipole is activated by the opportunity to exploit the benefits of the application; unlocking or not of a level; appropriate triggering, of the form of advice or intimidation. The "fear" of stagnation and exclusion of the user from new content or from the application itself, is related to the real world potential exclusion from new technological developments. Unlike the conquest of the application's levels, this mechanism is related to the conquest of knowledge and expertise that can be related to the real world. The inability to exploit in full the potential of the application acts as a reminder that his training is not yet sufficient.

Social acceptance / rejection is a powerful dipole in gamified applications which is often linked to social media nowadays. The user is given the opportunity to shape his/her profile / position in the 'market', to compare positions and actions with others, to view other user profiles, rankings and achievements. Users are encouraged to take action and match or outperform other players who have better statistics, consequently feeling greater social acceptance. Furthermore, the user can invite friends and eventually form in this way an identity and achieve a certain status in the Smartege world. In the future, the social dimension of the game will be upgraded by allowing the users to form alliances and compete against others by selling and buying electricity thus creating a virtual market regulated by the administrator.

In SMARTEGE all three FBM stimuli are used: a) Sparks, such as risk messages, warnings, award announcement; for example, a warning message is issued when the facility operated by the user has very high consumption at an unlikely time of day b) Facilitators are usually in the form of advice; for example, a message prompting the user to answer a quiz for point collection to be redeemed in appliance upgrading improving his/her consumption profile c) Signals are simple reminders or advice; to for example, a message notifying the user to purchase a second PV panel.

## Conclusion

Gamification is a novel technology compatible with student-centered and online learning that may be applied to address the challenges faced by 21st century education. Gamified learning environments must observe best practices for online education while adhering to gaming rules and procedures. The proposed methodology applies persuasive modeling to educate users and engage them in the process. The educational component is developed according to the cognitive model while game mechanics are used to motivate and keep the user engaged in the learning process.  Such an application must: a) offer feedback in a form similar to the student assessment while not snubbing the gaming practices: immediate, incremental, progressive and fun b)
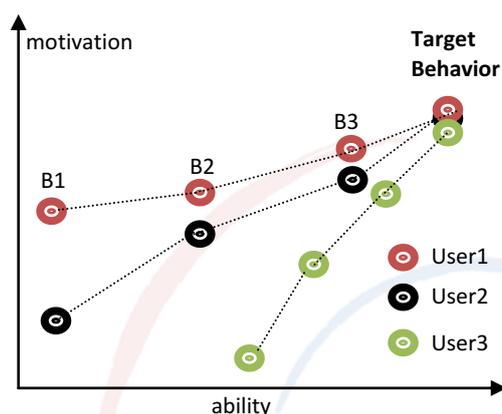


Figure 1. FBM's plane of behavior states and trajectories of reaching the target behavior for User1: high motivation and low ability, User2: low motivation and low ability, User3: high ability and low motivation

have a clear aim and guide the user to it c) pertain to the user's everyday life, experience, and culture d) game levels must be compatible with Bloom's taxonomy e) be versatile enough to allow for own learning curve f) encourage social interaction

## References

Kant, Immanuel. 1784. *What is enlightment?* Retrieved from: http://www.columbia.edu/acis/ets/CCREAD/etscc/kant.html. Last visited August 1st, 2015

Wilshire, Bruce. 1990. *The moral collapse of the university*. SUNY

The NMC Horizon Report. (2013) &  (2014). Higher Education Edition

Livingstone, Sonia. 2012. *Critical reflections on the benefits of ICT in education.* Oxford Review of Education, 38 (1), 9–24.

Lee, J.J. & Hammer, J., 2011. *Gamification in Education: What, How, Why Bother? Definitions and Uses.* Exchange Organizational Behavior Teaching Journal, 15(2), 1-5.

Domínguez, Adrián. Saenz-de-Navarrete, Joseba. De-Marcos, Luis. Fernández-Sanz, Luis. Pagés, Carmen. Martínez-Herráiz, José-Javier. 2013. *Gamifying learning experiences: Practical implications and outcome.* Computers & Education 63, 380–392

Carr, Danielle. Taylor, Herta. Hunt, Ryan. Mejia, Tony. 2014. *Gamification and adult literacy*, report of Literacy Link South Central's Job Creation Partnership Project "Using Technology to Facilitate Connections between Literacy and the Broader Community". Canada

Fogg, B.J. 2009. *A Behavior Model for Persuasive Design*, Persuasive'09. Retrieved from: http://bjfogg.com/fbm.htm. Last visited August 2nd, 2015

Bloom, B.S. and Krathwohl, D. R. 1956. *Taxonomy of Educational Objectives:* The Classification of Educational Goals, by a committee of college and university examiners. Handbook I: Cognitive Domain. NY, NY: Longmans, Green

McCombs B, Vakili D. 2005. *A Learner-Centered Framework for E-Learning.* Teachers College Record 107 (8) 1582-1600

Csikszentmihalyi, Mihaly. 2000. *Beyond boredom and anxiety*. San Francisco, CA, US: Jossey-Bass.

Ivetic, D., Petrović, V. (2012). *Gamifying education: a proposed taxonomy of satisfaction metrics.* Conference proceedings of "eLearning and Software for Education" (eLSE) 02:345350.

Constantos E., Elias, C., Ktena, A., Manasis, C., Skarpetis, N., Tatsiopoulos C., Tatsiopoulou A., et al, Zamani, E. (2015). *SMARTEGE gamification design and methodology*, Deliverable D2.1. http://www.smartege.eu/index.php/en/

http://www.smartege.eu/index.php/en/

Constantos E., Elias, C., Ktena, A., Manasis, C. Skarpetis, N., Tatsiopoulos C., Tatsiopoulou A.,et al,  Zamani, E. 2014. *SMARTEGE user requirements*. Deliverable D1.1. http://www.smartege.eu/index.php/en/

**Contact email:** aktena@teiste.gr

## Working with Evidence in Primary Education: A Game-Based Scenario between Formal and Informal Learning of History

Elias Stouraitis, Ellinogermaniki Agogi, Greece

The European Conference on Education 2015
Official Conference Proceedings

**Abstract**

This research proposal aims to elucidate the ways in which primary school Greek students understand the significance of evidence in history education. Twenty three pupils ten years old are invited to participate in a game-based scenario which took place in Acropolis (Athens). This scenario was designed on Collage Platform which realizes a connection between formal and informal learning. The Acropolis scenario contains quotes from ancient Greek writers and how they described the Acropolis in classical period. Students tried to understand how people learn about classical Acropolis and they observed the differences with the present. They observed Acropolis' monuments and answered game's questions. They should take pictures, join surveys and finally search and find places or things depended on ancient writers' quotes. This interactivity through game enhances students' ability to understand the significance of past's evidence. Students make judgments and justifications about how they played the game and their relation with evidence. The findings contribute to understanding pupils' interactions on evidences and design appropriate teaching history approaches in future.


Keywords: history, informal learning, formal learning, evidence, Collage, Acropolis

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Integrating students' every day habits to their learning procedure remains always a challenge insofar as to enhance education in a multimodal environment. Communities are changing and individuals' reflection on learning as experience is a new challenge in education. Paulo Freire's theory related to critical consciousness of individual who aims at the individual's emancipation and communities' reformation will be used a basis to this small scale research (Freire, 1994). This paper combines the cognitive theories, theories of didactic of history and an action research which embody the notion of experiences. The main hypothesis which concentrate the whole paper is how learning theories direct new connections between experiences, how technology creates new vivid experiences on students and how students understand the ability of the past's evidence is also examined.

**Learning theories and the significance of informal learning**

Students' procedure on how they learn during their life has examined by many researchers. One of the well-known researchers is the Swiss Psychologist; Jean Piaget; who was criticized in terms of his stages of intelligent from infancy to adulthood. Let's have a look through a basic part his theory which remains important even this period. His rational concerning people's conception and learning is revealing. His assumption related to the interaction between individual and environment but also the growth of intelligence through two procedures, the assimilation and accommodation, emerge another experience on students' learning. Assimilation is defined as understanding better an event or a person and accommodation as reforming an existing scheme or forming a new one (Piaget, 1973). In addition to this, psychologist Lev Vygostky emphasizes on the interaction between the social conditions which are changing culturally and historically. Learning acquisition is based on social experiences and the verbal connection between individual and society (Vygostky, 1978).

An experience outside classrooms not only emerge students' interest but also enhances their ability to discover the environment and what they watch around the place. Each place provides students the ability to assimilate something different than this or these students have also formed in their minds. As the previous theoretical background underlines the significance of this experience which is called informal learning. It is important to underline the definition of formal and informal learning. Formal learning could be defined as the main national educational policy which is organised in educational levels and its operation is based on Curricula, didactical methods etc. Informal learning is defined as consequential, non-assessed and self-pacing activities. These activities are usually outside classroom and it usually contains experiential learning. Observing learning theories and the rational of informal learning, it is extremely interesting to examine the relationship between them. Informal learning could use a means to enhance students' perspective on the assimilation through a social environment.

**Working with evidence in history education using games**

Last decades history education has transformed through the epistemology of history which emerged not only the political and military events or persons but also the

social, every day's habits, norms and ideologies. One of the New History characteristics is the use of evidences during history education. Evidence's significance is something that students can not completely understand. Curriculums do not encompass evidences in their context expect this of Northern Ireland (Barton, 2001).

Teachers usually make use of primary sources thinking of an alternative way of teaching without the common narration, the textbooks and the worksheets. This is also a major problem (Barton, 2005). Students did not understand the meaning of the evidences in history lessons. Evidences' operation is not only interesting but also gives students a chance to learn with an alternative way which inverts students to explorers. Analysing the sources has no meaning for students' understanding of history whether they do not connect the sources with the historical context. Working with evidences, students could use historical fiction, role-play, dramas, games and simulations.

Piaget's theory related to students' level of thinking also criticized by other researchers. This assumption underlines children's' inferences about the past from historical sources. He asserts that young children were not able to hold more than one perspective at a specific time. The next stage is able to observe the reality and the third stage uphold various hypothetical possibilities. (Cooper, 2003:10) How often teachers use historical sources and under which conditions? In which age students are familiarised with the historical sources? The stages may change depending on many premises which should be deeply examined.

More often there is a misunderstanding in relation with the way these evidences are used on behalf of teachers but also students' behaviour across them especially when they have to answer questions depending on them. It is imperative students understand the utility of historical sources and why these are transferred to evidences. Why these evidences are so important to our lives? Why these evidences presented to us the past? If students understand exactly the meaning of these evidences, their utility may change during the history education. In this paper, our assumption is related to usage of the evidences outside classroom and combining them with students' experience in an archaeological site. Denis Shemilt underlines the extrovert factors, such as museums, cinema, internet which have introverted to formal education. Shemilt also asserts that an exercise on evidences which operate as information could create on students' mind the notion of history. (Shemilt, 1980).

Connecting to the previous assumption the rational of games, students obtain another impact during their learning procedure. The advantages of a game which operates simultaneously to a learning acquisition are the interaction and the fun. Usually games have a problem-solving meaning which sparks students' interest and creativity. Games create a form of fun which motivates students' interest to begin something new because it offers pleasure but also restricts students on game's rule (Gee, 2014).

**Hypothesis**

Students believe that history has no connection to their lives. There is no meaning and no perspective for their future. They feel that history includes only information related to historical events and persons which they are obliged to memorize them. This

feeling dominates on students' minds and this is the major problem on teaching this subject.

What if students learn about history through evidences and how we understand the past through them? Peter Seixas asserts that "History is interpretation based on inference made from primary sources. Primary sources can be accounts, but they can be traces, relics or records". (Seixas, 2015: 10). Focusing on 4 grade students which were invited to use evidences in history, it was revealing in terms of what is their thoughts about them and how they face them. This implementation on 10 years old students enables students to understand how significant the evidences are so as historians create the history through them. Evidences are the way through people learns about the past.

**Methodology**

This small scale research on 10 years old students aims to enlighten students' interaction and opinion with the experience outside classroom in addition to the evidences of the past. 4 grade students from a rural school voluntary took part to this pilot implementation separated into teams by their teacher. Teacher separated them in teams which were consisted of 5 members with different perceptions and learning assimilation. Students answered anonymously to open-ended questions before and after the implementation at Acropolis of Athens. Students express their ideas about the evidences and their significance. It is also important to underline that these students learnt about the evidences and their significance during the previous history lessons.

Acropolis scenario designed in order students understands the significance of evidences during their visit at Acropolis. Quotes from Pausanias were selected so as to use in this visit. Mobile learning platform for context-dependent games creates fun, interdisciplinary, collaboration, and challenge beyond the four walls of the classroom create new learning opportunities. Collage platform (www.collage.edu.gr) operates such a board-like game on a site of educational interest. The game is played with the aid of mobile learning technology (mainly mobile phones and PDA's, and GPS technology) with direct communication with players situated on site or in the classroom.

**Educational scenario**

The educational scenario were created in order to enhance students' ability to observe the archaeological site of Acropolis and to give students' possibility to interact with the monument but also to understand how this monument was at the past and how this one is now. This scenario includes Pausanias' quotes which are embedded to the previous activities. Using Pausanias' quotes students had to visit Acropolis' monuments and each team had to collaborate so as to answer all the questions. In addition, there were questions without any quote in order students' express their opinion (such as exit polls), to take pictures depending a specific question and finally a person and finally search and find what the game's question asked from students.

**Findings**

Students' opinion in terms of evidences presents an interest because they answer without any thought of assessment. Their answers were separated into three categories depending on how students' answered. Students' quotes about evidences and their rational about them lead to create three different categories.

In terms of students' opinion before the implementation, we can form three categories: 5 students are indifference about the evidences' value. They assert that evidences have no relation to their lives and they cannot understand how these could help them to recognize the value of the past: "No, ancient writers cannot help us understand the past and how the ancient monuments were because they had not the same problems with us" a boy ten years old underlines.

12 Students' had positive thinking about the evidences but they did not give any argument about evidence's significance. So, these students know the evidences but they did not give any information about it: "*Yes, ancient writers help us understand the past because they knew more than us*" a girl ten years old asserts.

Finally, 6 Students' gave serious arguments about the value of evidences underlying their importance in understanding history: "*The ancient writers can help us because they wrote in books what happened at the past and through them we can understand the past and how people acted*" A boy ten years old underlines.

The implementation on Acropolis changed some students' opinion. 4 Students stayed indifference about the evidences' value. They did not demonstrate any interest about the procedure but also the archaeological site: "*It was boring. I did not understand writer's value*" s boy 10 years old concerns.

11 Students' had positive thinking about the evidences but still do not understand the evidence's importance. They thought that Acropolis is an important place and they were sure about the value of ancient writers in terms of Acropolis but they did not explain why: "*Classical monuments are very important and they who write about them*" a girl ten years old argues.

8 Students had serious arguments about the value of evidences. They insisted that ancient writers gave us an idea through their descriptions how these monuments were in classical period of Athens. They argued that these evidences are the proof of how Acropolis looked like on the past and now this place is so different from the past. Their experience on the Acropolis through the game made them to understand exactly: "*Ancient Greek writers gave us the possibility to understand how Acropolis was and we can learn from them the past*" a boy 10 years old concerns.

It is extremely interesting that some students are moved to the third category of understanding how evidences are important to comprehend the past and especially the monuments which changed through time. In addition, the gaming procedure outside classroom emerge students' interest about what the ancient writers wrote in terms of monuments and how they descripted them.

**Discussion**

This implementation is a premise so as to create a large scale research related to how evidences should integrate students' opinion about what is history and how history teachers use evidences. Students' answers underline the problem about how they understand the history and how this is making by evidences from the past. Students' opinion show a confusion about what is history and why evidences are important. It is needed more analysis about students' answers about the past and the significance of evidences.

Game-based learning in relation to informal learning improves students' understanding in terms of evidences but this is not exactly clear. Game-based learning's impact on history subject is something that it should be examined deeply and in relation to the traditional teaching methods. It is difficult to generalise this research but it is a basis so as to create appropriate educational scenarios improving evidences' notions.

**Conclusion**

This implementation was an attempt to present the connection between formal and informal learning but also how students should improve their thinking about historical context through evidences. It is extremely difficult in these students' grade to improve their ability to understand completely the meaning of evidences but it is the beginning. This implementation should be used a basis for further research and design appropriate teaching history approaches in future.

## References

Barton K. (2001), "Primary children's understanding of the role of historical evidence: Comparisons between the United States and Northern Ireland" *International Journal of Historical Learning Teaching and Research*, V.1 N.2,: http://centres.exeter.ac.uk/historyresource/journal2/barton.pdf

Barton K. (2005), "Primary Sources in History: Breaking through the Myths", *The Phi Kappan,* Vol. 86, No. 10, pp. 745 -753

Cooper H. (2003) "Historical thinking and cognitive development in the teaching of history" Bourdillon H. *Teaching History,* USA and Canada: Routledge.

Gee J.P., (2014), *Collected Essays on Learning and Assessment in the Digital World brings together some of James Paul Gee's most important papers on learning,* USA: Common Ground Publishing.

Seixas, P. & Morton, T. (2013). *The big six historical thinking concepts*. Toronto, ON: Nelson Education.

Shemilt D 1980. History 13-16. *Evaluation Study. Schools Council History Project*. Edinburgh: Holmes McDougall.

Piaget (1973), "Fondements scientifiques pour l' éducation de domain" *Education et développent,* Paris: P.U.F.

Vygostky, L.S. (1978), *Mind in society:* The development of higher of higher psychological processes. M. Cole, V. John – Steiner, S. Scriber & E. Souberman (Eds) Cambridge, MA: Harvard University Press.

Freire P.(1994), *Pedagogy of Hope*, New York: Continuum Press.

**Contact email:** estouraitis@ea.gr

# *Architecture and Literature Work Together: Re-reading an Environment through a Historical Novel*

Naime Esra Fidanoglu, Istanbul Kultur University, Turkey

The European Conference on Education 2015
Official Conference Proceedings

## Abstract

As one of the consequences of globalization, innovation, creativity and social learning became critical for being successful. It is being worked on architectural education to take a position to support the students for activating their attitudes for creativity. There are new approaches to establish creative environments for enabling the production of knowledge depending on experience and social contact. Merging and transforming the products and knowledge of the other disciplines give a chance to the students to accelerate new horizons depending on the "Genius Loci".

"Workshop" as a practice for learning architecture is objected to a raising interest nowadays. Architectural education uses workshop as a creative environment. Workshop itself is a creative design to attract and challange the students from various cities and countries. Interest occurs and creativity starts by the teamwork made on a specific place to discover/read/translate the existing soul, networks in other words, through experiencing and sharing. In addition to reading a place in the context of the everyday life, reading texts on that specific place helps to understand the environment.
Literature is a very helping discipline for the description of a definite place at a definite time. The values, networks, signs and objects can be learned over reading novels. This article aims to share a workshop experience realized on collaboration of architecture and literature for starting the architectural design process at Cukurcuma/Istanbul through the novel of Orhan Pamuk, "The Museum of Innocence".

Keywords: Experience, workshop, literature, values, creativity, architectural education, Genius Loci, space, existence

iafor

The International Academic Forum
www.iafor.org

**Introduction**

Architecture is a very lucky discipline comprising various kinds of information for the design and the production of space. Technology, policy and economy are very important fields of information to make decisions towards a project which will occupy and affect the city. The mentioned ones and the more are embedded in the everyday life fluxing in and around the objects, buildings, and streets at the city. An architectural product is supposed to support and accelerate this flux towards a better future. In other words, architecture cannot be thought separate from the reality of the environment. Reading the environment in the context of the everyday life becomes very critical for making crucial moves motivating people to excel. Architecture is to be creative and innovative to design a sustainable environment for the community.

It is being worked on architectural education to take a position to support the students for activating their attitudes for creativity. There are new approaches to establish creative environments for enabling the production of knowledge depending on experience and social contact. Merging and transforming the products and knowledge of the other disciplines give a chance to the students to accelerate new horizons depending on the "Genius Loci".

**Place**

An environment is the air, water, and land in or on which people, animals, and plants live. The place we live is something more than the environment. The state of "belonging to" distinguishes the place. Not just the formal characteristics, but also the current social life embodies the place. We experience the everyday life within a tangible geography established by the buildings and topography, as well as the intangible atmosphere established by the patterns of activities and the compromised meanings. Therefore to have real information about a place, we need to read both its tangible and intangible characteristics.

The tangible characteristics of an environment can be carried out by a reading in the context of "Genius Loci", the pervading spirit of a place. The concept of Genius Loci was used to express the quality of a definite environment starting from 185 AD. Christian Norberg-Schulz, Norwegian architect, brought the genius loci concept into architecture from a phenomenological point of view. According to him, the places have meanings hidden in the topography, the nature, the objects and systematic pattern of the buildings at an environment. The place is an environment having meanings which gives its value. The place is where we were thrown, we exist.

Genius loci is representing the sense people have of a place, understood as the sum of all physical as well as symbolic values in nature and the human environment. (Norberg-Schulz, C., 1980)

The place takes its meaning from the harmony and the continuity of the spaces produced by people, even they are temporary. We can read the meanings of a place not only on the objects, but on the activities happening now and in the past.

## Space

Space is the inside. Experiencing space is feeling to be inside of something. Not a closed building, but the physical things like surfaces, objects, sound, smell, people, movements, etc. defining boundaries for an activity. A building might involve spots inside and outside having spatial value, but it is not enough to close a place to feel the space.

Is space a material thing in which all material things to be located? If space is a material thing, does it have boundaries? If space has boundaries, is there another space outside those boundaries? If space does not have boundaries, do things then extend infinitely? Architecturally, if defining space is making space distinct define space? (Tschumi, B., 1994)

Space can be produced everywhere. Topography/nature helps sometimes if we are conscious enough to use. But more, it is people who produce the space now and in the past.

Their swarming mass is an innumerable collection of singularities. Their intertwined paths give their shape to space. (De Certeau, M., 1988)

Space is to dwell.

## Dwelling

We are conscious and ourselves when we dwell. We dwell in the space. It is the spatial consciousness, a possibility both for the user and the architect. If the space designed as a potentiality for being, than the user/being will face herself/himself. The architect may be in the form of the practitioner, the student or the instructor who design and construct the space; the user is the one who lives in that space. Thinking, designing and constructing the space, observing the user in that space will be a real opportunity for the architect/being to face herself/himself also. In other words experiencing the space is a tool for understanding, realizing the self even if we are at the stage of design, construction, use or observation.

The body precipitated into the world exists by dwelling on the earth. Dwelling is the place where the being realize his/her own existence. Architect can create a dwelling as a potentiality for the being become a conscious being. The being will realize his/her existence by experiencing the space. (Heidegger, M., 1962)

The power of the act of making is hold by the everyday life. The everyday life is the only space/time that enables practicing the idea.

Life, itself, must be defined as the unity of thought and action. (Lefebvre, H., 1991)

Therefore it can be said that, everyday life is a possibility for a body to become a conscious being.

Consciousness is the consciousness of the other. By recognizing the other as the mixture of presence and absence, the relation between the same and other as identity

in difference and the difference in identity, consciousness becomes the means of ascending to totality. (Lefebvre, H., 1991)

Totality indicates the being that has consciousness; he can unify himself and the other bodies as a totality in the everyday life.

## Architecture

Architecture is about producing space in the everyday life.

Architecture had been the representation of body, nature, geometry, and technology during hundreds of years. Today the social side of architecture is well to the fore. Tschumi defines architecture by events. There is a connection in-between the event and the space. Space is not a tangible building. It is the organization of the things to support the activity made by the individuals/people realizing their existences. Space is established in time by people.

Architecture is as much about the events that take place in spaces themselves[...].Moreover, the cause –and- effect relationship sanctified by modernism, by which form follows function (or vice versa) needs to be abandoned in favor of promiscuous collisions of programs and spaces, in which the terms intermingle, combine and implicate one another in the production of a new architectural reality. (Tschumi, B., 2000)

Today various structures of spatial relationships take place simultaneously in the big cities. Interactions occurring between the various spatial experiences happen on the streets and/or in-between the building or building complexes. People produce spaces to realize their existences in harmony with the everyday life in the city.

Everyday life is profoundly related to all activities, and encompasses them with all their differences and their conflicts; it is their meeting place, their bond, their common ground. And it is in everyday life that the sum total of relations which make the human – and every human being – whole takes its shape and its form. Hefebvre, H. (1991)

## Architectural Education

While an architect used to be the main actor, today she/he is just one of the actors in the architectural production process. Creativity as the main issue for the contemporary architectural education can be considered as a design of the team work.

Today architectural education focused on the design studio as a possibility to activate the creativity in the students by asking the correct questions about the place in the context of the everyday life.

Design education is required to be in a structure that directs the student-designer towards a multi-dimensional and dynamic process of thinking and "ways of knowing as a designer. (Schön, D.A., 1987).

The everyday life is a place/time for a student of architecture to face herself/himself, to embody a world view, to design a space, to work with the other bodies for

constructing that space, to live in that space, to observe the other bodies in that space. The architectural education can be a possibility for experiencing consciousness by creating in the context of the idea of existence.

Teamwork is made on a specific place to discover/read/translate the existing soul, networks in other words, through experiencing and sharing. In addition to reading a place in the context of the everyday life, reading texts on that specific place helps to understand the environment. They find a language to express their observations to reveal the existing everyday life. Discussions on the observations open a channel to the students for shaping a vision for a spatial production.

**Literature**

A definite place at a definite time can be learned over the novels. The story told might be unreal, but the taste of the day and the social life is mostly considered as the context as a real support strengthening the novel. The connection in-between the spaces and the people can be read over the novel, and explains the meaning of the place from the social point of view.

These everyday details help history come alive and are an important part of my Ethan Gage series of Napoleonic novels. As interesting as what happened is how it happened, meaning how people of another time lived, loved, dressed, ate and slept (half-sitting-up, in Napoleonic times). (Dietrich, W., 2013)

Our attention is drawn by the novel to the past in the context of the shared values and experiences. Our feelings and thoughts about a specific environment are being embodied by living at that place, dealing with the spaces and reading the traces of the everyday life flux. We make an observation for understanding the interrelationship/network of the space and the everyday life as a strong point of departure for a spatial production/design.

**The Case: The novel of Orhan Pamuk / The Museum of Innocence**

Orhan Pamuk is a worldwide famous writer who wrote novels about the everyday life of a definite time and place. His novel "The Museum of Innocence" is about the love of a man (Kemal) and a woman (Fusun) who represents the two typical characters living in 1960s. We learn about the everyday life at Cukurcuma where Fusun lives and Kemal visits her and her family. Pamuk gives detailes from the public places, the streets and the houses with relation to the activities of the people. Therefore we can feel the value of the place over the spaces and moments. Objects are the tools for the reader to travel in time. We can see the objects in the museum building at Cukurcuma restorated by him. These objects are familiar to us from our childhood. They are daily objects which can be seen in everyones house. Pamuk places value in them by making them a part of the story/everyday life of the heroes once lived nominally in that house.

It is interesting to see the same terminology and the approach with ours, from the writer of the novel. This is a provoking moment to share the text at his web site without any change:

Nobel prize-winning Turkish writer Orhan Pamuk realized a long-nurtured dream on April 28th with the opening of an actual Museum of Innocence as depicted in his 2008 novel of the same name. The Museum of Innocence is housed in an old, wine-red building in the Cukurcuma neighborhood in Istanbul. The museum displays real and fabricated artifacts from everyday Turkish life between 1950 and 2000, in homage both to the novel and to Pamuk's beloved native city. At the entrance of the museum, visitors can see a wall of the cigarettes that Füsun, the protagonist of the novel, smoked in the novel. The first and the second floors are filled with 83 displays for each of the 83 chapters of the novel. Finally the bed of Kemal is to be seen in the attic. Pamuk started to collect the objects before he wrote Museum of Innocence and he continued to collect them while writing the novel. And also after the completion of the novel, he added some objects to the Museum. "As far as I know this is the first museum based on a novel," he said. "But it's not that I wrote a novel that turned out to be successful and then I thought of a museum. No, I conceived the novel and the museum together." In addition to those, the catalog titled The Inoocence of Things is published in Turkish and in English. (Pamuk, O., 2011)

We realized a workshop (NAC: Network –Architecture- City: An architectural approach to notice the interferences in the everyday life) at Cukurcuma/Istanbul.

Network Architecture City (NAC) is an Intensive Program project which is supported by European Union/ERASMUS program for 2012-2013 academic year. 40 students and10 teachers attended from the Technical University of Delft, Sint Lucas University, Pecs University and Istanbul Kultur University as the host..3rd and/or fourth year BA students participated.1

Reading the novel in advance, the students had already an idea about Cukurcuma when they arrived in Istanbul. The visit to the site and the museum accelerated the process of concentrating on the site where they were supposed to design a public space at Cukurcuma for exhibiting their projects on Cukurcuma.

**Cukurcuma**

The Cukurcuma neighborhood's history dates back to the 1200s and still has buildings from that period. Nowadays there are residents coming from different parts of Turkey. The ground floor (street level) is used as shops, mostly selling antiques. They are small scale retailors. The habitants are open minded people. The students were accepted immediately in the neighborhood as far as they were considered as an added value for the neighborhood for inviting people from outside of Cukurcuma. The students made interviews, draw sketches and took photographs for recording their experience in detail.

---

[1] Esra FIDANOGLU (Project Leader), Gonca ARIK (Istanbul Kultur University/ Turkey (The host)), Susanne KOMOSSA, Nicola MARZOT, Alper ALKAN, Jorge Mejia HERNANDEZ (Technical University of Delft / The Netherlands),  Tomas OOMS, Johan VERBEKE (Sint Lucas University / Belgium), Bálint BACHMANN, Tamás MOLNÁR (Pecs University / Hungary)

The spatial production was made on the intersection of the two sources of information: 1. The students' current experience of the everyday life at Cukurcuma, 2. the novel: Other people's experience of the everyday life at Cukurcuma in the novel. (Fig. 1) Both of them were connected and accelerated the process for the students to read the place (Cukurcuma), to determine a value to be developed for supporting the neighborhood character of Cukurcuma, to design and install a public space. The stories, the museum and the objects were the intersection/connection of today with the past in the context of the everyday life inspiring the students today at Cukurcuma. (Figure 1)
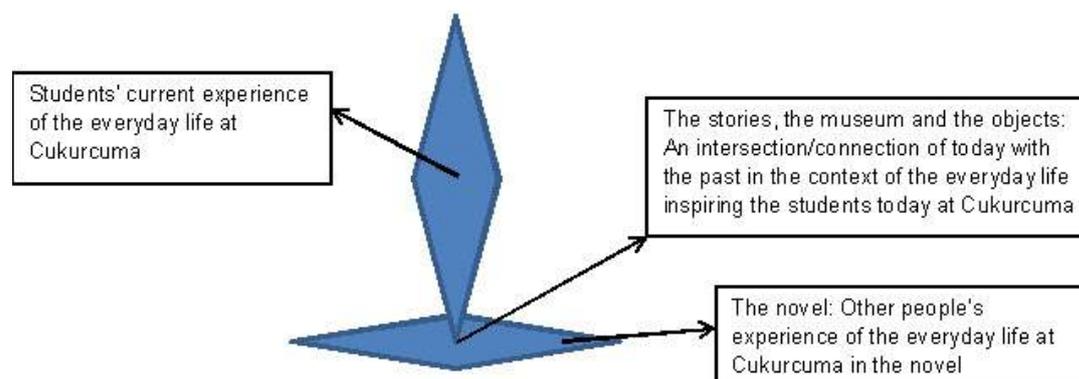


Figure.1: Structure of the relationship in-between architecture and literature

9 teams of students from different countries studied the novel and Cukurcuma. All teams were inspired by the novel, Istanbul and Cukurcuma in different aspects. You will find just one of them as an example for witnessing the connection in-between literature and architecture. The novel was read as a tool accelerating the understanding of the place (genius loci) and opened a vision for the students in the context of a living pattern. The following poster is the final presentation of one of the groups[2] worked at Cukurcuma. (Figure 2)

In the novel "against the banality of daily life in a house in Çukurcuma, the relation of its different inhabitants with each other makes the place to be described as *wonderful*". Observation made at Cukurcuma showed how important water is for the habitants of the neighborhood, not just to use, but to communicate by it as an attitude inherited from the past. This makes the "water" a phenomenon to study on as a spatial element to design a public space at Cukurcuma developing its meaning as a neighborhood.

---

[2] Group 2: Rasa Chmieliauskaitė (BE) András Biró (HU) Maarten Kempenaar (NL) Ömer Talha Yağci (TR)
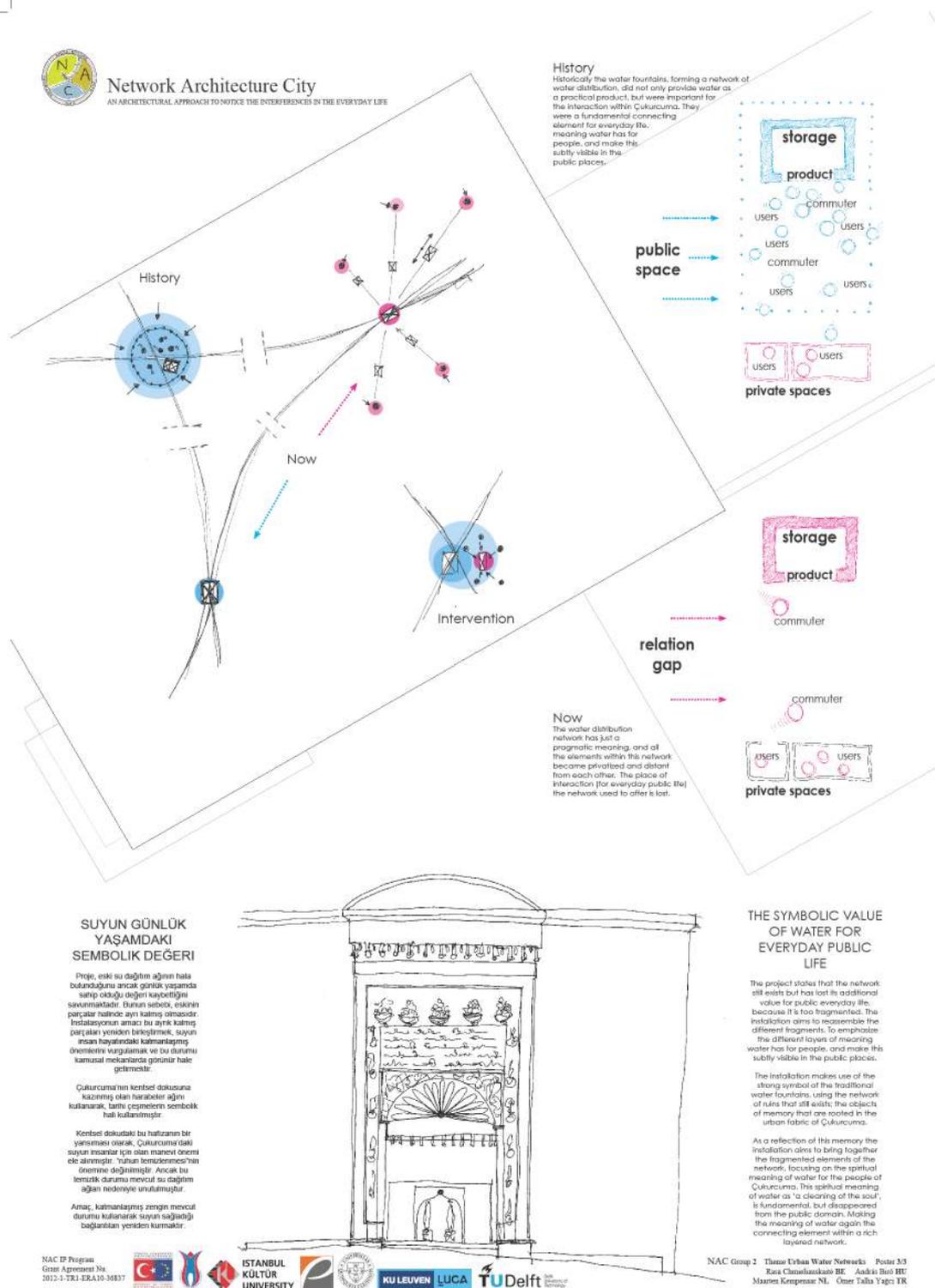
Figure 2: Final presentation of Group 2

## Conclusion

The methods of reading the genius loci are inclusive. In addition to visual senses we listen, smell and touch our environment. That is why we have an individual and subjective experience which requires a creative reading and innovative expressing skills. Reading a novel on a specific place and observing the everyday life at that place might be a creative way of learning architecture.

We lived a special case with the real object and space of the past in today. The novel of Orhan Pamuk, "The Museum of Innocence" accelerated the process of experiencing the everyday life at Cukurcuma by giving the chance to touch the past everyday life in the present time. Literature enabled/supported architecture for connecting the people/activities with the space. The students realized that the building means nothing without the people living in/out/with it. People will produce space if the place inspires/motivates and it is ready-to-hand. This is the value of the place as a combination of its topography, buildings and the activities of the people.

Reading the everyday life, finding out the value of the place and improving the place by designing a space for the people living at that place is a total process of architectural design to be experienced by the student. The students can observe the dynamics and the elements of the everyday life that will be a base point to depart from.

Everyday life becomes a place/time for the students of architecture to face themselves, to embody a world view, to design a space, to work with the other bodies for constructing that space, to live in that space, to observe the other bodies in that space. Students experience not only the continuity between design and construction processes, but make a step towards freedom and creativeness by seeing their own existences sprouting by their individual approach to the existing place as a whole. The architects of the future will thoroughly understand the power of creating a potentiality for the people to experience the space and realize their existences in everyday life.

## References

De Certeau, M. (1988). *The Practice of Everyday Life*, Berkeley: University of California Press.

Dietrich, W. (2013). http://writinghistoricalnovels.com/2013/07/27/details-of-daily-life-in-historical-novels-by-william-dietrich/

Heidegger, M. (1962). *Being and Time*, Oxford: Blackwell Publishing.

Hefebvre, H. (1991). *Critique of Everyday Life*, London: Verso.

Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*, New York: Rizzoli.

Tschumi, B., (1994) *Architecture and Disjunction*, London: MIT Press.

Tschumi, B., (1996). *Event Cities – Praxis*, London: MIT Press.

Schön, D.A. (1987). *Educating the Reflective Practitioner: toward a new design for teaching and learning in the professions*, New York: Basic Books.

(2011). http://www.orhanpamuk.net/news.aspx?id=26&lng=eng

(2013). https://networkarchitecturecity.wordpress.com/category/poster/page/2/

**Contact email: esrafidanoglu@gmail.com**